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Universal Kindness

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A decentralized unconditional
universal income guarantee,
implemented using cryptocurrency
and networks of social trust – an
attempt at the total, direct and
immediate abolition of poverty.

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DRAFT

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2019-06-06T2246

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GPLv3

Acknowledgements

10 The name *Universal Kindness* was suggested by Karl Nordström, an occasional turn of
11 phrase was suggested by Gavin Kirby, I was introduced to Murray Bookchin by Liam Moore,
12 and Stephen Ogilvy has advised on the merits of linen.

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44 Chapter 1

45 Introduction, motivations, 46 caveats

47 If a lot of people love each other,
the world would be a better place to live.

Johnny



Figure 1.1

48 Pierre-Joseph Proudhon, the first anarchist and yet deeply problematic person, rejected all
49 political action as a form of class collaboration and argued instead that the working class
50 can achieve its salvation through economic action alone.

51 This document presents some ideas that are in pursuit of a society that values fairness
52 and caring, intrinsically involving care of non-human nature, perhaps via some methods of
53 communalist anarchy, and that has at its core the idea that no one should have to work
54 just to survive. Described is a tool of social coordination to direct progress towards such
55 a society: a monetary policy controlled by dictatorship of a proletariat. Decentralized
56 networks of social trust and decentralized networks of cryptocurrency could possibly be
57 used to create this decentralized form of coordination, a prioritised function of which would
58 be a *decentralized unconditional universal income guarantee*. In short, we're talking about:



Figure 1.2

To each according to their needs.

Here, the slogan popularized by Marx has its symmetry broken because it could be interpreted as implying that there is scarcity of the resources required to ensure the needs of the people of the world, when this is likely not the case, as suggested by global food production capabilities, shown in Figure 1.3. This is with existing food production methods, which involve the atrocity called the animal industry. Leaving aside the horror of this industry, its inefficiency is remarkable: 16 kg of plants are needed to produce 1 kg of meat. A move to veganism would make the unreality of food scarcity even more clear.

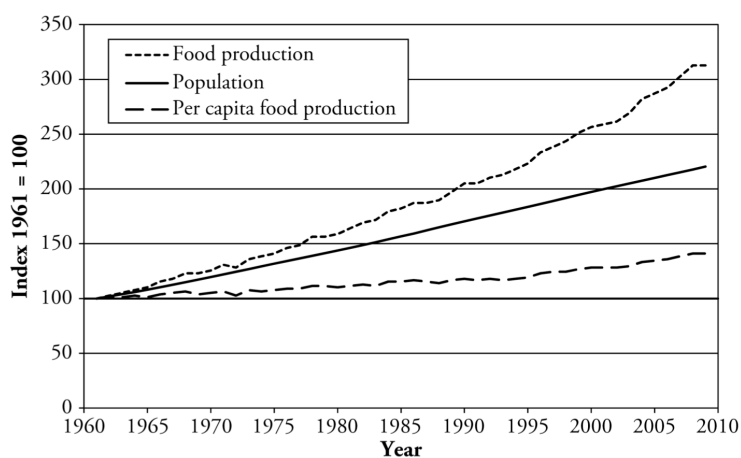


Figure 1.3: World food production from 1961 to 2009 [1]

Often socialists view an ideal economy as one in which remuneration is at least somewhat proportional to the degree of effort and personal sacrifice expended by individuals in the productive process. I argue that remuneration, or otherwise provision of fundamental needs, should not be coupled with ability or desire to commit effort or sacrifice, is a right – a need a person gets to demand.

If there are scarcities of resources needed for protection of fundamental needs, then we do at least have guidelines on what some of the most important needs are, such as the *Universal Declaration of Human Rights* [2] (UDHR), and on how needs are prioritized, an example of which is the *Corte Suprema di Cassazione* ruling on Roman Ostriakov [3], who stole some food in an action that was ruled a necessity for life; “il diritto alla sopravvivenza prevale

77 su quello di proprietà” [the right to survival prevails over that of property] [4], which was
78 based on the Italian legal doctrine ‘Ad impossibilia nemo tenetur’ [‘No one is held to do the
79 impossible’].

80 Poverty exists even in the wealthiest nations. For instance, Philip Alston, the United Na-
81 tions Special Rapporteur offered a statement in 2018 on extreme poverty and human rights
82 violations in the contemporary UK [5].

83
British compassion for those who are suffering has been replaced by
a punitive, mean-spirited, and often callous approach apparently
designed to instill discipline where it is least useful, to impose a rigid
order on the lives of those least capable of coping with today’s
world, and elevating the goal of enforcing blind compliance over a
genuine concern to improve the well-being of those at the lowest
levels of British society.

Philip Alston, 2018 [5]

84 Regarding anarchy, an introduction to the topic is provided by the Philosophy Tube video
85 *Intro to Anarchy: Power & Violence* [6]. An early comment on balanced anarchy yielded
86 by computer networks was given by James Burke in the 1985 documentary series *The Day*
87 *the Universe Changed* [7].

In describing this utopia as “anarchism,” I might have also used an equivalent expression – “anarcho-communism.” Both terms denote a stateless, classless, decentralized society in which the splits created by propertied society are transcended by new, unalienated human relationships. An anarchist or anarcho-communist society presupposes the abolition of private property, the distribution of goods according to individual needs, the complete dissolution of commodity relationships, the rotation of work, and a decisive reduction in the time devoted to labor. As this description stands, however, we have little more than the anatomy of a free society. The description lacks an account of the physiology of freedom – of freedom as the process of communizing. The description, in effect, lacks those subjective dimensions that link the remaking of society to the remaking of the psyche.

Murray Bookchin, *Post-Scarcity Anarchism*

89 Strict self-sufficiency approaches like Mao’s backyard pig iron and Angka’s isolationism have
90 proven to have a high likelihood of failure, and don’t conceptually work well in a world of
91 diverse location-based resources. Scotland has wind; Sudan has sunlight.

92 There is a tendency for human-created ideas to vastly prioritise human needs over the needs
93 of other people and creatures and systems of life. I want to emphasise that the use in this
94 document of words such as ‘person’ are to be extended beyond humans to others in nature,
95 including those created by human designs. I want to emphasise also that a fairer society
96 can be conceptualized only if there is a strong response to the climate emergency [8], and
97 that the climate emergency has been caused to varying degrees by projects concerned with
98 domination, profit, growth, structural violence, and general unconsidered unfairness in how
99 humans treat other humans and life generally.

100 The book *Utopia for Realists* by Rutger Bregman makes the statistical, economic and his-
101 torical case for open borders and implementation of a universal income guarantee. At a panel
102 session in Davos 2019 (which was popularized by Bregman emphasising the need for vastly
103 greater taxation on extreme wealth), Bregman links the socio-economic benefits of war-time,
104 such as reducing wealth inequality, with the framing of responses to the climate emergency
105 as “the moral equivalent of a war”. This is an inventive approach that should be investi-

106 gated, because it offers the possibility of addressing the climate emergency in tandem with
107 the possibility of improving social wellbeing [9]. The *Global Green New Deal*, as supported
108 by Alexandria Ocasio-Cortez and others, might be used for this purpose [10].

109 Caveat: if the mere existence of a form of commodification, such as the system proposed
110 herein, impedes progress towards a better world, perhaps by supporting surveillance capi-
111 talism in some way, then this tool and others like it should be dismissed;

The examined life is actually not worth living.

112

Natalie Wynn [11]

113 There is a tendency for the powerful to attempt to claim nice-sounding phrases, such as
114 “Universal Credit”. The UK Universal Credit system is a welfare payments system that
115 features sanctions and resulting deaths. It is possible that the use of this terminology by
116 the UK Tory government combined with the disastrous effects of its implementation will
117 scare people that have been subjected to it into fearing any change to the existing welfare
118 system and may even induce fear of terms like “universal” because they can represent
119 oppressive and painful changes. Even terms like “benefits” are manipulative and imply that
120 welfare is not a right, but a privilege. So, I make no apologies for the use of the laborious,
121 redundancy-high, term

122 *decentralized unconditional universal income guarantee*

123 because it is more difficult to change the meaning of a larger number of words than a smaller
124 number. I explicitly exclude terms like “citizen” because an income is demandable by anyone
125 who needs it.

126

Chapter 2

127

What: some terminology

128

2.1 Terminology

129

Some slightly non-standard terminology is used in this document, so some of it is qualified

130

in Figure 2.1.

Term	Description
Guaranteed income	A guarantee of money given to a person universally and unconditionally and reliably of an amount defined by some monetary policy.
Guaranteed basic income	A guaranteed income of an amount sufficient to cover basic needs/rights.
Guaranteed median income	A guaranteed income of an amount corresponding to the median income of the relevant population.

Figure 2.1: Terminology

131 Chapter 3

132 Why and how

133 3.1 Imperial capitalism and the class system

134 The current monetary system is both impractical and unfair. Taken in political context, it
135 concentrates a disproportionate power in a tiny minority of people. This promotes inequality
136 and injustice and a wealth of other problems, and is readily abused for the purposes of
137 manipulation and control. The current system rewards and encourages greed and selfishness.

138 There are many, many ways by which the capitalism system enables wealthy individuals
139 and groups to gain political and legal and otherwise dominative and coercive power, some
140 of which are lobbying, corruption, disinformation, manipulation and threats, and many of
141 which involve the undermining of both thinking and wellbeing via stress and poverty. In
142 societies that permit capitalism (or in those that do not sandbox it), there ends up being
143 a working class – that is the people who work for someone else – and a capitalist class –
144 who are the people who have people work for them – and a middle class, which is usually
145 comprised of working class people who live comfortably with noticeable social privileges
146 relative to working class people, and those who manage the working class for the capitalist
147 class (and someone self-employed may be a member of the petite bourgeoisie).

The United States is deeply in debt – that was part of the whole Reagan/Bush program, in fact: to put the country so deeply in debt that there would be virtually no way for the government to pursue programs of social spending anymore. And what “being in debt” really means is that the Treasury Department has sold a ton of securities – bonds and notes and so on – to investors, who then trade them back and forth on the bond market. Well, according to the Wall Street Journal, by now about \$150 billion a day worth of U.S. Treasury securities alone is traded this way. The article then explained what this means: it means that if the investing community which holds those securities doesn’t like any U.S. government policies, it can very quickly sell off just a tiny signal amount of Treasury bonds, and that will have the automatic effect of raising the interest rate, which then will have the further automatic effect of increasing the deficit. Okay, this article calculated that if such a “signal” sufficed to raise the interest rate by 1 percent, it would add \$20 billion to the deficit overnight – meaning if Clinton (say in someone’s dream) proposed a \$20 billion social spending program, the international investing community could effectively turn it into a \$40 billion program instantly, just by a signal, and any further moves in that direction would be totally cut off.

Noam Chomsky, *Understanding Power*

149 This scenario suggested by Chomsky, considered with sufficient economic skepticism, is just
 150 one way by which a coordinated campaign by the wealthy can be formed against a social
 151 program in order to make it prohibitively expensive.

152 In almost all countries, income and wealth inequalities have increased vastly, partially de-
 153 fended and concealed from traditional legal systems and economics by wealth stashed in
 154 tax havens. We have changed from a post-war time of liberalized financial markets to one
 155 of rentier capitalism, wherein more and more wealth and income is siphoned by owners of
 156 financial, tangible and intellectual property, leaving even wage labour incomes to stagnate
 157 and reduce. Governments, often under the financial control of the wealthy, have increased
 158 subsidies and tax cuts for the wealthy while reducing the welfare states and making such
 159 things as welfare payments difficult to obtain, often to a deadly extent. Even more alarm-

160 ingly, we see capitalist growth destroying the environment.

161 3.2 Artificial scarcity, technologies of decentralization 162 and income

I am now convinced that the simplest approach will prove to be the
most effective – the solution to poverty is to abolish it directly by a
163 now widely discussed measure: the guaranteed income

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [12]

164 The *Emergency Economic Stabilization Act of 2008* became law on 3 October 2008 for the
165 purpose of bailout of banks in the 2007–2008 sub-prime mortgage fraud.

166 While development of ideas like it took place over many years, the original *Bitcoin* paper [13]
167 was then released on 31 October 2008, in possible response to this bailout, with the coinbase
168 field of the genesis block stating “The Times 03/Jan/2009 Chancellor on brink of second
169 bailout for banks.” [14]. While the bailout act of 2008 was followed up by the *Dodd–Frank*
170 *Wall Street Reform and Consumer Protection Act* in 2010 to reduce fraudulent and risky
171 behaviour, Bitcoin has continued to grow and has resulted in the development of a vast
172 collection of other cryptocurrencies.

173 Just as Napster and BitTorrent led to a global decentralized mechanism of opposition to
174 artificial scarcity of easily-duplicable data, and a decentralized mechanism of protection of
175 certain rights, such as the UDHR Article 27(1) right to cultural participation and artistic
176 enjoyment, so too has Bitcoin become a global decentralized mechanism that bypasses au-
177 thoritarian mechanisms of enforcement of monetary policy, and a mechanism of protection
178 of certain rights, such as the UDHR Article 12 right to privacy (applicable in the case of
179 being able to access drugs currently called illegal by authoritarian regimes), the UDHR
180 Article 22 right to economic participation (of particular benefit to people in poverty who
181 cannot access banking systems and who are excluded because of risks of fraud) and the
182 UDHR Article 19 right to freedom of expression (I will accept an IOU from anyone I per-
183 sonally deem fit, thanks very much). It also assists in decreasing economic borders, such

184 as country-level sanctions and the forced sale of work for unfair rates. We see explorations
 185 of blockchain social networking with Memo [15]. We see the Bitcoin blockchain used as a
 186 notary with Satoshi Proof [16], whereby data can be reliably timestamped. We saw M-Pesa
 187 change from a measure of phone air-time to being a proxy used for money transfer. With
 188 government viewed as being substantially a form of technology, many other decentralized
 189 systems hint at other ways of forming and operating a decentralized government. One is the
 190 gradual migration of people away from brand loyalty to ratings loyalty. One is the usage
 191 of VPN servers in various countries. As seen in the VPN server loads per country shown in
 192 Figure 3.1 and Table 3.2, perhaps certain inferences could be made about the popularities
 193 of various countries in terms of their privacy, legal or government climates.

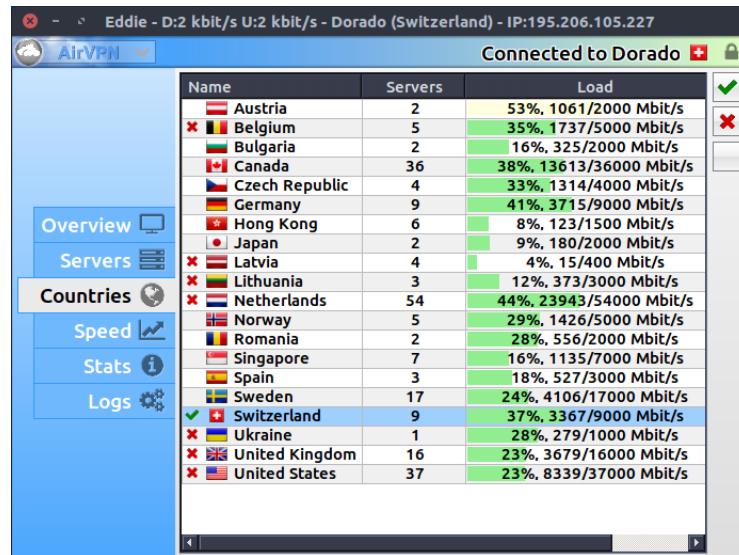


Figure 3.1: Load on VPNs of various countries in April 2019

Country	Load (%)
Austria	53
Netherlands	44
Germany	41
Canada	38
Switzerland	37
Belgium	35
Czech Republic	33
Norway	29
Romania	28
Ukraine	28
Sweden	24
United Kingdom	23
United States	23
Spain	18
Bulgaria	16
Singapore	16
Lithuania	12
Japan	9
Hong Kong	8
Latvia	4

Figure 3.2: Ordered load on VPNs of various countries in April 2019

194 Article 25 of the *Universal Declaration of Human Rights* states:

195 1. Everyone has the right to a standard of living adequate for the health and well-being
196 of himself and of his family, including food, clothing, housing and medical care and
197 necessary social services, and the right to security in the event of unemployment,
198 sickness, disability, widowhood, old age or other lack of livelihood in circumstances
199 beyond his control.

200 2. Motherhood and childhood are entitled to special care and assistance. All children,
201 whether born in or out of wedlock, shall enjoy the same social protection.

202 One way to ensure these UDHR Article 25 rights is through a decentralized mechanism
203 of protection offered by a *decentralized unconditional universal income guarantee*. The de-
204 centralization aspect is critical because it ensures the global and universal nature of the
205 protection, distancing it from implementation by an authority (which could change or re-
206 scind it, as has happened for other welfare measures in semi-welfare states like the UK) and
207 reducing all borders (helping to progress to a point where no one is forced to sell their work
208 at an unfair price).

Those at the lowest economic level, the poor white and Negro, the
aged and chronically ill, are traditionally unorganized and therefore
have little ability to force the necessary growth in their income.
209 They stagnate or become even poorer in relation to the larger
society.

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [12]

210 A decentralized system such as that described here *is* a means of organizing the poor.

211 It is here suggested that an unconditional universal income guarantee is a possible way to
212 undermine the inherent features of the capitalist system of oppression, domination, coercion
213 and artificial scarcity, and it is also suggested that even if an effort to undermine those
214 systems were not successful, so making the artifical scarcity an intractable problem, that
215 the unconditional universal income guarantee could be a plug-in economic mechanism that
216 acts as a constant mitigation to the capitalist system (and other oppressive systems). As
217 MLK put it, “*We have come to the point where we must make the nonproducer a consumer*

218 *or we will find ourselves drowning in a sea of consumer goods.*” [12]. The Marx/Engels
219 concept of *withering away of the state* is used to suggest that realization of the ideals of
220 socialism using the social institutions of a state makes the realized socialism self-sustaining
221 without the need for the state. In a complimentary way, though in the same spirit, the
222 unconditional universal income guarantee could be a method of withering those mechanisms
223 of oppression, both private and state, that impede both greater protection of known rights
224 and the exploration that is in pursuit of unknown rights. Use of a decentralized income
225 could be a *Propagande par le fait* [*propaganda by the deed*], a political action which is an
226 example to others and serves as a catalyst for revolution. The idea is both to inspire a spirit
227 of revolt by demonstrating that the authorities are not omnipotent, and to offer hope to the
228 downtrodden. It is an approach that was approved in 1881 at the *International Anarchist*
229 *Congress of London* [17].

230 It has been suggested that a guaranteed income is possibly best seen as a reform to the
231 existing monetary distribution systems and as something that exists in a free market econ-
232 omy. It could modestly reduce economic inequality in a number of ways, the least of which
233 is likely to be because a flat-rate regular payment represents a larger share of the income
234 of a poor person than it would for a wealthy person. It could reduce economic insecurity
235 and chronic economic uncertainty by strengthening social insurance against flexible labor
236 markets and technological disruption, particularly the continued rise of intelligent automa-
237 tion [18]. It, particularly as a decentralized, borderless system, could mitigate the global
238 pandemic of stress and depression. Indeed the evidence suggests that even the guarantee as-
239 pect, rather than the exact size, of the income reduces the intensity and prevalence of stress,
240 with that in itself giving people more control. Both the Ontario 2017 and Finland 2017 ba-
241 sic income studies (both of which were ended prematurely) suggested a sharp decline in
242 domestic violence and depression. A guaranteed income would also mitigate the disgusting
243 “targeting” approach for welfare payments inflicted on poor people by governments through
244 means-testing and behavior testing, often implemented by for-profit private companies with
245 a deadly conflict of interest. So in some senses an unconditional universal income guarantee
246 is protection of the right to economic security. It also slightly disincentivises high-profit,
247 low-effort activities.

248 Another important consideration is that insecurity, inequality, stress and precarity may be
249 associated with neo-fascism.

250 Global warming, climate change, pollution, and falling life expectancy rates all can be
251 collected under one term: extinction. As was seen with les gilets jaunes in France, unfair
252 distributions of taxation are unpopular because the poor are made to pay proportionately
253 more of their income than the wealthy. Steps in the right direction are seen in Canada and
254 Switzerland, where high fuel and other eco-taxes are imposed with proceeds returned to the
255 people in the form of “carbon” or common dividends. A cross-party group in the USA has
256 advocated a similar approach with the support of 27 Nobel Prize economists. Basic income
257 studies have shown that those that receive it tend to do more useful work that is ecologically
258 and socially desirable, as opposed to resource-depleting labor (as Bregman calls it “bullshit
259 jobs”).

260 The 2019 paper *Basic Income for All: From Desirability to Feasibility* [19] suggests that, in
261 the UK, a basic income would:

- 262 • pay a significant, no-questions-asked amount of 10,400 GBP per year to a family of
263 four,
- 264 • cut child poverty by more than a third and pensioner poverty by almost a third,
- 265 • narrow the inequality gap,
- 266 • lead to gains for three quarters of all households, with the largest gains among the
267 poorest households,
- 268 • strengthen the universal element of the benefits system and reduce dependency on
269 means testing and
- 270 • would take the UK back to the level of social security spending of 2010, but with much
271 more progressive and universal outcomes.

272 The paper considers a few options for the introduction of a universal income guarantee,
273 seeking to address particularly the usual criticism: that the income amount is either too
274 small to make much of a difference or too generous to afford. I wish to emphasise that
275 the exact amount of the income, which is distinct from other forms of social aid, such as

276 disability support, *must* change such that it provides enough for fundamental needs. The
277 10,400 GBP number is merely a guide number that is suggested by a paper considered in
278 the context of the current political climate.

279 The 2019 paper *A Larger Us* [20] suggests three transitions that are needed for happier,
280 healthier, more resilient democracies:

- 281 • from fight-or-flight to self-awareness,
- 282 • from powerlessness to agency, and
- 283 • from disconnection to belonging.

284 I feel it's possible that the guaranteed income system proposed here could assist with the
285 second and possibly the third transitions.

286 The Stockton Economic Empowerment Demonstration (SEED) [21] is a city-led guaranteed
287 income project which involves providing at least 100 people of Stockton with a guaranteed
288 income of 500 USD for 18 months using prepaid debit cards. It plans to make a number
289 of measurements, such as changes in financial wellbeing, psychological distress and physical
290 functioning. For the case of financial wellbeing, measurements of income volatility and
291 unsecured debt will be made. In similar experiments, it has been observed that individuals
292 tend to use surplus income to pay down debt. For the case of the health indicators of
293 psychological distress and physical functioning, measurements are to be made using the
294 SF-36 and the Kessler 10 and through qualitative interviews.

295 The paper *No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash Transfer*
296 *Programs* [22] summarizes the empirical evidence from three major U.S. guaranteed income
297 experiments. In these experiments, educational achievement increased, health outcomes
298 substantially improved, and there was little effect on labor market supply.

Two conditions are indispensable if we are to ensure that the guaranteed income operates as a consistently progressive measure. First, it must be pegged to the median income of society, not at the lowest levels of income. To guarantee an income at the floor would simply perpetuate welfare standards and freeze into the society poverty conditions. Second, the guaranteed income must be dynamic; it must automatically increase as the total social income grows. Were it permitted to remain static under growth conditions, the recipients would suffer a relative decline. If periodic reviews disclose that the whole national income has risen, then the guaranteed income would have to be adjusted upward by the same percentage. Without these safeguards a creeping retrogression would occur, nullifying the gains of security and stability.

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [12]

300 As a decentralized plug-in, or virus, for existing political systems, an unconditional universal
 301 income system might broadly be intended to move things towards equality of outcomes – for
 302 people, species and ecosystems generally (where equality of outcomes is here supposed to
 303 mean broadly a fair distribution of satisfaction with life, including satisfaction with degree
 304 of autonomy and perhaps including equality of perception), and towards non-competitive
 305 behaviours. One candidate form of politics for pursuit of this is Murray Bookchin’s commu-
 306 nalism. Shortcomings in the anarchic approach, however, concern tyranny of the majority;
 307 specifically, the author suspects that a more protective approach should be considered in
 308 order to ensure the needs of minorities instead of assuming that the anarchy system per-
 309 fectly undermines tyrannical, dominative and oppressive behaviours. Welfare should be a
 310 part of whatever system is implemented to attempt to ensure that there is a social safety
 311 net that ensures that rights such as those listed in the *Universal Declaration of Human*
 312 *Rights* cannot be denied. An example of tyranny under a purported anarchic system is the
 313 pogroms, banditry and sexual abuse in the Free Territory of Ukraine [23].

314 The feature of the proposed system of a network of social trust also has the possibility
 315 of not just protecting the UDHR Article 27(1) right to cultural participation, but could
 316 also increasing the extent of that right by encouraging people to participate more fully in

society. However, as the income is unconditional, universal and guaranteed, there should be protections for those that do not wish to participate in the cultural life of society or are excluded from society, such as has been the case of despised minorities, examples of which have been Jewish people, sexuality minorities and gender minorities. Fully addressing such social exclusion is beyond the scope of this document, but the decentralized system should feature some protections against it and the system itself should not feature social exclusion capabilities, the likes of which are seen in the *Black Mirror* 2014 Christmas special *White Christmas* [24].

Rutger Bregman’s *Utopia for Realists* has a chapter *Why It Doesn’t Pay to Be a Banker* which [spoiler] compares a strike of bankers and bank employees in Ireland with a strike of sanitation workers in New York City. In 1968, the sanitation workers took the illegal option of striking, resulting – in a matter of six days – in a declaration of a state of emergency and – in a matter of nine days – in the sanitation workers getting their way. The bank employee strike of 1970 lasted six months, and the Central Bank of Ireland concluded that “The Irish economy continued to function for a reasonably long period of time with its main clearing banks closed for business” and, indeed, the economy grew. During this strike, Irish people continued writing cheques, effectively printing their own cash, with the only difference in the character of the cheques being that they couldn’t be cashed at banks. Instead, dealers such as publicans could act as verifiers of trust and could accept the cheques. It was a decentralized monetary system and it seems to have worked because of social cohesion. I myself recall that this sort of fractional reserve banking certainly did not stop after this strike and was implemented in my home town of Longford via Doyle’s pub, seen in Figure 3.3.



Figure 3.3: Doyle's pub [25]

339 Bregman suggests that the fact that the Irish people implemented this decentralized banking
340 makes it clear that the society needed some form of financial sector.

341 It is beyond the scope of this document to describe and evaluate past implementations of
342 basic income and past implementations of anarchism, but the book *Utopia for Realists* gives
343 the former and histories of the Spanish anarchists, the peak implementation of modern an-
344 archism, give the latter. However, I can mention that the slogan of the CNT/FAI anarchists
345 was “Ni dios, ni estado, ni patrón” [No god, no state, no boss], widespread by the Spanish
346 anarchists since 1910.

347

I had dropped more or less by chance into the only community of any size in Western Europe where political consciousness and disbelief in capitalism were more normal than their opposites. Up here in Aragon one was among tens of thousands of people, mainly though not entirely of working-class origin, all living at the same level and mingling on terms of equality. In theory it was perfect equality, and even in practice it was not far from it. There is a sense in which it would be true to say that one was experiencing a foretaste of Socialism, by which I mean that the prevailing mental atmosphere was that of Socialism. Many of the normal motives of civilized life—snobbishness, money-grubbing, fear of the boss, etc. — had simply ceased to exist. The ordinary class-division of society had disappeared to an extent that is almost unthinkable in the money-tainted air of England; there was no one there except the peasants and ourselves, and no one owned anyone else as his master.

George Orwell, *Homage to Catalonia*

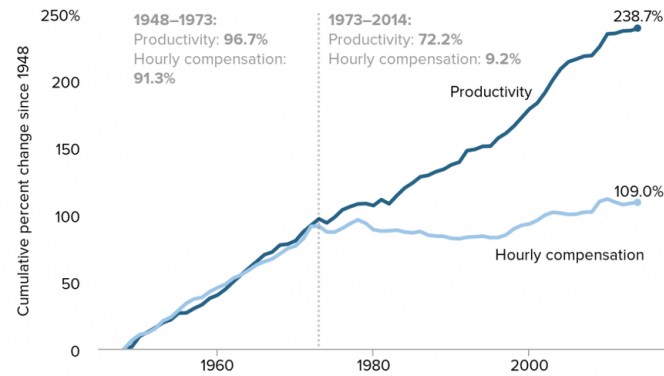
348 As summarized in the documentary about Rojava *Accidental Anarchist*, contemporary move-
349 ments such as Occupy Wallstreet, Occupy Sandy and, more recently, Extinction Rebellion
350 are collectives of direct democracy, mutual aid and, arguably, socialist forms of anarchy.

351

The opposite of government-imposed order is not chaos: there's a deeper order concealed within human society which relies not upon coercion but cooperation and trust, built not by governments or politicians, but by people who realise at last their own true power.

Carne Ross, *Accidental Anarchist* [26]

Disconnect between productivity and a typical worker's compensation, 1948–2014



Note: Data are for average hourly compensation of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services minus depreciation per hour worked.

Source: EPI analysis of data from the BEA and BLS (see technical appendix for more detailed information)

Economic Policy Institute

Figure 3.4

352 With technological, educational, and medical improvements, productivity has increased mas-
 353 sively over at least the last century, however, compensation has not been increasing to match
 354 it, as shown in Figure 3.4. This is plausibly something of a result of a fundamental problem
 355 described by Marx: ownership of the means of production, and likely many other sneaky
 356 methods besides. While taxation of automation is one approach to address this disparity,
 357 decentralized ownership of the means of production, perhaps by means of decentralized
 358 income and wealth redistribution, and it is an approach that does not (at least at face
 359 evaluations) require much battle with existing power structures.

360 In all of the unconditional universal income guarantee experiments (run everywhere from
 361 New Jersey to Pennsylvania to Iowa to North Carolina to Indiana to Seattle to Denver
 362 to Finland, Mincome in Manitoba, as well as some smaller ones in Africa) the approach
 363 improved health and education, boosted the economy, and ended poverty. Apart from
 364 new mothers, people didn't tend to work less when they received this income. In fact,
 365 particularly as seen in the African unconditional universal income guarantee experiments,

366 having a reliable income enabled people to have more free time to educate themselves so
367 that they could advance to a new form of work, perhaps more enjoyable or meaningful, or
368 to start businesses or generally to take more risks. Even the likes of Nixon and Rumsfeld
369 were pretty much convinced by it [27]. *Utopia for Realists* by Rutger Bregman presents a
370 referenced analysis of the idea as it has been implemented through history.

371 While climate emergency and denial of fundamental needs are powerful justifications for
372 efforts on caring methods to undermine capitalism, there is another concern: Yuval Noah
373 Harari emphasized the urgency of building decentralized information processing systems
374 that are more efficient than fascist information processing systems in the 2018 TED talk
375 *Why fascism is so tempting – and how your data could power it* [28].

We are witnessing the gradual disappearance of the postwar British
welfare state behind a webpage and an algorithm. In its place, a
376 digital welfare state is emerging. The impact on the human rights of
the most vulnerable in the UK will be immense.

Philip Alston, 2018 [5]

377 **3.3 Decentralized unconditional universal income guar-** 378 **antee system**

A hundred times every day I remind myself that my inner and outer
life are based on the labors of other men, living and dead, and that I
379 must exert myself in order to give in the same measure as I have
received and am still receiving...

Einstein

380 It is possible that the emergence and rise to cultural prominence of cryptocurrency and
381 networks of trust, which may be viewed as an extension of the free culture movement, offers
382 a possibility of escape from the current systems of oppression and better ideas that it to
383 improve the wellbeing of creatures of this world. A combined system of a social trust graph
384 together with crypto verification is here referred to as a *crypto-trust* system.

385 Government, politics and monetary systems all can be viewed as technologies. Viewed
386 as such, societal problems are technological in origin. Most of the ideas in the current

387 monetary and political systems were designed centuries ago, and they feature limitations
388 which suggest that the imaginations of their creators were limited by the comparatively
389 primitive technology of their times. The limits of our language, so to speak, are the limits
390 of our world.

391 The speed of light appears to be an important constraint of computational efficiency; a
392 galaxy size computer would be slower than a microchip computer because of the distance over
393 which computational elements must communicate. So, computational efficiency requires
394 that we explore methods of decentralizing and distributing computations such that as much
395 local computation as possible is accomplished. A decentralized or distributed system for
396 monetary and welfare and history policies is needed for computational efficiency and will
397 become more necessary as we expand throughout the cosmos.

398 Algorithms like Bellman-Ford can be used to determine arbitrage paths and flows of value
399 between people, business, countries, city states and other entities. This, together with other
400 considerations such as the number of users to which income is due, might be used by an
401 automated decentralized unconditional universal income guarantee system to determine the
402 income amount attributed to users per unit time, and might be used for funding and bailout
403 calculations in order to improve economies.

404 An attempt has been Grantcoin, now called Manna [29]. Manna is administered by a
405 US non-profit organization. While perhaps well-intentioned and inherently against borders
406 (due to its use of a decentralized blockchain), Manna features a number of flaws, one of
407 which is the organization acting as a gatekeeper, another being the organization acting as
408 a centralized control over the monetary policy, and another being the possibility to invest
409 in the currency. It intends to model itself on the Alaska Permanent Fund, which is a form
410 of income paid to all Alaskans which arise from profits from a capital reserve fund. Its
411 emphasis is more on altruism and charity than on rights. Fundamental rights shouldn't be
412 subject to the whims of charity – that's why they're called rights. So, I view the emphasis of
413 the Manna approach as fundamentally flawed. However, the opening of the Manna mission
414 statement is perhaps worth repeating:

We, the people of the world, recognize and declare that money is a social invention which can be changed by the people according to our values. As we witness the growing scourge of inequality and its consequences, we see that the existing system is unjust and unsustainable. Recognizing and accepting the moral obligation that arises from such knowledge, we stand united in the decision to create a better alternative: a currency of conscience designed to facilitate the emergence of a more just and sustainable global economic system.

Money By the People, For the People: The Manna Vision and Mission [30]

A decentralized unconditional universal income guarantee system might be defined by the following ideas:

- Blockchain is used to ensure the integrity of the currency (well, currencies) via distributed consensus, in the manner of Bitcoin and Ethereum.
- A social trust graph is used to attempt to ensure that there is a one-to-one relationship between a user and a wallet, in other words a defence against Sybil attack. This can be supplemented by gatekeepers of various forms.
- An income rate definition or inflation/deflation algorithm, a basic version of which sets the income rate in proportion to the number of users in the system.

3.3.1 Blockchain

Blockchain is a reusable proof-of-work (effort/energy/work-based) approach to decentralized/distributed ensurance of integrity of a record. Similar approaches that are energy-efficient are under exploration currently.

The decentralized unconditional universal income guarantee system features individualized colored cryptocurrencies [31], with a specific color of currency corresponding to a reported user, which is defined when the user joins the system. The user receives income in the form of their colored currency over time, at a variable open source rate, which might be calculated by reference to the number of users in the system and by reference to more complicated

434 ideas, such as open source economic analyses to lower the time it might take to reach societal
435 economic prosperity or wellbeing more generally.

436 The Austrian school of economics, which arguably features shortcomings like pure logical de-
437 duction and a lack of scientific rigor, underlies the design of Bitcoin, with Bitcoin resembling
438 gold.

439 3.3.2 Decentralized/distributed social trust graph as Sybil defense

440 The social network Facebook has a security facility that enables a user to nominate a number
441 of friends to vouch for them when they lose access to their account, as shown in Figure 3.5.
442 This vote of confidence is a network of trust.

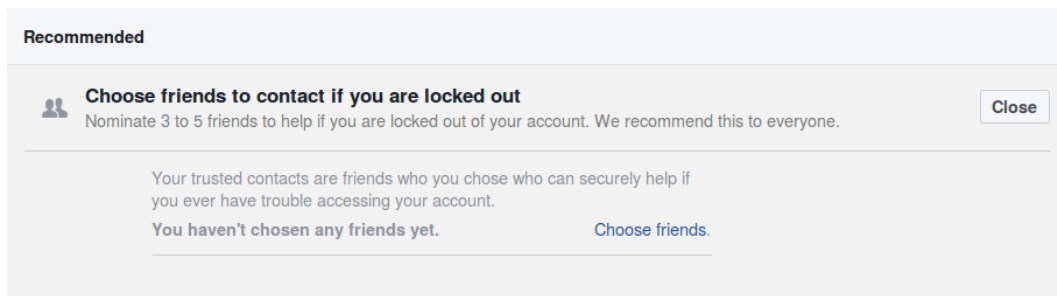


Figure 3.5: Facebook trust network

443 Graph-based Sybil defences can use social network graph properties to distinguish Sybil
444 users from legitimate users. Some assumptions in a Sybil defense strategy could be that the
445 legitimate social network graph features fewer edges between user vertices than the Sybil
446 social network graph and that a Sybil user cannot produce meaningful interactions in the
447 legitimate social network graph, even if it may infiltrate it. Other strategies have been
448 considered [32].

449 In this proposed social trust graph Sybil defense, in a sense, a social contract is being
450 created wherein a user receives money unconditionally to engage with their community. It
451 is hoped that the social trust graph will be secured fundamentally by a careful population
452 and population scale ideas like “six degrees of separation” [33], with analyses and gatekeepers
453 as supplementary protections. New users are given a currency that is worthless by default

454 and they must take steps to increase its value. These social steps are the formal barrier to
455 participation.

456 The canton of Zug is a region of Switzerland that has a low tax rate and a startup culture.
457 In 2017 Zug started to use uPort [34] for its Zug ID [35]. uPort is decentralized by storing
458 identity data on IPFS and by using the Ethereum blockchain, but the Zug ID involves
459 centralized gatekeeping by in-person verification by a city administrator. It was scheduled
460 to be used to test non-binding voting in 2018. This Sybil defense could be used but only as
461 a supplement to decentralized/distributed Sybil defences. This is because such a centralized
462 gatekeeper could make people beholden to it. Consider a bad, authoritarian government
463 implementing income using a gatekeeper. It could wait until people are familiar with this
464 form of income and dependent on it, and then could start making demands on people to
465 comply with it in order to keep receiving the income. Defences against such authoritarian
466 control must be present in the system. The idea of a basic income arises from rights, not
467 from a gatekeeper, whether that gatekeeper be a government office or a charity.

468 Gatekeepers *are* permitted in the system – one could imagine businesses, governments,
469 social groups, living groups *etc.* having specific validation requirements or other logics to
470 determine group membership. This would be a level of validation above the basic validation
471 provided by the social trust graph, a level of validation which must be reasonably achievable
472 by all users.

473 In this proposed decentralized unconditional universal income guarantee system, users have
474 the ability to trust the personal currencies of other users, which requires them to treat this
475 personal currency identically to any other currencies that they trust. As the social trust
476 graph becomes more interconnected, it is hoped that these personal currencies converge
477 on a single universal monetary system. All users receive income at the same open source
478 calculated rate, meaning that new money is distributed equally to all users at all times.
479 This income generation is the only way new money is created.

480 Strangers wanting to exchange money automatically search for a transitive chain of trusted
481 currencies between each other. The payer trades along this chain of trusted currencies, one
482 after the other, until they have one that the recipient needs. Such exchanges working in
483 practice require a reasonable number of users in the system. Up to that point, the system is

484 little more than passing IOUs between trusted users. Something like this routing capability
485 exists in the form of the Bitcoin Lightning network.

486 3.3.3 Demurrage, inflation and deflation

487 Demurrage, or negative interest, is the cost associated with holding a store of value over
488 a time [36]. For commodities such gold, demurrage is the cost of storing and securing it.
489 For currency, it can take the form of a periodic tax, such as stamp tax, on currency hold-
490 ings. The goal of demurrage currency is to ensure that cash is *cash flow safe*, wherein
491 money is sure to return into the cash flow and this is accomplished not through inflation
492 or deflation (though these are not excluded from the currency) but through periodic scrip
493 payment to ensure that the money remains valid. The idea was suggested by Silvio Gesell,
494 a German theoretical economist and anarchist libertarian socialist, as a way to undermine
495 the privileged position held by currency compared with capital goods and to undermine
496 entrenchment of the financial elite [37]. The concept has been tested in the Bavarian cur-
497 rency *Chiemgauer* which requires an effective payment of 2 % of the value of a currency
498 note every three months in order to maintain the validity of an individual bill in order to
499 undermine hoarding and also has been tested in the short-lived local Schilling currency of
500 the city of Wörgl, which appears to have protected the city from the economic depression
501 in Germany of the 1930s [38, 39]. The Swiss WIR Frank (Wirtschaftsring-Genossenschaft
502 [economic circle cooperative]) initially also featured ideas from Gesell [40]. A cryptocur-
503 rency that implements a form of demurrage is Freicoin, though Freicoin has the demurrage
504 fee paid to the developers as opposed to all other users [41]. The Freicoin documentation
505 suggests that Freicoin is an implementation of Bitcoin which loses approximately 5 % of its
506 value per year, with destroyed money taken out of circulation and minted coins created and
507 distributed to miners, with the intention that the real capital required to secure the network
508 is comparable to the payments of newly minted coins.

509 Keynes considered demurrage currencies and concluded that having currencies experience a
510 reasonable rate of inflation is preferable, and has the same effect of promoting investment
511 and spending [42].

512 Inflation is used to disincentivize hoarding and to encourage economic activity. In a basic

513 inflation scheme, all user currencies issue progressively larger amounts of income per unit
514 time, and this includes new users (ensuring that some mitigation of the Monopoly problem
515 is built into the system – new players have a fair chance in the game).

516 **3.3.4 Existence in tandem with other currencies**

517 In the case of the *Chiemgauer*, there are different rules for nonprofits and businesses. Non-
518 profits are incentivized to purchase Chiemgauer by adding 3 % to the value on converting
519 from Euros to Chiemgauer and businesses are incentivized to stay in the Chiemgauer system
520 by taking a 5 % commission from the value on converting from Chiemgauer to Euros.

521 **3.3.5 Exchange rates**

522 The default system enforces a one-to-one exchange rate between all personal currencies, but
523 less trusted users have currencies that are less valuable than established user currencies.
524 This might be addressed by empowering users to limit the amounts they are willing to
525 accept from other users. Such an approach could cautiously be suggested as a way for some
526 majority of the population (perhaps as defined democratically in code) to limit the economic
527 power of certain powerful people. Investigations resulting in the Panama Papers and the
528 Paradise Papers tell us of wealthy people of the world (often people who have that wealth
529 through little expended time or effort, sometimes called inheritance or siphoning) that are
530 part of an enormous criminal conspiracy to dodge taxes and to hoard wealth in offshore
531 accounts, yet such conspiracies are resilient to traditional economic and legal mitigations.
532 A global, decentralized monetary policy might offer a mitigation to these methods that is
533 not currently offered by existing systems of law and economics.

534 Methods of preventing bad mob rule (e.g. a population generally distrusting and discon-
535 necting from a user for reasons other than trustworthiness) should be considered. Perhaps
536 there is a gatekeeper that represents rights (as opposed to tyranny of the majority) that
537 can enforce verification of users or anonymisation of a user personal currency, though there
538 should not be a gatekeeper that can exclude a user from the decentralized unconditional
539 universal income guarantee.

540 **3.3.6 National credit**

541 This could be a part of the system that stores a small amount when it has beyond the
542 resources needed to pay all guaranteed incomes. This amount is used to ensure guaranteed
543 incomes when there are economic downturns. Could the system feature the ability to loan
544 to itself in certain circumstances? This would be decided by economists.

545 **3.3.7 Revolution**

546 The system should be reliable and resilient. Bitcoin and Ethereum have been subject to
547 intense hacking attempts and scrutiny so these should likely feature as the codebase, with
548 Ethereum being the more likely candidate because it is more easily programmable.

549 How can the proposed system draw power from the existing systems? A group of people
550 could agree to trial the system. The group will likely feature a mix of incomes and none. In
551 participating, one approach could be for participants to give some fraction of their income
552 to the system. The group should be designed such that the combined income divided
553 equally between all participants is sufficient for a income, perhaps of median value, for all
554 participants.

555 On a larger scale, the enticement of the ‘free’ currency accessible to people for a one-time
556 small degree of effort (comprising solely of installation of a program) could be enough. To
557 use the currency there is then the effort of building a few social connections/verifications.
558 Outreach in order to educate about the system would be straightforward. Perhaps people
559 like Ash Sarkar and Owen Jones could be helpful at popularisation. A contact for political
560 association could be Michael Tubbs (SEED). Contacts for technical evaluation could be
561 Stacia West (SEED) and AmyCastro Baker (SEED).

562 One noteworthy point raised in documentation on the Stockton Economic Empowerment
563 Demonstration (SEED) [21] is that a declared income, such as a guaranteed income, could
564 impact existing social welfare payments because these often are means-tested. Secrecy or at
565 least legal waivers would be needed to address this system if the groups implementing the
566 system were not able to have the guaranteed income at a basic income level. Happily tech-
567 nologies for financial privacy exist in the forms of Zcash and Monero and perhaps Ethereum

568 and private social trust authentication is a totally separate system which is merely used by
569 the cryptocurrency system.

570 Cryptocurrencies tied to the value of traditional fiat currencies such as the Euro may be
571 of assistance at the boundaries between the system proposed here and the existing capital-
572 ist world, perhaps by providing a means of uneasily-censorable use of the traditional fiat
573 currency. One suggestion is the stablecoin xEURO[43].

574 Publically demolishing the arguments of the protectors of the wealthy could involve empha-
575 sis such as that used by MLK on consumerism: “*We must create full employment or we*
576 *must create incomes. People must be made consumers by one method of the other*” [12]. I
577 suggest, having seen video of people employed to cut grass using scissors in the Democratic
578 People’s Republic of Korea and having heard reports from my parents of USSR Moscow
579 toilet attendants (one employed to greet, one to open the cubicle door, one to hand the
580 single pieces of toilet tissue and so on) that the latter must be the emphasis.

I believe we oughta to do all we can, and seek to lift ourselves by our
own bootstraps but it’s a jest to say to a bootless man that he
581 oughta lift himself by his own bootstraps.

Martin Luther King, Jr.

582 Chapter 4

583 Other uses

584 4.1 Reparations and debt forgiveness

585 Large groups within social trust networks could conclude that they are due reparations
586 and the system could feature some reweighting of all currencies in the system such that a
587 large group that is due reparations is granted the reparations in the form of, say, preferential
588 exchange rates. An ideal example would be an attempt to bring people today to the economic
589 state they would have been at were slavery not to have happened. Conversely, large groups
590 within social trust networks could mitigate or cancel debt of others if the debt is deemed
591 unfair.

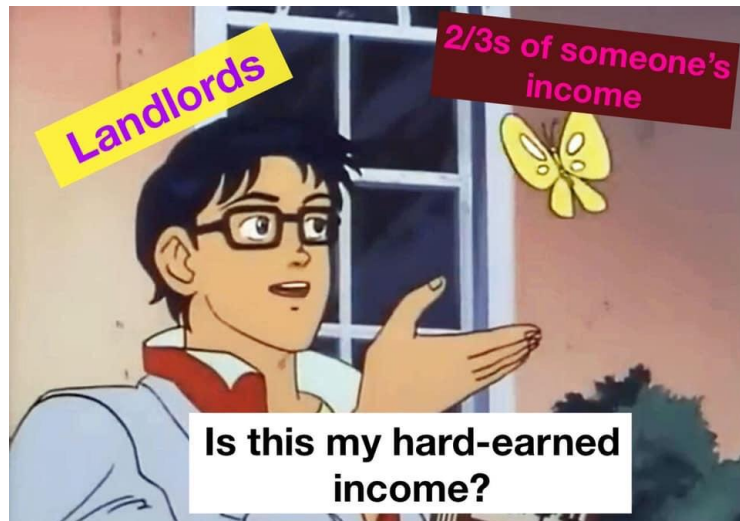


Figure 4.1

592 At smaller scales, other debts and expenses could be mitigated. For example, in the time
 593 before landlords are abolished, the exchange rates of landlords could be defined by society
 594 to be of a worth that means that any rents they have received are immediately redistributed
 595 back to the renter.

596 4.2 Direct democracy

597 Switzerland is a country with one of the more direct democracies. A crypto-trust system
 598 could make the running of direct democracy, popular initiatives, voting, power of recall, and
 599 so on much less laborious.

600 4.3 Surveillance and privacy, and proletariat control 601 over the admissability of evidence into court

602 Soussurveillance is personal surveillance, for example by way of a camera worn by a person.
 603 Inverse surveillance is a subset of soursurveillance and is surveillance of surveillance, usually

604 surveillance of the surveillance activities or technologies of an authority. Soussurveillance
605 or other small-scale surveillance systems could record to encrypted databases which are
606 decryptable using only crypto-trust systems. For example, courts could be limited from
607 permitting surveillance recordings to be admitted as evidence unless they have been de-
608 crypted by a majority of people in a crypto-trust system.

609 **4.4 Credit**

610 Smart contracts, similar to the form seen in Ether, implemented in the crypto-trust system
611 could be used to implement forms of mutual credit bank, an interest-free loan system with
612 credit provided voluntarily by users of the crypto-trust system.

613 **4.5 Similar, good ideas that may not be implementable** 614 **using the proposed system**

615 While private decentralized organisations of humans and private decentralized contracts
616 systems have been implemented to some degrees, this may be beyond the capabilities of the
617 system proposed here. For privacy, say in purchasing delicious 1P-LSD, systems like Zcash
618 and Monero have more developed methods of privacy than Bitcoin.

619 **4.6 Fair use of resources intended for people as opposed** 620 **to bots**

621 There is a contemporary problem with dark net markets running on Tor in the form of an
622 ongoing distributed denial-of-service attack A network of social trust could identify the user
623 of a resource as an authentic person, while maintaining anonymity, such that the resources
624 are provided with priority given to people.

Chapter 5

Dangers

5.1 Borders

Everyone has the UDHR Article 13(2) right to leave any country and the complimentary right to free migration. In *Utopia for Realists*, Rutger Bregman argues that country borders (which have been enforced largely only since WWI, when border enforcement was introduced as a war-time emergency measure) are the greatest form of unfair discrimination today. For the case of the European migrant crisis of 2015, a protection against the tyranny of the majority that was the opposition to and oppression of migrants, another protection is open borders.

5.2 Tyranny of the majority

The framers of the United States Constitution did not envisage direct democracy because they saw a danger in the tyranny of the majority. A direct democracy, monetary policy, unconditional universal income guarantee and so on implemented using a crypto-trust system must have protections against tyranny of the majority. One protection for this is a population educated on oppression such that it is less likely to oppress. Another protection is representatives that are subject to the scrutiny of anarchy.

642 5.3 Transparency

643 Ivan Krastev said in his talk *Can democracy exist without trust?* [44] that there are un-
644 intended consequences associated with transparency in government systems that feature
645 humans, that transparency can be used as a way to silence humans in government. While
646 the proposed system should plausibly not intrude on this (particularly given such economic
647 privacy techniques as Zcash), it might have some unintended consequences relating to this.

648 5.4 Unintended consequences

649 Copyright was defined originally in the USA in the context of improving society; it was
650 categorically not a recognition of some form of right to censor ideas. It was designed to
651 mitigate the bad effects of individuals and groups keeping innovative ideas secret. While
652 perhaps this was laudible, the system has become subject to mass manipulation enabled by
653 monetary power and technologies such as *Content ID* [45].

654 An unconditional universal income guarantee is direct and promising but potentially as
655 complex in implementation as the current social welfare systems. A naïve approach would
656 set an income amount in stone at the lowest levels of income and would have the consequence
657 of perpetuating poverty; the dynamic approach of changing the amount to match the median
658 income is more promising. However, any of the ideas of this proposal could have many
659 unintended consequences. They should be modified or supplanted as is reasonable.

660 The curse of poverty has no justification in our age. It is socially as
cruel and blind as the practice of cannibalism at the dawn of
civilization, when men ate each other because they had not yet
learned to take food from the soil or to consume the abundant
animal life around them. The time has come for us to civilize
ourselves by the total, direct and immediate abolition of poverty.

Martin Luther King, Jr.,

Where Do We Go from Here: Chaos or Community (1967) [12]

References

- [1] D. Lam, *How the World Survived the Population Bomb: Lessons From 50 Years of Extraordinary Demographic History*, *Demography*, 48 (4), 1231–1262 (November 2011), doi:10.1007/s13524-011-0070-z, URL <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3777609/pdf/nihms335409.pdf>
- [2] United Nations, *Universal Declaration of Human Rights*, URL <https://www.un.org/en/universal-declaration-human-rights>
- [3] S. Kirchgaessner, *Theft of sausage and cheese by hungry homeless man ‘not a crime’*, *The Guardian* (May 2016), URL <https://www.theguardian.com/world/2016/may/03/theft-sausage-cheese-hungry-homeless-man-not-crime-italy>
- [4] M. Gramellini, *Il diritto di avere fame*, *La Stampa* (May 2016), URL <https://www.lastampa.it/2016/05/03/cultura/opinioni/buongiorno/il-diritto-di-avere-fame-rNMKcewcPiKTU9FvY7C0nK/pagina.html>
- [5] P. Alston, *Statement on Visit to the United Kingdom, by Professor Philip Alston, United Nations Special Rapporteur on extreme poverty and human rights* (November 2018), URL https://www.ohchr.org/Documents/Issues/Poverty/EOM_GB_16Nov2018.pdf
- [6] Philosophy Tube, *Intro to Anarchy: Power & Violence* (January), URL <https://www.youtube.com/watch?v=bCAUmh99hMI>
- [7] J. Burke, *Worlds Without End: Changing Knowledge, Changing Reality*, *The Day the Universe Changed* (May 1985), URL https://www.youtube.com/watch?v=mB8_wPei2ZM

- 682 [8] *Climate Change: A Cross-Party Consensus for Action*, URL
683 [https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/](https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint_committee_on_climate_action/reports/2019/2019-03-28_report-climate-change-a-cross-party-consensus-for-action_en.pdf)
684 [joint_committee_on_climate_action/reports/2019/2019-03-28_](https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint_committee_on_climate_action/reports/2019/2019-03-28_report-climate-change-a-cross-party-consensus-for-action_en.pdf)
685 [report-climate-change-a-cross-party-consensus-for-action_en.pdf](https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint_committee_on_climate_action/reports/2019/2019-03-28_report-climate-change-a-cross-party-consensus-for-action_en.pdf)
- 686 [9] R. Bregman, World Economic Forum (January 2019), URL [https://www.youtube.](https://www.youtube.com/watch?v=r5LtFnmPruU&t=14m40s)
687 [com/watch?v=r5LtFnmPruU&t=14m40s](https://www.youtube.com/watch?v=r5LtFnmPruU&t=14m40s)
- 688 [10] Wretched of The Earth, *An open letter to Extinction Rebellion* (May 2019), URL
689 <https://www.redpepper.org.uk/an-open-letter-to-extinction-rebellion>
- 690 [11] N. Wynn, XOXO Festival (November 2018), URL [https://www.youtube.com/watch?](https://www.youtube.com/watch?v=0Ix9jxid2YU&t=3m10s)
691 [v=0Ix9jxid2YU&t=3m10s](https://www.youtube.com/watch?v=0Ix9jxid2YU&t=3m10s)
- 692 [12] J. Martin Luther King, *Where Do We Go from Here: Chaos or Community* (1967)
- 693 [13] S. Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System* (October 2008), URL
694 <https://bitcoin.org/bitcoin.pdf>
- 695 [14] S. Nakamoto, *The Times 03/Jan/2009 Chancellor on brink of second bailout for banks.*
696 (January 2009), URL https://en.bitcoin.it/wiki/Genesis_block
- 697 [15] *Introducing Memo* (April 2018), URL <https://memo.cash/introducing-memo>
- 698 [16] *Satoshi Proof*, URL <https://github.com/ligi/SatoshiProof>
- 699 [17] M. Abidor, *Death to Bourgeois Society: The Propagandists of the Deed* (2016)
- 700 [18] S. Santens, *Deep Learning Is Going to Teach Us All the Lesson of Our Lives:*
701 *Jobs Are for Machines* (March 2016), URL [https://medium.com/basic-income/](https://medium.com/basic-income/deep-learning-is-going-to-teach-us-all-the-lesson-of-our-lives-jobs-are-for-machines-7c64)
702 [deep-learning-is-going-to-teach-us-all-the-lesson-of-our-lives-jobs-are-for-machines-7c64](https://medium.com/basic-income/deep-learning-is-going-to-teach-us-all-the-lesson-of-our-lives-jobs-are-for-machines-7c64)
- 703 [19] *Basic Income for All: From Desirability to Feasibility*, Compass (2019)
- 704 [20] T. C. P. Project (May 2019), URL [https://www.collectivepsychology.org/](https://www.collectivepsychology.org/wp-content/uploads/2019/05/A-Larger-Us.pdf)
705 [wp-content/uploads/2019/05/A-Larger-Us.pdf](https://www.collectivepsychology.org/wp-content/uploads/2019/05/A-Larger-Us.pdf)
- 706 [21] S. Martin-West, A. C. Bake, S. Balakrishnan, K. Rao and G. Y. Tan, *Pre-*
707 *Analysis Plan: Stockton Economic Empowerment Demonstration* (December 2018),

- 708 URL [https://static1.squarespace.com/static/59d55793268b96ccff4ff70e/t/](https://static1.squarespace.com/static/59d55793268b96ccff4ff70e/t/5c0eb980575d1fbc6d9996ed/1544468865166/SEED_PaP_V2+%281%29.pdf)
709 [5c0eb980575d1fbc6d9996ed/1544468865166/SEED_PaP_V2+%281%29.pdf](https://static1.squarespace.com/static/59d55793268b96ccff4ff70e/t/5c0eb980575d1fbc6d9996ed/1544468865166/SEED_PaP_V2+%281%29.pdf)
- 710 [22] I. Marinescu, *No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash*
711 *Transfer Programs* (May 2017), URL [http://www.marinescu.eu/Marinescu_UBI_](http://www.marinescu.eu/Marinescu_UBI_review_2017.pdf)
712 [review_2017.pdf](http://www.marinescu.eu/Marinescu_UBI_review_2017.pdf)
- 713 [23] *Free Territory*, URL https://en.wikipedia.org/wiki/Free_Territory#Criticism
- 714 [24] C. Brooker, *White Christmas*, Black Mirror (December 2016), URL [magnet:?xt=urn:](magnet:?xt=urn:btih:49f2d942c054cd5bbf932e1e921642eebe110bf7)
715 [btih:49f2d942c054cd5bbf932e1e921642eebe110bf7](magnet:?xt=urn:btih:49f2d942c054cd5bbf932e1e921642eebe110bf7)
- 716 [25] *Doyle's Bar and grocery* (September 2017), URL [https://www.facebook.com/](https://www.facebook.com/Doyles-Bar-and-grocery-1060055107349764)
717 [Doyles-Bar-and-grocery-1060055107349764](https://www.facebook.com/Doyles-Bar-and-grocery-1060055107349764)
- 718 [26] *Accidental Anarchist: Life Without Government* (2017), URL [https://www.youtube.](https://www.youtube.com/watch?v=XudWK8ua2WA)
719 [com/watch?v=XudWK8ua2WA](https://www.youtube.com/watch?v=XudWK8ua2WA)
- 720 [27] R. Bregman, *Nixon's Basic Income Plan* (May 2016), URL [https://www.jacobinmag.](https://www.jacobinmag.com/2016/05/richard-nixon-ubi-basic-income-welfare)
721 [com/2016/05/richard-nixon-ubi-basic-income-welfare](https://www.jacobinmag.com/2016/05/richard-nixon-ubi-basic-income-welfare)
- 722 [28] Y. N. Harari, *Why fascism is so tempting – and how your data could power it*
723 (April 2018), URL [https://www.ted.com/talks/yuval_noah_harari_why_fascism_](https://www.ted.com/talks/yuval_noah_harari_why_fascism_is_so_tempting_and_how_your_data_could_power_it)
724 [is_so_tempting_and_how_your_data_could_power_it](https://www.ted.com/talks/yuval_noah_harari_why_fascism_is_so_tempting_and_how_your_data_could_power_it)
- 725 [29] (2015), URL [https://drive.google.com/file/d/1uRTC_hjabk_](https://drive.google.com/file/d/1uRTC_hjabk_Ps1C4qLyGDFV8yTHYLj3W/view)
726 [Ps1C4qLyGDFV8yTHYLj3W/view](https://drive.google.com/file/d/1uRTC_hjabk_Ps1C4qLyGDFV8yTHYLj3W/view)
- 727 [30] *Money By the People, For the People: The Manna Vision and Mission* (2015), URL
728 <https://drive.google.com/file/d/1issWZCMhPJYFoOrABpCcSxkYfA3wPBaj/view>
- 729 [31] *Colored Coins whitepaper*, URL [https://docs.google.com/document/d/1AnkP_](https://docs.google.com/document/d/1AnkP_cVZTCMLIzw4DvsW6M8Q2JC01IzrTLuoWu2z1BE)
730 [cVZTCMLIzw4DvsW6M8Q2JC01IzrTLuoWu2z1BE](https://docs.google.com/document/d/1AnkP_cVZTCMLIzw4DvsW6M8Q2JC01IzrTLuoWu2z1BE)
- 731 [32] M. Al-Qurishi, M. Al-Rakhami, A. Alamri, M. Alrubaian, S. M. M. Rahman and M. S.
732 Hossain, *Sybil Defense Techniques in Online Social Networks: A Survey* (January 2017),
733 doi:10.1109/ACCESS.2017.2656635, URL [https://ieeexplore.ieee.org/document/](https://ieeexplore.ieee.org/document/7828091)
734 [7828091](https://ieeexplore.ieee.org/document/7828091)

- 735 [33] *Six degrees of separation*, URL [https://en.wikipedia.org/wiki/Six_degrees_of_](https://en.wikipedia.org/wiki/Six_degrees_of_separation)
736 [separation](https://en.wikipedia.org/wiki/Six_degrees_of_separation)
- 737 [34] *uPort*, URL <https://www.uport.me>
- 738 [35] D. Cummings, *uPort Announces Zug Digital Ethereum ID Pilot* (July 2017), URL
739 <https://www.ethnews.com/uport-announces-zug-digital-ethereum-id-pilot>
- 740 [36] *Demurrage (currency)*, URL [https://en.wikipedia.org/wiki/Demurrage_](https://en.wikipedia.org/wiki/Demurrage_(currency))
741 [\(currency\)](https://en.wikipedia.org/wiki/Demurrage_(currency))
- 742 [37] *Silvio Gesell*, URL https://en.wikipedia.org/wiki/Silvio_Gesell
- 743 [38] *Chiemgauer*, URL <https://en.wikipedia.org/wiki/Chiemgauer>
- 744 [39] *Wörgl*, URL https://en.wikipedia.org/wiki/W%C3%B6rgl#The_W.C3.B6rgl_
745 [Experiment](https://en.wikipedia.org/wiki/W%C3%B6rgl#The_W.C3.B6rgl_)
- 746 [40] *WIR Bank*, URL https://en.wikipedia.org/wiki/WIR_Bank
- 747 [41] *Freicoin: a peer-to-peer digital currency delivering freedom from usury*, URL [http:](http://freico.in)
748 [//freico.in](http://freico.in)
- 749 [42] J. M. Keynes, *The General Theory of Employment, Interest and Money*
750 (1936), URL [https://www.marxists.org/reference/subject/economics/keynes/](https://www.marxists.org/reference/subject/economics/keynes/general-theory/ch23.htm#vi)
751 [general-theory/ch23.htm#vi](https://www.marxists.org/reference/subject/economics/keynes/general-theory/ch23.htm#vi)
- 752 [43] *xEURO: most transparent and legally compliant stablecoin automatically convertible to*
753 *fiat* (2019), URL <https://xeuro.online>
- 754 [44] I. Krastev, *Can democracy exist without trust?* (2012), URL [https://www.ted.com/](https://www.ted.com/talks/ivan_krastev_can_democracy_exist_without_trust)
755 [talks/ivan_krastev_can_democracy_exist_without_trust](https://www.ted.com/talks/ivan_krastev_can_democracy_exist_without_trust)
- 756 [45] *Content ID (algorithm)*, URL [https://en.wikipedia.org/wiki/Content_ID_](https://en.wikipedia.org/wiki/Content_ID_(algorithm))
757 [\(algorithm\)](https://en.wikipedia.org/wiki/Content_ID_(algorithm))