Cryptocurrencies: Anarchist Turn or Strengthening of Surveillance Capitalism? From Bitcoin to Libra

Catherine Malabou

Translated by Robert Boncardo

Internet expert, argues that we are witnessing today a veritable war against cryptocurrencies. The list of 'enemy combatants' fighting these currencies includes governments, banks, and credit card companies, as well as the SEC (Security Exchange Commission). These institutions have allied in order to thwart the development of the 'crypto-renaissance'. A number of banks and lenders have allegedly interrupted payments in electronic currencies. McAfee exhorts 'crypto believers' to take a stand: 'What can we do? Take action. Write to your Congressman; it sounds silly but while they are still in power, make them work. Go into your bank and demand that they allow crypto transactions. If they say no, ask them to recommend a bank that will. Demand the credit card companies allow crypto payments' (Avan-Nomayo).

Cryptocurrencies must be defended. Speaking on behalf of his fellow 'crypto believers', McAfee writes: 'We are not a security; we are coins, we are currency. They are frightened of us'. McAfee invites internet users to sign an extraordinary text that was recently published online in a number of different languages: the *Declaration of Currency Independence* ('Declaration'). This document is strikingly similar to the United States' *Declaration of Independence*. Both begin with the same formulation: *When in the course of human events*.... 'When in the course of human events it becomes apparent that the bands of control and power stem from a

universally common source, the necessity of separation from these powers becomes a matter of survival'. The time has come to challenge the State's monopoly on the fabrication of money and the control of currency flows; to deconstruct the link between geography and money (that is, to deconstruct money's national—or, in the case of the Euro, international—assignation); and to put an end to the privilege enjoyed by central banks and all the organisms that depend on them.

'The expenditure of energy by man, machine, and Nature is the sole source of Value', the text of the *Declaration* continues. 'These sources and their results have been devalued through the international inflation of printed currencies. Money and currency as understood by the global population are no longer an expression of the collective output of exertion, but rather an arbitrary calculation of unaccountable individuals and organizations that hold them in their influence. Humanity has fallen under [their] domination. [...] The value of work has been wholly degraded by arbitrary calculations of political expediency. [...] This declaration of Currency Independence is a direct response to the continued manipulation and destruction that stems from the deliberate degradation of Value across the whole of humanity. We, the undersigned, will dedicate our lives to building networks and systems that restore the Integrity of Value...' ('Declaration').

By 'cryptocurrencies', the authors are referring not only to the most famous cryptocurrency, Bitcoin, but also to the multiple other cryptocurrencies that exist (to date, 1500 have been recorded). By the terms 'networks and systems', the Declaration's authors also have in mind the technology that serves as a platform for these currencies: the blockchain. Recall that the blockchain, which emerged as a response to the financial crisis of 2008-9, is a distributed ledger technology, a kind of record in which anyone can write, carry out, and verify transactions, albeit without the possibility of modifying or erasing previous transactions. These transactions are recorded and stocked in the form of blocks, or numerical containers, which are assembled in chains and distributed across multiple computers and protected from fraud thanks to an electronic consensus between participants, or 'nodes'. The blockchain is the foundation of cryptocurrencies. Cryptography is the procedure by which a sender transmits an encrypted product to a receiver, who then deciphers the product with the help of a key. Transactions occur 'peer to peer', without the mediation of a third party. The register belongs to everyone and no-one, while its functioning is decentralised, anonymous and secure.

There remains little public awareness of what is at stake in this monetary and cybernetic phenomenon. The reason for this no doubt has to do with the high degree of technical sophistication that cryptocurrencies imply. The functioning of the blockchain, as of the mechanisms for the creation, circulation and use of cryptocurrencies, is not easy to understand and requires a process of initiation. It is reasonable to think, however, that this difficulty will be overcome in time, as was the case with the internet. For now, it is crucial to see that far from being a purely technical question of interest only to economists or finance buffs, the development of cryptocurrencies is in fact a major political and social issue.

When the authors of the *Declaration of Currency Independence* associate bitcoin and the blockchain with the re-creation of value, it is obviously not in the name of a return to some sort of gold standard. Cryptocurrencies are wholly dematerialised and have no tangible form. With cryptocurrencies, value, which is limited neither to price nor to the exchange rate, arises from a phenomenon that is simultaneously effective and symbolic: the reliability of the algorithm, which thereby takes the place of human confidence. Indeed, in his founding text, Satoshi Nakamoto, bitcoin's enigmatic creator, speaks of the disappearance of the notion of confidence: the 'electronic payment system [is] based on cryptographic proof instead of trust'. In another passage, he writes: 'We have proposed a system for electronic transactions without relying on trust' (Nakamoto). The reliability of the algorithm allows value to return in the form of transparency.

However, contrary to what the *Declaration of Currency Independence* might have us think, the war of states and banks against cryptocurrencies does not pit evil against good, nor the unjust against the just. It is, rather, an internal war. The enemies are brothers. In fact, what we are witnessing today is a conflict internal to capitalism, which is entering a new phase. Today, capitalism is beginning its anarchist turn. How else are we to describe such phenomena as decentralised currencies, the end of the state's monopoly, the obsolescence of the mediating role played by banks, and the decentralisation of exchanges and transactions?

It is important to note that the large majority of traditional currency systems are supported by central banks who create and control liquidity. In addition to this, in order to lend money to their clients, commercial banks also create, without actually possessing it, a second layer of money. The banks then credit the current accounts of borrowers. By way of a simple game of writing, banks thereby produce money. Thanks to this process, the stock of money grows in proportion to the needs of the economic system in general. Let us add, finally, that central banks can now also use the digital currencies they control and store in their accounts. In all cases, these monetary sources are inaccessible to their clients.

With the phenomenon of cryptocurrencies, there has also appeared so-called 'money agitators', who, in the wake of the 2008 financial crisis, challenged the banks' monopoly. We can distinguish five major movements in this 'agitation' (Scott). The first goes by the name of 'modern monetary theory'. Its

representatives affirm that it is contradictory for governments to say that they have to take money in the form of taxation while banks can in fact indefinitely create money. 'The idea that a federal government can run out of money like an ordinary household or a business is an illusion [...]. A government can only run out of money if it either does not issue its own sovereign currency (like the European nations, which have opted for the Euro) or if an artificial political limit has been placed on how much money it can issue' (Scott).

The second tendency is that of the 'reformers'. According to them, the excessive power possessed by banks creates constant instability. It was the banks who effectively plunged the world into financial crisis in 2008. American reformers include the 'American Monetary Institute', the group 'Positive Money', and the 'International Movement for Monetary Reform'. There are just as many libertarian reformers as there are liberal reformers, in the Anglo-Saxon sense of the term. They include both the right-wing economist Murray Rothbard and progressive organisations such as the United Kingdom's Green Party. The reformers' demands vary but converge on the following point: the necessity of a form of currency creation that is independent, transparent, and governed by democratic institutions.

Next, we have the 'cryptocurrency crusaders', a very heterogeneous group who nevertheless share a single idea: the rejection of national banking systems, credit included. The system, they argue, should be replaced by the circulation of a currency that is produced just liked any other commodity. This is the function of 'mining'. Money would then no longer be the business of the State. I referred above to state uses of cryptocurrencies. In Venezuela, for example, the government introduced the 'petro' in an attempt to control the currency crisis that had sent the country hurtling towards the abyss. But this points precisely to the difference between the use of cryptocurrencies by the state and by circuits linking particular individuals: the latter are obviously constituted outside of the centralisation of state reserves.

The defenders of local forms of currency (the 'localists') also express scepticism towards government and banking systems. According to them, small communities, rather than algorithms, should control the flow of money in a closed circuit. Such an apparatus would also encourage the economy of the region of origin.

A final group is made up of members of the Crypto-Credit Alliance, who bring together cryptocurrencies and mutual credit by way of the blockchain. This is the least well-known of all the movements, but without doubt the most interesting. Recent initiatives such as Trustlines, Holochain, Sikoba, Waba, and Defterhane seek to hybridize old inventions like mutual credit and the use of the most recent distributed technologies—including, of course, the blockchain.

In light of these phenomena, it is not surprising to see the semantics of anarchism emerge in the management literature. A number of introductory books have appeared lauding the coming of 'capitalist anarchy' with the development of blockchain and bitcoin. Patrick Shwerdtfeger's work, AI, Anarchy Inc., Profiting in a Decentralized World with Artificial Intelligence and Blockchain, is an interesting example (Schwerdtfeger). This 'Uberisation' of the economy 'without the company Uber'—this 'Uberisation of Uber'—allows him to affirm that 'anarchy is within sight' (45).

In the United States, a plethora of articles pose the question of Trump's 'anarchism'. 'Is Trump an Anarchist in Chief?' asks one journalist in reference to an interview with Michael Moore titled 'Donald Trump, an Anarchist at Heart', in which Moore comments on his film *Trumpland* (Stoddard).

The paradox is striking, even shocking: how can we speak of anarchy in a period marked by the growing and unprecedented concentration of power? And yet, when political journalists (and experts) ask if Trump is an anarchist, they are not playing with words. They are attempting to circumscribe, more or less successfully, what the whole world is experiencing as a new crisis of capitalism: the combination—at once senseless, monstrous, and unprecedented—of savage verticality and uncontrollable horizontality.

Savage verticality, which is at once a cause and consequence of such a transition, also takes the form of the fascistic evolution of so many of today's governments policies, with the excessive security and military build-up that goes along with it. Such phenomena do not contradict a drive towards anarchism. Rather, they indicate precisely the disappearance of the state, which, once its social function has been removed, expresses the obsolescence of its force through the use of violence. Ultra-nationalism thus signals the death agony of national authority. Once again what is striking and paradoxical in such a situation is the fact that the semantics of anarchy that are animating it motivate a discourse apparently invested in confidence and transparency. 'We are putting an end to the pyramid model of decision-making', Emmanuel Faber, the CEO of Danone, recently declared (Girard and Gallois). This is the paradox of a discourse of transparency that simultaneously authorises the large-scale but opaque use of data, the dark web, and the fabrication of information.

It will be said that this is a 'right-wing' or libertarian form of anarchism. Thus, for their part, the authors of the article 'Trust, Anarcho-Capitalism, Blockchain and Initial Coin Offerings' highlight the direct link between bitcoin and blockchain and the Austrian school: 'We argue that blockchain can trace its philosophical roots to the anarchy-capitalist strain of the Austrian school. [...] Hayek, for example, abandoned his former belief that it was necessary to control the abuses of the State as regards the monetary system [...]. He ended up calling for what he terms the "denationalization of money" (Flood and Robb).

It is thus not only the State but the nation that is being disturbed by 'cyberanarchy'. The authors also ask the following questions: 'What will happen to national borders if money is the same everywhere? How will governments raise taxes if revenue is anonymized by cryptography? How will the economy function without a central authority?'

Of course, the semantics of anarchism that give ultra-capitalism its new tonality changes nothing as regards the logic of profit, which ultra-capitalism only expresses in a different form. Those banks that should logically be afraid for their survival have already seen the provisional advantages that they can draw from blockchain: the reduction in the number of agents and advisers they have to hire. An article in the Financial Times, 'Five Ways Banks Are Using Blockchain', insists on the fact that the new technology is indeed revolutionising the sector (Arnold).

On this new stage, conflict is once again raging. This conflict pits the cyberanarchist tendency, which marks the new turn in capitalism, against the ultrasovereigntist counter-tendency, which accompanies it. And the banks have seen perfectly clearly the at least provisional advantages they can draw from the situation: financial technologies, crowd funding, and staff cuts. Incontestably, the horizontality of blockchain will prevent neither its privatization by some sectors (there already exist multiple private blockchains), nor its confiscation in the name of particular interests. However, this does not mean that traditional forms of currency exchange are not threatened. This is what explains the surrealist character of polemics such as those around the question of exiting the Eurozone. With electronic currencies, we have already 'exited'. The discourse of centralized control is undermined from within. Whence the war, the prohibitions, and the predictions that claim that cryptocurrencies will eventually vanish.

Why not leave these enemies to finish each other off? Why sign the declaration? Why did I, a philosopher who is not a libertarian, sign it? Signing the *Declaration* of Currency Independence is obviously a wager: once again, we encounter the question of confidence. What if the end of confidence were to revivify confidence? By guaranteeing transparency and protection, is it not true that the algorithms accomplish what institutions have prohibited, namely the possibility that both exchanges and money are our own, in all senses of the term? That money, even demataterialized money, is in our hands? With neither intermediaries nor middle men? The economist Jean Tirole recently declared that while the blockchain was a useful invention, 'cryptocurrencies did not contribute to the common good'. Despite this, if the association between cryptocurrencies and blockchain allows us to at least repose the question of what the common good is today, then bitcoin already, incontestably, has value. 'We, the undersigned, will dedicate our lives building networks and systems that restore the Integrity of Value and directly challenge the authority of those who seek to destroy Value', states the Declaration of Monetary Independence.

We could extend this analysis by mentioning the relation between new trajectories and the new forms of money and value and what has been called the third industrial revolution, that of the 'internet of things'.

An object, connected to the internet, has the ability to receive data and to send it over the internet to an integrated control panel. Blockchain technology has considerable potential in this new domain. Objects, connected to the internet and linked to the blockchain by a cryptocurrency protocol, are able to contract a service or validate a transaction all by themselves. A washing machine capable of calculating its own consumption, an electric heater that can enter into an appropriate contract, a rental car that can sign a contract directly with a driver all of these are examples that give another twist to the new law of exchanges, with objects now contracting with and between one another. Not only are currencies becoming delinked from nations or territories, not only are they escaping the hands of the state, the human actors of exchange are themselves in some sense disappearing behind the horizontal autonomy of objects contracting with other objects with the help of currencies that are themselves objects connected to one another and to other commodities.

Many will conclude that the third industrial revolution is but one more turn of the screw in the logic of capital. Others, like me, will persist in seeing in capitalism's conflict with itself the paradoxical possibility of the emergence of a new type of resistance, of an anti-capitalism that will wrench a liberatory anarchism from the grip of its counter-model, libertarian anarchism.

In The Zero Marginal Cost Society, Jeremy Rifkin affirms that the new technological platforms are 'Collaborative Commons'. Without going so far as to use the word 'anarchism', he insists on the change of paradigm that capitalism is currently going through: 'A new economic paradigm—the Collaborative Commons—is rising [...] that will transform our way of life. We are already witnessing the emergence of a hybrid economy, part capitalist market and part Collaborative Commons. [...] Between these two rival paradigms, the struggle will be long and implacable' (Rifkin).

To distinguish a liberatory from a libertarian anarchism, the representatives of the first movement propose to name liberatory anarchy acracy, signifying the absence of power in the sense of an absence of domination, and the second *anomie*, in the sense of an absence of law. According to the famous definition first given by Durkheim, anomie signifies the social disorganization that results from the absence of common norms. It is incontestable that libertarian anarchism goes in this direction. However—and this is what makes the current situation so striking—the absence of a social bond is being at once exacerbated and repaired, in an almost unthinking coincidence, by a technological supplement. Automated confidence is in the process of becoming the substitute for a social bond. How can we not think, even if it is in a utopian mode, that this prosthetic bond will not generate new forms of communal organisation that will simultaneously resist the anomie from which they arise?

Responding in 2017 to the question 'Do you see blockchain technology as a means to anarchy?', Noam Chomsky declared that a technology was certainly not sufficient to allow the advent of a new political regime. 'There is no such "silver bullet" tool that will bring about anarchy. The only way is via implementing anarchist practice in what we as humans do and the way we come together in our societies, how we organise and make freedom a paradigm. Anything else is not sustainable. It may be a tool that could be used, I'm not sure how, but the reality is to bring about anarchism we have to organise via anarchist praxis' (Error). It is obvious that a fetishization of the blockchain is not the path that we should follow. But Chomsky is wrong to conceive of technology in an exclusively instrumental sense. In any case, how can we separate technology and praxis today? How can we affirm that the technological situation of a given epoch does not have a determining value for collective praxis and its 'organisation'?

Recently, the 'anti-capitalist' philosophers Erin Manning and Brian Massumi responded to the questions of Uriah Marc Todoroff for *The New Inquiry*. Based in Montreal, the two philosophers use blockchain technology to develop a network of social and economic exchanges. Influenced by the work of Félix Guattari, Manning and Massumi plan to create a network that is 'parasitical' upon the liberal economy. 'Massumi: Going back to the question of value, we want to create an economy around the platform that does not follow any of the usual economic principles. There will be no individual ownership or shares. There will be no units of account, no currency or tokens used internally. The model of activity will not be transactional. Individual interest will not be used as an incentiviser. What there will be is a complex space of relation for people to create intensities of experience together, in emergent excess over what they could have created working separately, or in traditional teams. It's meant to be self-organizing, with no separate administrative structure or hierarchy, and even no formal decisionmaking rules. It's anarchistic in that sense, but through mobilizing a surplus of organizing potential, rather than lacking organization. You could also call it communistic, in the sense that there is no individual value holding. Everything is common' (Todoroff).

So, where do we stand today? The current monetary outlook is changing so quickly that it is becoming more and more difficult to understand the meaning of its evolution. Thus, when I set out to develop these reflections, Facebook had not yet announced the birth of its cryptocurrency Libra, nor that of its subsidiary company Calibra, which was tasked with managing 'Libra'. This took place in June 2019. Do these new phenomena render my conclusions null and void? The immediate answer is no. 'Calibra's main mission is to develop an electronic wallet that can be used on the messaging services WhatsApp and Messenger and through a dedicated mobile application' (Delaye), explains Kevin Well, the vice-president of the project based in Geneva, the city where Libra's reserves are managed. The first objective of this new global digital currency 'is to serve the 1.7 billion people in the world who have no access to banking institutions, and the equivalent number who have poor access', declared David Marcus, the project's director. Libra, whose commercial launch is set for 2020, will make payments almost free and as simple as sending a text message. To shore up confidence, each one of the partner companies (there are 28 in total, including eBay and Spotify) has invested 10 million dollars to buy control of one of the nodes of the blockchain that Libra is built on. The other element for engendering confidence—and perhaps the one that is most determining—concerns the choice of the way that Libra's value will be fixed. 'It is built on the foundation of stable currencies', explains David Marcus. Which currencies has not yet been decided, but the Swiss franc, the Pound sterling, the euro and the dollar are being evoked. Finally, Kevin Weil promises that there will be no link between the personal data that appears on Facebook and the financial data stored by Calibra. For example, there will be no 'retargeting of advertising between Facebook and Calibra' (Delaye). Apparently, then, Calibra will function in substantially the same way as cryptocurrencies.

However, many today think that far from being decentralized, the use of Libra will be hyper-controlled by Facebook, whatever the company's claims to the contrary. Are we not dealing here with a new model of money, one that resembles neither the 'sovereigntist' model of the classical state nor cryptocurrencies' anarcholibertarian model, but which is much closer to the model of 'surveillance capitalism'? Libra is indeed a currency that lies outside of states' powers, but it is accompanied by a surveillance apparatus that allows Facebook to track the behaviour of its users. As Primavera de Filippi says in an interview given to *Philosophie Magazine* on July 2, 2019, 'The problem is that the injunction to create profit always leads to abuses. We could perhaps pay for an Uber directly via Facebook and send tips in the form of Libras. All of this is very practical. But couldn't our reputation on an application like Uber, where we are evaluated by each driver, not constitute a piece of data for the social network that can then be used to evaluate our capacity to pay back a loan to a bank? If an application has identified us as a bad payer, Facebook could easily monetise that information and sell it to a bank! We thus find all of the same risks we associate with 'social credit', which already exists in China, with the large social network WeChat' (De Filippi).

Have we thus left anarchism behind? In a letter to Mark Zuckerberg and David Marcus, three members of the United States Congress demanded the suspension of Libra. According to them, Facebook's future crypto-currency represents serious competition for the dollar. 'It appears that these products may lend themselves to an entirely new global financial system that is based out of Switzerland and intended to rival U.S. monetary policy and the dollar. This raises serious privacy, trading, national security, and monetary policy concerns for not only Facebook's over 2 billion users, but also for investors, consumers, and the broader global economy', they write in the letter (Hern). We might think, then, that rather than representing capitalism's war with itself, Libra is generating a simple war between states, which today have become, on a global scale, companies.

Yet, in reading an article from the magazine *L'Echo*, titled precisely 'When Facebook Becomes a State' [Quand Facebook devient un État], we learn that things are not so simple. The article characterises Facebook, with its new capacity to create currencies, as the most powerful global company at the same time as it is 'a state above states', and thus as an even more centralized version of a state. In the following paragraph, however, the author contradicts himself by speaking of the 'old libertarian dream' that, according to him, Zuckerberg is adhering to with Libra. He continues: 'the former hippy communes of the 1960s, having failed to realise their utopian visions, will progressively [...] be reincarnated through the constitution of alternative communities based in cybernetics. An extraordinary encounter has thus taken place between notorious visionaries, artists, hackers, scientists and left-wing activists' (Brunfaut. See also Klein). We thus come full circle, back to liberatory anarchism. But not for long, as it is now a matter of anarcho-capitalism: 'But this libertarian ideology, which is fundamentally leftwing, will progressively enter into alliance with right-wing libertarianism, that is, hyper-liberalism'.

Our thesis thus seems to have been confirmed. If it is indeed very difficult to know where the deconstruction of the idea of a national currency will lead, we can clearly perceive that this is a political problem just as much as it is an economic one, which demands that we renew our analysis of capitalism, which is also to say our resistance to capitalism. That this renewal demands thought travel down anarchist paths—both left-wing and right-wing—is without doubt one of the most troubling philosophical challenges of our time. If only for this reason, cryptocurrencies must be defended.

CATHERINE MALABOU is a professor of philosophy at the Centre for Research in Modern European Philosophy, at Kingston University, UK, and at UC Irvine where she regularly teaches in the Spring. Her last books include Before Tomorrow: Epigenesis and Rationality (Polity Press, 2016, trans. Carolyn Shread) and Morphing Intelligence: From IQ Measurement to Artificial Brains (Columbia University Press, 2018, trans. Carolyn Shread). She is currently working on a new book project around anarchism and philosophy.

ROBERT BONCARDO is a sessional tutor in the European and International and Global Studies programs at Sydney University. He is the author of *Mallarmé and* the Politics of Literature (Edinburgh University Press, 2018) and with Christian R. Gelder of Mallarmé: Rancière, Milner, Badiou (Rowman & Littlefield, 2017).

Works Cited

- Arnold, Martin. 'Five Ways Banks Are Using Blockchain.' Financial Times 16 https://www.ft.com/content/615b3bd8-97a9-11e7- 2017. a652-cde3f882dd7b>.
- Avan-Nomayo, Osato. 'John McAfee Says There is a War on Cryptocurrencies.' Bitcoinist, 28 May 2018. https://bitcoinist.com/john-mcafee-says-war- cryptocurrencies/>.
- Brunfaut, Simon. 'Quand Facebook deviant un Etat.' L'Echo 24 June 2019. https://www.lecho.be/entreprises/technologie/quand-facebook- devient-un-etat/10139091.html>.
- 'Declaration of Currency Independence.' 28 June 2018. https://medium.com/ @currencyindependence/declaration-of-currency-independenceb404296bf03b>.
- De Filippi, Primavera: 'Le libra est aussie une nouvelle façon de collecter des données.' Interview with Charles Perragin. Philosophie Magazine, 2 July 2019. https://www.philomag.com/lactu/resonances/primavera-de- filippi-le-libra-est-aussi-une-nouvelle-facon-de-collecter-des-donnees>.
- Delaye, Fabrice. 'La crypto-monnaie de Facebook relance la Genève financière et internationale.' *Bilan*, digital editino, 8 June 2019. < https://www.bilan.ch/ techno/la-crypto-monnaie-de-facebook-relance-la-geneve-financiere-etinternationale>.
- Error, Dave. 'Noam Chomsky: Do You See Blockchain Technology as a Means to Anarchy?' Interview with Noam Chomsky. Quora, 22 September 2017. https://www.quora.com/Noam-Chomsky-Do-you-see-blockchain- technology-as-a-means-to-anarchy>.

- Flood, John and Lachlan Robb. 'Trust, Anarcho-Capitalism, Blockchain and Initial Coin Offerings.' 20 November 2017. Griffith University Law School Research Paper No. 17-23.
- Girard, Laurence and Dominique Gallois. 'Emmanuel Faber, PDG de Danone: 'Nous mettons fin au mode de décision pyramidal.' Interview with Emmanuel Faber, CEO of Danone. *Le Monde* 26 April 2018. < https://www.lemonde.fr/ economie/article/2018/04/26/emmanuel-faber-en-rendant-tous-lessalaries-de-danone-coactionnaires-nous-mettons-fin-au-mode-dedecision-pyramidal 5291107 3234.html#kBDBSBHCLtkE2yLb.99>.
- Hern, Alex. 'Libra: US Congress Asks Facebook to Pause Development.' The Guardian 3 July 2019. http://www.theguardian.com/technology/2019/ jul/03/libra-us-congress-asks-facebook-pause-developmentcryptocurrency>.
- Klein, Olivier. 'Les cryptomonnaies, une utopie anarcho-capitaliste.' Les Echos 7 .
- Satoshi. 'Bitcoin: A Peer-to-Peer Electronic Cash System.' Nakamoto, <https://bitcoin.org/bitcoin.pdf>.
- Rifkin, Jeremy. The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism. St. Martin's Press, 2014.
- Schwerdtfeger, Patrick. AI, Anarchy Inc.: Profiting in a Decentralized World with Artificial Intelligence and Blockchain. Authority Publishing, 2008.
- Scott, Brett. 'These 5 Rebel Movements Want to Change How Money Works.' *Huffington Post*, 17 September 2018. https://www.huffingtonpost.com. au/entry/five-monetary-rebellions-change-moneysystem n 5b9a819ae4b0b64a336ca248?ri18n=true>.
- Stoddard, A. B. 'Donald Trump, Anarchist-in-Chief'?' RealClearPolitics, 14 October 2016. https://www.realclearpolitics.com/articles/2016/10/14/donald trump anarchist-in-chief 132066.html>.
- Todoroff, Uriah Marc. 'A Cryptoeconomy of Affect.' The New Inquiry, 14 May 2018. https://thenewinquiry.com/a-cryptoeconomy-of-affect/.