Constructing Futures: How are Emerging Technologies informing new conceptions of the Human?

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Abstract

This dissertation explores how emerging technologies are transforming conceptions of 'the human' within the specific context of a pop-up city in Honduras concerned with gaining biological immortality. I first outline the characteristics of this unique location, before describing the importance of future imaginaries in evaluating and describing social change. I next turn to the historical notions of 'the human' from which the burgeoning social movement of 'transhumanism', a set of imaginaries centred on redefining the boundaries of humanity has emerged. Building upon this and situating my discussions within the STS tradition of co-production, I highlight how the convergence of emerging technologies has come to be viewed as an exercise for delivering a 'boundaryless' future for humanity. I explore transhuman imaginaries at Vitalia, highlighting a lack of unified consensus regarding the aims of the project. While individual imaginaries constructed here differ in modes of achieving a desired transhuman form, the collective imaginary is one in which human biology is merged with machines.

The political system in which Vitalia is situated is a special economic zone which functions as an 'encrypted geography'. Placing this emerging space within a historical context, I show that Próspera ZEDE is not only encrypted by its use of certain technology but by language and customs as well. Like transhuman imaginaries, Próspera is predicated upon a sociotechnical imaginary of collapsing geopolitical and regulatory boundaries. This carries within it an understanding of human nature as rational and self-maximising utilisers of technology.

I conclude that emerging technologies are altering notions and imaginaries of the human in this ideological space.

Introduction

Emerging technologies are those which have the potential to have large-scale impacts on society, both in terms of our understanding of the world around us and the social relations which tie us together, but which are still in development. Movements encouraging the global embrace of emerging technologies as tools for enacting desired futures have grown in influence in recent years. For instance, the notion of an 'Artificial General Intelligence' (AGI), a computer software which acts on the level of or eclipses human ability, has evolved from a fringe idea, originating in the science fiction of Samuel Butler's (1872) *Erewhon* or Isaac Asimov's (1920-1992) collection of classic novels on robotics, to a serious research goal today. Artificial intelligence and the pursuit of AGI as a research priority, alongside other emerging technologies, have commanded considerable investment and social attention. The focus of this dissertation is a social movement which centres on encouraging and advancing the use of emerging technologies to alter, in their view, the biological and social fabric of humanity's future. Such movements are becoming altogether more common (Farman, 2020). Meanwhile, the technology-centric 'future imaginaries' incubated within these movements are becoming more influential, increasingly "occupying the imaginative space" of futures thought (Benjamin, 2024, p. 18). I describe here a unique ethnographic case study, in the unlikely nation of Honduras, of a group actively engaged in 'future-making', the "work of making sense of possible and probable futures, and evaluating, negotiating and giving form to preferred ones" (Whyte, et al., 2022, p. 1), as well as the impacts of this speculative future-making on the local population.

Vitalia describes itself as a 'pop-up city', a temporary location which only utilises existing infrastructure. This experimental project is located within Pristine Bay, a resort on the Honduran island of Roatán along the southern end of the Mesoamerican reef. Vitalia's goal is to gather scientists, technologists and entrepreneurs to discuss and accelerate progress in emerging technologies which improve human longevity and may lead to the eventual elimination of human biological ageing. Vitalia's slogan is "Make Death Optional", and its attendees intend to achieve this future through a mode of pharmaceutical experimentation and technological development. Pristine Bay, as well as being chosen for its accessible and touristic location in the Caribbean, is significant for achieving this aim in that it lies within the Special Economic Zone (SEZ) of Próspera. SEZs are defined by the United Nations as "geographically delimited areas" in which governments "facilitate industrial activity through fiscal and regulatory incentives and infrastructure support" (UNCTAD Report, 2019, p. xii). Examples range from ports and airports with certain favourable taxation arrangements to whole cities with business-friendly regulations such as Dubai and Shenzhen, China. Próspera holds the status of a ZEDE

within Honduras, a *Zona de Empleo y Desarrollo Económico*, or a Zone of Employment and Economic Development in English. Unlike most other SEZs, a ZEDE is a privately owned location with independence from Honduran civil law. ZEDEs were developed by the previous two Honduran governments as a means of encouraging foreign investment in the wake of economic downturn and political instability in the country following a coup in 2009 (Geglia, 2016). Próspera enables its residents to select the regulatory frameworks within which they operate, provided they are approved by the independent Próspera Arbitration Centre (PAC). Próspera's residents and businesses frequently opt to operate within a patchwork of existing legislation from multiple OECD countries. For Vitalia and the biomedical industry more broadly, this means that novel therapeutics and procedures prohibited across most jurisdictions, such as by the Food and Drug Administration (FDA) in the USA can be trialled and distributed freely within the zone, provided they are regulated in some OECD countries. Próspera has hence become a hotspot for medical tourism, with individuals travelling there to seek treatments or partake in experimental trials. It has also attracted other technologists, including AI developers and cryptographers. Próspera's organisers have a similarly ambitious aim to Vitalia, of "maximising human prosperity", the word in Spanish from which its name is derived.

Próspera has been described as a 'Charter City' in the mould of former World Bank economist Paul Romer's formulation (2010), as well as a 'Startup City' by its founders[1] and a 'Private City' by commentators. Romer described Charter Cities as 'opt-in' urban environments in developing countries in the wake of the 2008 financial crash. Próspera however bears very few hallmarks of an urban environment. Pristine Bay, and thus Vitalia, is located within St John's Bay, Próspera's flagship hub. Most of the 500-acre resort space owned by Próspera here is home to typical amenities – an assortment of luxury villas (currently inhabited mostly by Vitalia attendees) restaurants, swimming pools and a private beach, similar to many such resorts on Roatán's popular West Bay. St John's Bay is located on Roatán's north coast, surrounded by dense forest with a single road which connects it with the island's main highway. The resort is adjacent to the small fishing village of Crawfish Rock, located just under a mile southwest and sharing its coastline. Crawfish Rock (or simply Crawfish as it's known locally) is inhabited mainly by the island's Afro-indigenous community and is the nearest settlement to Próspera. Crawfish Rock consists mostly of stilted homes and small wooden cabins and is one of few areas which does not attract much attention from the 1.9 million tourists who visit the island each year. Halfway between Crawfish Rock and Pristine Bay's centre, a new, more typical urban development was

[1] https://www.prospera.co/visit

under construction at the time of my visit, known as the Duna Tower. A majority of the construction workers are locals from the surrounding area, including Crawfish Rock. Once complete, this tower will be home to a laboratory, conference space, and residencies, and will become the tallest building both within Próspera and on the island.

Vitalia's 500 attendees currently occupy a majority of Pristine Bay, its main hubs are the resort's Beach Club, and 'Dome', a large dome-shaped tent just outside this location in which biweekly technology conferences are held. Upon arrival, Vitalia attendees first pass Próspera's security box, presenting their Próspera 'e-passports' to enter the zone. They next register for Vitalia in the lobby of the Beach Club. This otherwise plain space has been suitably decorated with artwork depicting a human brain merging with a computer, futuristic cities of skyscrapers and glass domes, and water paintings of influential technologists Steve Jobs and Elon Musk. Upon my arrival here in February 2024, I met Justin, a 40-year-old former Silicon Valley software engineer who now runs a business in the supplements industry and publishes futurist science fiction novels under a pseudonym. When we met, he was holding a small bottle of Piracetam capsules. Piracetam is a nootropic compound, a cyclical derivative of the neurotransmitter GABA. A key medical effect of this compound is a potential increase in neuroplasticity in those with impaired cognitive functions, including dementia and vertigo patients (Stockburger, et al., 2016). Justin had been taking these pills to improve his working memory, while also investigating them as a potential addition to his business. He additionally explained during our interview that he had been undergoing a trial in follistatin gene therapy, an experimental attempt to increase the expression of the *FST* protein. The procedure has been tentatively associated with increased muscle mass and prevention of obesity in rats (Tang, et al., 2020). Neither of these interventions is available to the public in Justin's home country of the USA, which he cites as his key motivation for moving permanently to Vitalia and Próspera. Furthermore, Justin anticipates that neither of these pharmaceutical interventions is likely to prolong his lifespan, instead viewing the two as "enhancements to the normal human condition". The perspective that humans can and should augment their abilities utilising technology is often termed 'Transhumanism', defined by anthropologist Abou Farman as a "recent set of common ideals, or ideology, with the stated aim of transcending the current physical and mental limitations of the human by technological means". For Justin and many other attendees, Vitalia is a project which advocates for a redefinition of 'the human' itself, with the explicit intention of achieving a 'transcendent' form. For Justin and others who consider themselves to already be on the verge of becoming 'transhuman' or even 'posthuman' (Bostrom, 2005), this future is not a speculative horizon, but one which is already underway.

This dissertation engages with several interrelated strands relating to the future-making taking place at Vitalia, Próspera and the implications of this on Honduras. What future imaginaries of human life and society are being constructed here? What social and historical forces have influenced these imaginaries and led them to become viewed as achievable? Borrowing the phrasing of Helmreich (1998, p. 13), how do emerging technologies figure into utopian imaginaries of the human "as-it-could-be"? What are the material consequences of speculative future-making on local populations and cultures?

To address these questions, I draw from 2 weeks of ethnographic research at Vitalia, including 11 in-depth (45-60 minutes), semi-structured interviews with Vitalia attendees, and literature in sociology, anthropology and Science and Technology Studies (STS). My fieldwork was approved by the School of Anthropology and Museum Ethnography Research Ethics Committee (Ref: SAME_C1A_24_003). I attended every event organised by Vitalia during my stay as a participant observer, this included over 30 hours of planned programming, ranging from conference talks to the weekly 'town hall' meetings. I identified participants for interviews through informal, in-person approaches and utilised snowball sampling to identify further participants. Each interview began with the topic of the individual's background and motivations for attending Vitalia, before discussing their expectations for the future, desired futures, their sources of hope that such a future is achievable and the unique features of the attendee's journey. 'Vitalia attendees' include all of those assigned formal attendee status at Vitalia. Those given formal attendee status by the event include the workers and volunteers organising Vitalia, many of whom are Honduran, as well as long-term permanent residents and those who visit for a short time (1 week to 2 months), including event speakers. Three of my interviewees were Hondurans working at Vitalia, five were with short-term visitors and three were with long-term residents.

Future Imaginaries and Technology

Futures have become increasingly important to the social sciences in recent years. Possible and probable futures are salient across cultures, whether through fictional accounts, prophecy, or concerns over 'what will happen' amidst global climactic changes and economic uncertainty. In recognition of this, anthropologist Arjun Appadurai has asked that we "place futurity, rather than pastness, at the heart of our thinking about culture" (Appadurai, 2013, p. 194). This requires an understanding of "the future as a specific cultural form" (p. 286). 'The future' for Appadurai is an *imaginary* produced by a collective. Taylor (2004) defines 'social imaginaries' as the "ways people imagine their social existence, how they fit together with others, how things go on between them and their fellows" (p. 23). Appadurai perceives future imaginaries as

containing culturally grounded representations and reflections of 'the good life' and the nature of possible utopias, places of perceived perfection. Appadurai's position is strongly influenced by Benedict Anderson, who, writing in "an anthropological spirit", famously defined 'the nation' as an "imagined political community" (p. 6). According to his argument, nations are 'imagined communities' insofar as "the members of even the smallest nation will never know most of their fellow members, meet them, or even hear of them, yet in the minds of each lives the image of their communion" (p. 6). No longer viewed as "mere contemplation" or "opium of the masses", the imagination has come to be understood as "an organised field of social practices, a form of work (…) and a form of negotiation" (Appadurai, 2002, p. 50). For Appadurai, it is the work of imagination, that which humans do as they "strive to extend their chances of survival, improve their horizons of possibility, and increase their wealth and security", which characterises "the production of locality" itself (Appadurai, 2013, p. 77). He argues that when they exercise their imaginative capacities, humans "literally produce" (p. 77) the ecological and social environments in which they operate. Próspera and Vitalia, geographies created by a common set of values, rather than the other way around (as in Anderson's theory of nations), are a testament to this notion and the materiality of imaginaries. Sociologist Jens Beckert has similarly argued future imaginaries are a "crucial component of social and economic order" (2017, p. 11), particularly with the material ability of those within positions of power in capitalist economic systems to deliver upon imagined future scenarios. Imaginaries of the future are thus important cultural landmarks which are also significant in shaping social change.

Anderson identified nationalism as having emerged from a shared sense of comradeship, theorising that this was in part driven by shared experiences of time and space provided by the 'print capitalism' of national newspapers, as well as national maps, museums and books. STS Scholar Shiela Jasanoff later referred to these technologies as "instruments for standardizing national identities" in the context of "nation-making" (2004, p. 26). Jasanoff's later work has sought to theorise the role of technologies which have emerged more recently in informing identities and future imaginaries. This work has focussed on the implications of "modernity's grand aspirations and adventures with science and technology" (2015, p. 5). In 'modernity', science fiction tropes of past centuries, like AI, robots, space travel, and the reversal of ageing and immortality have become achievable aims due to the development of emerging technologies. Jasanoff has formally articulated the notion of 'sociotechnical imaginaries', as

"Collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology." (2015, p. 5)

Sociotechnical imaginaries were initially limited to those visions performed by nation-states (Jasanoff and Kim, 2009), but later extended to include organised groups such as "corporations, social movements, and professional societies" (Jasanoff and Kim, 2015, p. 4), and thus have been employed to analyse a variety of social phenomena, from energy systems in Asia to "techno-optimism" within Silicon Valley (Tutton, 2021). Sociotechnical imaginaries are situated within the wider STS tradition which Jasanoff labels co-production. This is the conviction that "the ways in which we know and represent the world (both nature and society) are inseparable from the ways we choose to live in it", and that scientific knowledge "both embeds and is embedded in social practices, identities, norms and institutions" (Jasanoff, 2004, p. 3). Furthermore, she has argued that "political imaginations today cannot be separated from the futures promised by science and technology" (2020, p. 32). As I show, Vitalia and Próspera both serve as evidence that "scientific discoveries and their applications" have opened up "the future as a space of political struggle" (Jasanoff, 2020, p. 29).

STS provides an integrative framework connecting perspectives from anthropology and sociology with which to analyse sociotechnical imaginaries emerging at Vitalia. An important question to contend regarding the 'ways Vitalia attendees choose to live', that being within the unique regulatory environment of Próspera is one encouraged by STS scholar Ruha Benjamin. Benjamin asks STS practitioners to ask, "Who and what are fixed in place—classified, corralled, and/or coerced—to enable technoscientific development?" (2016, p. 145). Her work has examined how algorithms reinforce racial biases, for instance (Benjamin, 2019). More recently, in *Imagination: A Manifesto* (2024), she has called for an embrace of imagination as a liberating power and a tool for making more just futures. Imagination can inspire alternative modes of social life, including those which challenge long-held assumptions about human nature as *Homo economicus*, the image of a 'perfectly rational' human who makes economic decisions purely based on cost-benefit analysis. Benjamin also urges caution, however, arguing that "imagination is not a wholesale good" (p. 24). She explores exclusionary nationalism and the imaginations underpinning eugenics as key examples. She also highlights the recent embrace of 'longtermism': the ethical position that the distant or long-term future should take moral priority over the present and near-term future. Intellectual and cultural movements such as transhumanism are included. Longtermist imaginaries, in Benjamin's view, are "snaking [their] way into the global mainstream" (p. 18). For instance, the recent fuelling of "massive investment in AI" in the West can be interpreted as "a necessary step toward the evolution of transhumans" (p. 19). The theme of transhumanism or achieving transcendence utilising technology may be explicitly or implicitly present within sociotechnical imaginaries of human futures.

Outline

I contend that future-making at Vitalia and Próspera can be theorised as taking place at a set of boundaries. Boundaries can be broadly conceptualised as distinctions and borders between concepts, places and people. Transhuman sociotechnical imaginaries emerging within Vitalia and Próspera rely on technology's ability to overcome and reconfigure boundaries, both biological and sociopolitical. Emerging technologies within these imaginaries serve as objects which inspire and ultimately render possible a 'boundaryless' future. In these imaginaries, humans are freed of their biophysical limitations and even integrated with technologies, becoming cybernetic organisms or cyborgs which blur the boundary between humans and machines (Haraway, 1991). Suggestions of the 'transhuman' as biologically immortal, cognitively enhanced, free of suffering, and perhaps even free of the constraints of the human body itself, represent new utopian concepts of 'the human' located within these technological futures.

Próspera and Vitalia both explicitly refer to specific imaginaries of "Human" futures. My first chapter thus places the notion of 'the human' within its historical context, before discussing the origins and notions of the transhuman and posthuman. I suggest that transhumanism is better understood as a set of imaginaries, rather than a coherent singular "ideology" (Farman, 2022) as some have attempted to address and express it as. Expressing transhumanism in this way lays the foundation for the rest of my enquiry as I examine different sociotechnical imaginaries co-existing within Vitalia. While subtly different, all of these imaginaries are united by the perceived overcoming of biological and social boundaries.

My second chapter engages with these transhuman imaginaries directly, while highlighting how imaginaries of the 'human-as-it-could-be' are predicated on specific imaginaries of the 'human-as-it-is' (Helmreich, 1998). Vitalia attendees seek a collapse of the distinctions between human biology and machine, as well as the overcoming of the biophysical limitations imposed by human ageing. These imaginaries also implicitly collapse the boundary between 'medicine' and 'argumentation', with interlocutors framing augmentation as a rational choice based on our current culture of biomedical approaches to disease.

Próspera is also predicated on sociotechnical imaginaries of a 'boundaryless' future, in the sense that humans will not be governed within set geopolitical borders. They seek to claim 'sovereignty' on the level of the individual, rather than aggregates like nation-states wherein that power currently lies. In my third chapter, I show that the use of emerging technologies by this group to achieve this future in turn creates new boundaries and distinctions: between those

who have access to the technological inventions they propose and those who do not. Próspera is an example of an 'Encrypted Geography' (Simpson, 2022). Simpson and Sheller (2022, p. 2) have recently called for further research into the impact of these spaces on "polities, cultures, and societies, including issues of governance, economics, and environmental justice" in the local areas and countries in which they are located.

Alongside self-identifying and non-self-identifying transhumanists, stakeholders in the creation and maintenance of encrypted geographies, the dissertation incorporates a group thus far not studied extensively in this area: local Honduran residents who have experienced life both inside and outside such geographies. I highlight the considerable impact of the construction of new social and cultural boundaries between Próspera's wealthy residents and even wealthier backers, the local population of Roatán, and the wider population of Honduras. Social tensions, issues of land contestation and appropriation, and public feuds between Próspera, local Indigenous communities and the Honduran government tell a story familiar to Latin America given its colonial past.

Chapter One: Futures of 'The Human'

On the first day I attended, the co-founder of Vitalia, Niklas Anzinger, addressed a small group of around 20 technology and longevity enthusiasts and myself as an initial introduction to the project. He declared that "longevity is the defining moral question of humanity". Later in my attendance, Próspera CEO Erick Brimen proclaimed Próspera's exploits as "ushering in a new golden age for humanity". The figure of 'the human' lies at the heart of both groups' attempts at speculative future-making. I outline the notion of 'Man', generally considered the conception of the human in the West, followed by the initial formulation of transhumanism outlined by Julian Huxley was one which underscored the human exceptionalism of classical humanism and divided the species into 'rational' and 'sub-rational' constituents, akin to earlier notions of humanhood. I then examine the more recent usage of the term transhumanism, defining it to be a set of imaginaries focussed on re-shaping the boundaries of the human, both biological and social.

'Man'

The social sciences, themselves centred on understanding the human condition, have a long history of interest in the figure of "Man". Michel Foucault famously declared Man, broadly considered a Western concept of the human, a "recent invention" (1970, p. 386). For him, "man" was an *episteme,* a product of thought rather than ontology, which emerged during the Enlightenment with to a series of paradigm shifts between the classical and modern eras. Building on Foucault, Sylvia Wynter more directly critiques "Man" as the dominant, "present ethnoclass (i.e., Western bourgeois) conception of the human" (2003, p. 260). Wynter dissociates two successive "genres of the human": "Man1" and "Man2" (p. 264). She contends advances in the physical sciences gave rise to "Man1", while advances in the biological sciences gave rise to "Man2". Man1 was a "political subject" (p. 381) embedded within the Judeo-Christian matrix, meanwhile, Man2 is characterised by Wynter as a "humanist and ratiocentric conception of the human" (p. 269), biologically endowed to achieve rational goals.

Wynter highlights that the notion of 'Man-as-Human" produces the "Human Other", an alternative "irrational/subrational" genre of the human, to the "civic-humanist, rational self-conception" of "Man" (p. 281-282). With the withdrawal of religious beliefs during the Enlightenment period, the "significant ills" of the human condition were no longer considered to have derived from Original Sin, but rather the ill of 'irrationality'. The Columbian encounter and the discovery of the 'New World' played a key role in the emergence of this conception. Columbus' discovery of the Americas led to what Wynter calls a "mutation of ethics" (p. 289),

portrayed through Shakespeare's *The Tempest*, a play in which the character Prospero, a name also derived from 'prosperity', and the male form of Próspera, embodies the "rational political Man" and "settler of European descent", enslaves and develops magic on an island belonging to Caliban, who embodies the "irrational Human Other" (p. 314). The 'space of Otherness', in times of colonial rule, was entirely occupied by the natives, deemed 'less human' than their rational rulers.

Transhumanism

'Transhuman' is a term which stems from the Victorian translation of Dante's Divine Comedy. Dante's term 'trasumanar' describes the 'transhuman change' induced by ascending to Heaven, a form of transcendence which "words may not tell of" (Harrison & Wolyniak, 2015, p. 467). Taking inspiration from Dante's religious allusion to the transcendence of the human condition, influential evolutionary biologist and eugenicist Julian Huxley was the first to use the term 'transhumanism'. Huxley is perhaps best well known for his (1942) coining of the term 'Modern Synthesis' of evolution. A member of the famous Huxley family, he spent much of his early career working towards creating scientific and rationalist alternatives to religious ideals, which he termed 'religion without revelation'. Huxley's formulation of transhumanism is most clearly expressed in this oft-cited passage of his essay, 'Transhumanism':

"The human species can, if it wishes, transcend itself, not just sporadically, an individual here in one way, an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps transhumanism will serve – man remaining man, but transcending himself, by realizing new possibilities of and for his human nature." (Huxley, 1957; p. 15)

Huxley's "man" loosely refers to humanity as a collective, though he also refers to "the human species" and "we" apparently synonymously. According to Huxley, "man" emerged during the "last few ticks of the cosmic clock", dwarfed by the "thousand million years of evolution" which led up to its emergence (p. 13). "Man", however, is simultaneously "radically different" from evolution's earlier products (p. 13). Thanks to advances brought about by "psychologists, biologists, and other scientists, by archaeologists, anthropologists, and historians" (p. 13), "man" has discovered his destiny: "to be an agent for the rest of the world in the job of realising its inherent potentialities as fully as possible" (p. 13). Huxley declares "the exploration of human nature and its possibilities has scarcely begun" and, "a vast New World of uncharted possibilities awaits its Columbus" (p. 14). Here, Huxley is celebrating Columbus' activities as a "glorious achievement" and "triumph for the Christian West" as Wynter (1995, p. 5) suggests such accounts are. "Man" for Huxley is a self-proficient, rational animal who stands in

exception to the rest of the living world. It should be noted that Huxley here says little of technology, instead referring to the 'techniques of spiritual development' to bring about 'willed transformation', the classic mode of Utopia.

Who *isn't* included within Huxley's "man"? How is "man" sub-categorised into groups? Huxley contends that "We have pushed the scientific exploration of nature, both lifeless and living" (p. 15). Invoking the term "they", he writes that "the great majority of human beings (if they have not already died young) have been afflicted with misery in one form or another" (p. 16), listing poverty, disease, cruelty, and over-work as examples of misery inflicted upon the "under-privileged" (p. 15) of "man". According to Huxley, this subpopulation of "man" has "attempted to lighten their misery by means of *their* hopes and *their* ideals" (p. 16, emphasis my own). However, "their" hopes, according to Huxley are "unjustified", and "their" ideals have "failed to correspond with reality" (p. 16). Meanwhile, "our hopes" (p. 16) are made "rational" by the "zestful but scientific exploration of possibilities and the techniques for realizing them" (p. 16). Huxley implicitly dissociates "man" into two groups: the underprivileged or sub-rational with false hopes of salvation, and rationalists, whose hopes are superior to the hopes of the former.

Transhuman Imaginaries: 'New Concepts of the Human'

As opposed to "man remaining man", transhumanists today call for the creation of what science fiction author FM-2030 called, in his 1960s series of classes of the same name, "*New Concepts of the Human*" (Goundrey-Smith, 2023, p. 34) through the use of technology. Transhuman imaginaries encompass the use of 'smart drugs' like piracetam, genetic engineering like follistatin gene therapy or germline gene editing, AI, brain-computer interfaces and space travel as means of achieving a transhuman condition (Bostrom, 2005). The world's leading transhumanist organisation Humanity+, previously known as the World Transhumanist Association (WTA) defines transhumanism as:

"The intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate ageing and to greatly enhance human intellectual, physical, and psychological capacities" (WTA, 2003, p. 4).

'Transhumans' in this framing are seen not as 'transcendent' but as "transitional beings, or moderately enhanced humans, whose capacities would be somewhere between those of un-augmented humans and full-blown posthumans", in the words of WTA co-founder Nick Bostrom (2005, p. 5). Bostrom's posthuman is a figure which is no longer recognisable as 'human'.

However, this term is also contentious. Two semi-related schools of thought, transhumanists and critical posthumanists employ the term 'posthuman' in different ways. The term posthuman dates to literary theorist Ihab Hassan (1977). Hassan drew upon Foucault's assertion that "Man" may soon come to an end and Levi-Strauss' comment that human "institutions, manners and customs (…) are an ephemeral efflorescence" which may eventually become "meaningless" with future changes (p. 845). He argued that these thinkers meant "not the literal end of man but the end of a particular image of us" (p. 845). As such, critical posthumanism is often defined as a school of thought 'post' to the humanist 'concept of the human', which "grounds discrimination against nonhuman animals and the disabled" (Wolfe, 2010, p. xvii). Critical posthumanists call for relational understandings of humanity and the disregarding of biological essentialism and human exceptionalism. Critical posthumanists are also 'post' to "the historical occurrence of humanism", the classical school of thought which places moral value on the human being (Ferrando, 2013, p. 29). The WTO assert that transhumanism is meanwhile "an extension of humanism" (2003, p. 4).

Hassan however does question in his original outlining of 'the posthuman' whether the emerging technology of AI will literally alter human capabilities. He asks, "Will artificial intelligences [sic] supersede the human brain, rectify it, or simply extend its powers?" concluding that:

"We do not know. But this we do know; artificial intelligences, from the humblest calculator to the most transcendent computer, help to transform the image of man, the concept of the human. They are agents of a new posthumanism" (1977, p. 846)

This 'new posthumanism' has been arrived at in the form of transhuman imaginaries. These sociotechnical imaginaries emerge from technologies which "help to transform the image of man", but rather than a singular idea of how this might occur, I show that these take the form of a space of sociotechnical imaginaries. It is curious that as Farman notes, "despite its engagement with the core figure of anthropology – *anthropos* – transhumanism has yielded only a handful of sustained studies in anthropology" (2022, emphasis his own). Transhumanism has thus far mostly been the subject of political science and ethics. Francis Fukuyama (2004) in a famous article declared transhumanism and its advocation of "mood-altering drugs, substances to boost muscle mass or selectively erase memory, prenatal genetic screening, or gene therapies" as 'The World's Most Dangerous Idea' (p. 42). Jenny Huberman suggests that questions over whether transhumanism is right or wrong "are not the kinds of questions anthropologists typically ask" (2021, p. 11), instead, she argues that the anthropologist should

ask what movements like transhumanism can "teach us about the way conceptions of the human are being actively transformed by the intersecting fields of neurobiology, computer sciences, and artificial intelligence" (p. 11).

Evaluating transhumanism as a set of imaginaries enables this consideration. Farman (2022) previously described transhumanism as an ideology, but ideologies have "proven to be limited theoretical tools for pursuing the normative dimensions of science" and scientific activity (McNeil, et al., 2017, p. 457). Ideologies are relatively static, while imaginaries on the level of the individual and the collective can differ. Imaginaries also capture the affective dimensions of future expectations. While ethnographic accounts of implicit and explicit transhumanism have appeared in recent literature (Bialecki, 2022; Huberman, 2021; Farman, 2020; Singler, 2019; Bernstein, 2019), transhumanism has rarely been studied as a serious social, cultural or political movement, nor in the context of a directed effort of future-making. The subject of the next chapter, a physical, location with a specific political platform underpinning it, is a different proposition and one which lends itself to an ethnographic approach, through which transhumanism can be investigated *in situ*.

Chapter Two: Vitalia: Future-Making at Biological Boundaries

Vitalia's attendees are concerned with the 'enhancement' of the human, including but not limited to the elimination of ageing and death. While its founders do not affiliate directly with transhumanism, transhuman imaginaries are significant in guiding the everyday future-making practices of Vitalia attendees. I show that while imaginaries of achieving this desired future differ, the collective imaginary at Vitalia is one where humanity merges with technology, ultimately overcoming the boundary between human biology and machines. This imaginary of overcoming boundaries to create a transhuman form relies on a specific understanding of *'the human-as-it-is'*. From the perspective of Vitalia attendees, *'the-human-as-it-is'* is endowed with a body unsuitable for the world of technology it finds itself in, but is equipped with a rational mind and technologies capable of transcending its limitations.

The word Vitalia stems from 'vital', as in vitality, according to the OED, "Vital force, power or principle as possessed or manifested by living things" or "the ability or capacity on the part of something of continuing to exist". Vitalia was set up to attract "renegade life scientists, artists, biotechnology engineers and an entrepreneurially driven community"[2]. Though applicant figures are not publicly available, since December 2023 over 500 people have visited Vitalia. Most are between 25 and 40 years old, with an approximately equal gender split. Most residents are from Western Europe and the US, with notable a cluster residing in California. Over half of those I interviewed had some connection to the Silicon Valley nexus, and almost all residents have some affiliation with start-up companies in the industries of biotechnology or artificial intelligence. In the words of Tamara Kneese, Silicon Valley has become an "ideological space that has global ramifications" (2023, p. 18), transcending its geographical boundaries through the influence of its richest innovators and companies. Kneese also identified transhumanism as a dominant theme in start-up culture, with many Silicon Valley companies increasingly launching in the fields of longevity, space exploration and alternative governance.

Justin, who formerly spent 10 years in Silicon Valley, had already been at Vitalia for 2 months before we spoke. Before that, he lived in India for a month, and before that Malaysia for 2 months. He describes Vitalia as a "commune updated for the 'digital nomad era". A 'digital nomad' is a relatively recent concept, someone exclusively works remotely using digital technologies. Mancinelli's (2020) ethnography of digital nomad communities highlights the

[2] https://foresight.org/summary/laurence-ion-vitalia-new-cities-to-accelerate-scientific-progress-and-make-death-optional/

phenomenon of "suitcase entrepreneurs" (p. 433), individuals who travel from retreat to retreat to promote their start-up businesses. Mancinelli suggests that the affinity between entrepreneurship and digital nomadism is underpinned by an imaginary of the freeing power of mobility, combined with a strong emphasis placed on network social capital by this group. Despite likening Vitalia to a commune for this group, Justin was keen to highlight the difference between the two:

"Unlike a commune, Vitalia is not hierarchical. Everybody works in their own company. Also, it brings these people together for months at a time. (…) At a regular conference, you spend most of your time introducing yourself to people and then it's over. Also, Vitalia is not hedonistic, people have parties here, but mostly it's just about work."

Communes are "relatively small communities, which have set themselves up, typically self-consciously, as an alternative to the wider social order, and embrace collectivism in some substantial fashion" (Evens, 2001, p. 2288). The term "intentional community" has also been used to describe these spaces, Sarisson describes these communities as "strange places, full of dreams, hopes, and disappointments as groups of individuals work collectively to realise a better life" (2007, p. 396). Sarisson argues that intentional communities are best understood as 'utopias in progress' (p. 393); "from its no-place, utopia tells a story; it breaks rules that constrain the present; it thinks the unthinkable" and "demands the impossible" (Sargisson, 2007, p. 395). Vitalia, in attempting to create a world without death, certainly dares to 'think the unthinkable'. Utopian intentional communities provide "a space inside which members can explore the good life" (p. 393). At Vitalia, 'the good life' is a life of self-experimentation to facilitate the practice of future-making.

Future-Making at Vitalia

Vitalia most directly engages in future-making by providing funding to proposals or pre-existing companies, which its founders identify as 'moonshots' which support its aim. Taking its name from the Apollo project, a moonshot is a 'long shot'. An investor I spoke to at Vitalia described investing in a moonshot as "a financial gamble on high cost, high risk and potentially high reward product". The "potentially high reward" in the minds of Vitalia's organisers, is the overcoming of ageing and death. Here, the process of ageing is considered a disease, and the entire global population is thought of as a "patient population of terminally ill people" and potential customers for the "service of longevity", in the words of one speaker. There was a name for those who ascribed to this ideal at Vitalia: 'Vitalism'. Vitali*sm* was conceived of before Vitali*a*. Vitalism takes its name from the superseded scientific theory of a 'spark of life' or 'living

energy' being present in living organisms that isn't present in non-living organisms. Vitalism is a movement which highlights the state of 'being alive' as a moral priority. The movement's founder Adam Gries, an entrepreneur with a background in both computer science and neuroscience spoke on two occasions. He invited attendees to sign the 'Vitalist Declaration', which reads:

"Life and health are good. Death is humanity's core problem and ageing is its primary agent. (...) I will work on or support others to work on reaching an unlimited healthy human lifespan."

Gries noted during his attendance that "existing names", including transhumanism, "have failed to unify the longevity movement". The Vitalist Declaration however did not serve as a clear ideological identity for Vitalia either. Despite Vitalia's founders and decision-makers having agreed to the declaration, the initiatives funded by the group did always not address ageing or death but were rather expressions of human augmentation. This distinction is significant. In defining ageing as the "primary agent" of "humanity's core problem", and calling for an "unlimited healthy lifespan" in an unquantified manner, Vitalism intended to distinguish itself from transhumanism. However, the "imaginative space" of Vitalia (Benjamin, 2024, p. 18) contains several references to transhumanist goals, for instance, Justin's use of 'smart drugs' to speculatively take him 'beyond' average human intelligence. The iconography of the word 'transhumanism' is also highly prevalent within Vitalia's art programme, found stamped across several paintings and drawings. While writing in favour of classifying ageing as a disease, bioethicist David Gems admits that the "tragic feature of decelerated ageing is the impossibility of separating the aspects of treatment and enhancement (2011, p. 111).

'We Can Become Cyborgs'

Frazier is the director of Augmentation Limitless, a Vitalia-funded project which operates in the basement of the Beach Club. He became involved with the augmentation and enhancement communities after completing his degree in Biology. The son of a Honduran, he has recently moved permanently to Vitalia to set up his laboratory. We met in this lab, an enclosed single-room space with an array of biomedical equipment scattered across a few tables, a hospital bed with an ECG monitor and IV drip in the corner, as well as a selection of supplements and drugs for free use by Vitalia attendees. I first asked Frazier if he would describe himself as a transhumanist. He initially rejected the label. Later in our conversation, however, he stated that "We [Augmentation Limitless] are technically transhumanists, but we don't ascribe to the cultural baggage". For Frazier, this "cultural baggage" includes the perception of transhumanism

as an attempt at obtaining some kind of 'virtual immortality', but for him, the transhuman is simply an "augmented human". Frazier prefers the term 'Biohacker' to transhumanist, and the Augmentation Limitless Lab was frequently referred to as 'the biohacking lab' by attendees.

Biohacking, or 'grinding' as it's sometimes known, is a combination of biology and computer hacking. Biohackers employ a range of techniques, from specific diets and supplements to hyperbaric chambers, to enhance their well-being. These 'DIY' biologists frequently sit outside established institutions or companies (Gruber, 2019). Augmentation Limitless meanwhile seek to eventually become a trading company offering cybernetic implants, which they have already begun at Vitalia. Frazier has two implants himself, in the forefinger of his right hand. One is a magnet which causes his muscle to twitch if he gets close to an electromagnetic field, advantageous for him as he regularly works with live wires. The other is a near-field communication (NFC) chip. NFC chips store data locally and interact with NFC terminals to transmit private information. Currently, he only stores his business card on his NFC chip, but he plans to eventually store his investment portfolio and ID here. NFCs can also be used for contactless credit card payments, which Frazier intends to integrate with the product in the long term. Frazier describes his implants as having augmented his body, which he directly distinguished from "medical intervention":

"Medical intervention corrects a disease or a condition or it could be used to help alleviate a condition, like a pacemaker or a hip replacement. What we're doing is augmentation, it means adding something onto yourself, like how my finger augments my senses and adds to my senses".

Frazier expressed that he wasn't interested in the pursuit of longevity or radical life extension himself, his main motivation for attending Vitalia was to try "new things in cyberpunk culture". The long-term future that Frazier envisions, enabled by the convergence of AI, cybernetics and "other technologies" is one where the boundaries between human and machine are blurred, or destroyed altogether:

"This is the beginning of cybernetics in the sense of replacing parts of your body with mechanical components, and not just replacement, but augmentation to the point where you're going to be integrated with AI and other technologies. We can become cyborgs."

Like Ray Kurzweil's 'Human Body 2.0' concept, Frazier imagines a future in which humans have physically merged with technology. "We are becoming cyborgs", states Kurzweil, "The human body version 2.0 scenario represents the continuation of a longstanding trend in which we grow

more intimate with our technology", after integrating with technology, "we will become more nonbiological than biological" (2005, p.541). The human body here is, in the words of one Vitalia attendee "an engineering problem", with the cyborg as its final *posthuman* form. Frazier explained that the desire to 'hack' his body is motivated by the fact that he doesn't believe that his body is suitable for the world he lives in. He seeks to 'add to' his senses to better adapt to his surroundings. As he often works with live wires, he views the magnetic implant as a necessity and, due to the recent rise in NFC technology, he holds that "integrating with technology is a must in today's world". His experiences of modernity have thus been strongly mediated by these technologies which serve as interfaces between body and mind.

Frazier's and Augmentation Limitless' imaginary of achieving transhumanism is in line with what Raymond Williams termed the 'Willed Transformation', the characteristic utopian mode. Willed transformations are achieved by the "human effort" of "the scientific spirit, either in its most general terms as secularity and rationality or in a combination of these with applied science which makes possible and sustains the transformation" (1978, p. 204). Notably this imaginary foresees a threshold beyond which physical integration with technology has occurred, Frazier doesn't yet consider himself a cyborg or a transhuman but is actively working towards this. This stands in contention with the second transhuman imaginary identified here.

'I'm already a Transhuman'

This next interlocutor has a background in software development and biology, their previous ventures included a 'Seasteading' business, an attempt to create a 'floating city' in international waters, free of the US visa requirements associated with Silicon Valley. Originally from Eastern Europe, they spent much of their early career in the USA, where they first became exposed to transhumanism. Their work today spans artificial intelligence and biology, as an entrepreneur and investor in the market of AI-powered drug discovery. When we first met, they showed me two large scars on their thighs from when they had undergone leg-lengthening surgery, a procedure which increased their height by 8 centimetres. They also detailed their hair transplantation surgery, NFC cybernetic implants similar to Frazier's, and laser eye surgery as components of his transhumanism, which they define as "advocacy for transcending the common human condition". This individual sees their procedures as enhancements rather than cosmetic or medical interventions. When I asked if they identified as a transhumanist, they stated:

"I'm more than a transhumanist, I'm already a transhuman."

They claim that their initial desire to pursue this transhuman form came from their experience in Silicon Valley, where they were persistently mocked for their height, which was "in the bottom 5th percentile" for their gender. They also state that they were mocked for their non-standard accent and attribute the resulting depression they suffered after moving to the US as the main cause of the failure of their business. For them, the transhuman is a way of overcoming the stigma of the body, which they feel should not determine social status. In this sense, this individual agrees with the likes of Haraway (1991), viewing the cyborg as a means of overcoming biologically essentialist notions of the human. Haraway's famous Cyborg Manifesto illustrates the fluidity of boundaries, between human and machine, human and animal and 'male and female'. This individual's formulation of the transhuman however is based on core assumptions regarding human nature:

"Evolution has already been perverted by technology. If an autonomous agent finds themselves in a new place, what should they do? The obvious conclusion is to maximise survival. If the agent has human nature, that means maximising the quality and quantity of life, so they have to become transhuman, at least in some sense. You wear clothes, it's an external technology to regulate your temperature, you're transhuman too"

In this transhuman imaginary, technological advancement is an inevitable product of human rationality and the desire for maximising survival. Here, the transhuman is also a socially augmented human as much as a biophysically augmented one. In this imaginary, because 'technology' is far more broadly defined, any usage of tools, including clothing, to better one's mental or physical condition can be considered a transhuman augmentation. This corresponds with Farman's (2022) observation that a common philosophical defence of transhumanism is to regard almost all technologies as "proto-transhumanist". Here, however, transhumanism is understood as an ongoing erosion of biological boundaries, rather than a specific threshold to be overcome. Nevertheless, the resulting imagined outcome of transhumanism is the same as in Frazier's case, one in which a physical merging of biology and technology takes place. In both imaginaries, the brain and mind are privileged in comparison to the rest of the body, which is the site of the 'augmentations' suggested by both.

This chapter has shown that emerging technologies are mediating conceptions of human nature and where the biological boundaries of 'the human' might lie. Emerging technologies have been highlighted as tools for overcoming limitations, but transhumanists at Vitalia bear certain essentialist assumptions about the nature of being human and of human evolution. The collective imaginary is of a merging of technology and the human, either directly and actively

through implants, or over a slower evolutionary timescale. In both imaginaries, this merger is a necessity in the age of technology, for not only does ‘the human’ not live long enough, its senses are not attuned to the modern technological world, its biological body is a symbol of inferiority and even a driver of social inequality. The human mind, apparently separate from the body in this imaginary, is capable of transcending this condition, much in the vein of Huxley’s (1957) rational “Man”. Unlike Huxley’s “Man” however, defined by its rationality and evolutionary history, this ‘human’ is defined by the world of technology it finds itself in, much as predicted by Hassan (1977).

Chapter Three: Próspera: Future-Making at Social Boundaries

Recalling Jasanoff's notion of co-production, that scientific futures are inseparable from social and institutional futures, this chapter examines how new political technologies are materially altering societal and political boundaries in Honduras. At Vitalia, attendees and speakers frequently blended science with politics in everyday conversation, speaking of "freedom from ageing" as the Vitalist Declaration states, in the same breath as political and regulatory freedom. Próspera's unique political system is explored in relation to the technologies they employ, highlighting the imagined transcendence of geopolitical and societal boundaries. A historical approach is employed to show how Próspera's future-making, which itself enables future-making at Vitalia, arose from patterns of enclave liberalism and government-level corruption in Honduras. The result is a new form of 'encrypted geography' (Simpson, 2022) enabled by the use of novel economic and political technologies. I also note how more mundane technologies, of signs and symbols also 'encrypt' Próspera's location from its surrounding environment.

Próspera: A New Political Reality

Justin, who has written utopian science fiction, stressed in our interview about Vitalia:

"It's not a lark where we're just pretending that we have a utopian world. Próspera has real significant political differences that enable a brand-new political reality. Much like how Blockchain became a dimension of political reality, rather than just lines of code."

His allusion to Blockchain technologies, a form of digital currency, is not coincidental. ZEDEs are "entitled to their own laws, police forces, currencies, tax collection procedures, social services, and [...] their common-law courts" (Geglia, 2016, p. 355). Próspera thus decided to implement its own and these courts, unlike any other in the country, are not accountable to the Honduran Supreme Court. Invoking the figure of 'the human' Próspera Inc. President Joel Bomgar has claimed that:

"Próspera is the first time in human history that a group of people has said there's a way to deliver governing services, privatized for profit in a completely free market way,"[3]

Bomgar's expression of the anarcho-capitalist ideal of individual sovereignty reflects a growing desire to commercialise governance itself, as a mode of "escape" or exit from contemporary politics, particularly American politics. A key component of Appadurai's analysis of future-

[3] https://reason.com/video/2023/07/06/a-private-libertarian-city-in-honduras/

making in modernity is the emergence of "commodity markets which barely existed before 1970" (2013, p. 72), such as "biotechnology, digital media, drinking water, energy credits, financial derivatives" (p. 72). Próspera attempts to mark the emergence of governance itself as such a market, as a place in which traditional political boundaries do not apply, informing a sociotechnical imaginary of geopolitical and social boundary transcendence which underpins Próspera. Próspera's investors include billionaires like PayPal co-founder Peter Thiel, who has previously discussed technology as a means of 'replacing politics' (Farman, 2020) as well as self-described transhumanist Patri Friedman, the anarcho-capitalist grandson of Nobel Prize-winning economist Milton Friedman. Jasanoff in her formulation of Imagined Worlds argues that "regulatory devices, whether social or material, are designed with tacit, if culturally grounded, understandings of how human beings reason and behave" (2020, p. 38). In the case of Próspera, its leaders and investors seemingly assume that its residents are 'rational' self-maximisers, able to interpret and decide which legal frameworks are the most beneficial for their businesses. Próspera's investors and organisers themselves do very little in terms of active future-making, aside from maintaining the ZEDE's legal freedoms and creating favourable policies for investment such as a 1% business tax. Unlike the willed transformations being attempted at Vitalia, Próspera simply provides a platform for a 'technological transformation', in which "new technology, (...) for good or ill, has made the new life" with the involvement of "little or no social agency" (Williams, 1978, p. 204), at least on the part of Próspera's decision-makers themselves. In allowing individuals to be self-governed, Próspera removes themselves from the legal responsibilities of a traditional regulatory body or nation-state.

How Enclave Histories Made Encrypted Geographies

Appadurai in *The Future as Cultural Fact* (2013) encourages the consideration of geographies as having been produced by histories and cultural flows of information. Beth Geglia analyses ZEDEs in the broader context of Honduran political history, a history characterised by "enclave development" (p. 354) and neoliberal interventions from the global North. Honduras, alongside Guatemala, was one of the original 'banana republics', parodied by the writer O Henry in his collection of short stories, *Cabbages and Kings*. Having fled to the country in 1896 to avoid persecution in his native America, Henry satirises his own experience of Honduras through the fictional country of *Anchuria*, meaning "spaciousness, in the sense of room to move freely". Henry didn't mean this in the physical sense, much of Honduran terrain is extremely mountainous and rugged, making it notoriously difficult to traverse. Instead, the name reflects the considerable freedoms, power and influence of American businessmen, particularly in the banana trade, over the Honduran government, making it, for them, "The Land of Anything Goes"

(Davenport, 1993, p. XV). *Cabbages and Kings* tells a story of entanglements between the native population, a government with little power and an "advance-guard of speculative Americans that had invaded" (p. 12), representing real businesses such as the Boston Fruit Company, at each turn threatening to overthrow the government in favour of one supporting their endeavours.

Such was the influence of the banana industry in Honduras that a *coup d'etat* was successfully instigated by the president of the United Fruit Company Samuel Zemurray in 1911 (Cohen, 2012), re-installing Manuel Bonilla as the country's president due to his promise of low-tax environments. Since at least this moment in the early 20th century, Honduran politics has been intimately connected to land concession. This has particularly been the case in the wake of tragedies and shocks like Hurricane Mitch in 1998, after which the administration led by Carlos Roberto Flores adopted a strategy of privatisation of federal activity and creating a low tax environment to foster foreign investment. Flores achieved this by expanding the provision of 'Export Processing Zones', mostly locations crucial to Honduras' then emerging raw materials industry, to the whole country. to the whole country. The events following the shock of another military *coup* d'etat in the nation, this time in 2009, directly led to the establishment of the ZEDEs. Recent political history in Honduras, both before and after the coup, has been marred by constitutional crises, allegations of corruption, and institutional drug trafficking. To combat the economic downturn at the end of the Manuel Zelaya administration, post-coup President Porfirio Lobo Sosa declared the country "open for business". A familiar commitment to prioritising economic growth "caught the attention of a group of libertarian futurists who, in early April 2011, organized a conference entitled the 'Future of Free Cities'" (Geglia, 2016, p. 354). Like Vitalia, this conference was also held in Roatán, marking the "beginning of a newfound interest in turning post-coup Honduras into a laboratory of experimentation with alternative forms of corporate governance" (Geglia, 2016, p. 354). Legislation turning the ZEDEs into law would eventually pass in 2013 after an attempt to establish a similar scheme in 2011 was deemed unconstitutional by the Honduran Supreme Court. It has been alleged that Sosa and Juan Orlando Hernández, then President of Congress and later President of the country following Lobo, colluded to remove the Supreme Court judges who voted against the 2011 bill (Joyce & Sheptak, 2013). Sosa was imprisoned in the US for drug trafficking in 2016, meanwhile, Hernández faced sentencing for the same crime shortly after I arrived in February 2024.

Simpson (2022) has termed locations such as Próspera 'Encrypted Geographies', insular spaces demarcated by their use of virtual bordering technologies. These forms of geography "aim to transpose cyberspace onto geographical space and to realize in the material world the

promises of the digital world thereby allowing individuals to transcend geographical borders and foster the spontaneous organization of like-minded communities" (p. 221). Próspera is, in essence, a 'digital first' community, with far more residents signing up as 'e-residents' than those in the physical location. E-residents can visit the location, but not stay there for more than 6 months per year. Encryption is the activity of mathematically securing data behind a firewall, such that only those with a 'decryption key' can access it. Cryptographic proofs are used to generate and verify the digital passports of Próspera's e-residents upon arrival. In addition, Próspera has implemented the digital 'cryptocurrency' Bitcoin as a legal tender within the special zone. Simpson argued that these spaces can be described as 'encrypted' not only because of these technologies but because they are 'encrypted' or hidden from their surrounding environments and cultures. My Honduran interlocutors reported feeling uneasy about the Próspera project and a sense of disconnect with their home cultures when inside the zone. Honduran artist Luis told me that:

"It doesn't even feel like Honduras here, it's a different language, different culture, and there are different priorities. (…) The worst part is that because I know what's happening here, I know that Hondurans will not experience the benefits of these technologies"

Edhel, meanwhile stated

"[Próspera is] not seen with good eyes by us. We have a history in which other countries come, buy a piece of land for a couple of years and eventually give it back. But all the earnings from that place go to a different country (…) It's an economic area where things are different, where you don't pay taxes or perhaps you do, but either way, it's not for Hondurans."

The 'encryption' of this specific space thus extends beyond bordering and currency, but also to language and customs. Many interlocutors were unsure of Próspera's exact mechanisms, or operating model because details are not easy to access or locate. One Honduran interlocutor informed me of a previous conference at Próspera in which a European speaker declared that the island of Roatán was "too nice for Hondurans" and needed to be taken. Furthermore, there are more basic means of encryption and privatisation which characterise Próspera. Aside from a security box at the entrance, there are no indications of the resort belonging to a ZEDE in which Honduran civil law does not apply. The local indigenous population of Crawfish Rock were not informed of the nature of the ZEDE before it opened, assuming it to be another resort. A public feud with the local Indigenous *Garifuna* population at Crawfish Rock also culminated in Próspera's removal of water supplies to the village, when the ZEDE had previously agreed to

provide it free of charge[4]. Residents of Crawfish Rock are met by armed guards when trying to reach the beach, which just a few months ago was a public space. Honduran workers and residents were distinctly othered during discussion, often referred to as “the locals”.

Much like Prospero in *The Tempest*, Próspera has sidelined local populations within a ‘space of Otherness’. Despite a stated aim of transcending boundaries and borders, which it achieves for its wealthy residents, Próspera has created new boundaries enforced by digital encryption, technologies of sign systems and political lobbying. Próspera’s mission statement is to ‘maximise human prosperity’, but in reality, only those inside of this exclusive space can prosper.

[4] https://restofworld.org/2021/honduran-islanders-push-back-libertarian-startup/

Conclusion

The unique locations of Vitalia and Próspera incubate grand imaginaries of human futures, in which fundamental human limitations and boundaries are overcome with the aid of emerging technologies. While Vitalia attendees advocate for the destruction of the boundary between human and machine, conferring morphological freedom, Próspera serves as a platform which advocates the destruction of political and regulatory borders, conferring political freedom. These imaginaries seemingly converge upon a specific 'boundaryless' future of humanity.

In the name of progress towards a future in which biological human abilities are augmented and individual sovereignty is claimed, Vitalia and Próspera have however excluded many from their imaginaries of the future and, ultimately, their conceptions of 'humanity' itself. Within these imaginaries, technology is perceived as an enabler of possible futures for 'the human', capable of re-engineering its limitations and boundedness. Rather than challenge the inherently Western-centric notion dominant of 'the human' (Wynter, 2003), however, this rare ethnographic encounter with transhumanist thinkers highlights that transhuman imaginaries do form new, technology-centric, conceptions of the human but that these 'novel' imaginaries reinforce many 'old' assumptions about human nature and behaviour, and that these imaginaries are firmly Western-oriented and ratiocentric.

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