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A Thousand Blockchains

Capitalism and Tokenmania

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> "Dai diamanti non nasce niente, dal letame nascono i fior."
> Nothing comes from diamonds; flowers are born out of shit.
> - De Andrè, *Via Del Campo*

Over the last decades, financial intermediaries have gained exceptional influence over our daily lives; capitalism has become able to exercise "control over the future" (Lazzarato 2012, 46) by creating and destroying social relations based on debt mechanisms. In parallel, technology has invaded the social sphere with innovations such as blockchain. This digital public ledger that records online transactions is expected to disrupt business practices and social interactions as they are currently conceived. Because of its revolutionary potential that could affect global power structures, some people see blockchain as the most promising opportunity to effectively resist the pernicious effects of capitalism.

This paper aims to: a) critically analyze financialization and its connections with capitalism and debt mechanisms; b) investigate the revolutionary potential of blockchain technologies in contrast to their drawbacks and risks; c) evaluate the viability of ongoing experimental implementations of blockchain technologies in their attempt to resist capitalism; specifically, among these, the idea proposed by Brian Massumi, which requires us to "reinvent" the concept of value within broader collective arrangements. My conclusion is unequivocal: Massumi's project, although interesting and promising, is undermined by several contradictions. Blockchain is insufficient to resist capitalism and cannot replace the hard work of politics.

In section 1 (Financialization and Blockchain), I investigate the logic behind the attribution of value, the circumstances which led to the emergence of money, and its role within the capitalist system. For Gilles Deleuze and Félix Guattari, capitalism sustains itself thanks to its ability to produce desires; these, in turn, create new needs that capitalism readily satisfies. This process implies a subtle form of subjugation, whereby money is used to generate debt and make sure that the mechanism is continuously perpetuated. Ultimately, alternative monetary frameworks are desirable, but they would be insufficient to solve the problem at its roots; more fundamental and revolutionary forms of resistance could be based on blockchain technologies. Blockchain-based money is not merely a digital currency, but rather, a set of protocols affecting social relations. Can blockchain serve as a platform for collective individuation, despite its weaknesses? Although currency has become a constitutive element of social relations, a rupture with causality should take place on a pre-monetary level, and blockchain technologies may serve the purpose by virtue of their power to bring people together in ways unmediated by money.

For Massumi (2015, 69), we need to resist quantification and take back the "qualitative field of life," which he defines as a contagious "boost of vitality." In section 2 (Reinventing Value), I describe affect as the distinctive feature of such field and frame it in terms of a differential relation of power. Furthermore, I address the main weaknesses and contradictions of Massumi's call for a reinvention of value by means of blockchain. First, his attempt to resist quantification is undermined by his very appeal to the notion of degrees. Differential relations of power can be seen as variations of intensity that are necessarily perceived on a quantitative scale. Second, as we are forced into a condition of complicity with capitalism, it is rather naïve to think that we can technologically shelter from its influence. Third, Massumi's project depends on

goods and services that necessarily need to be sourced from the dominant economy. This could introduce an unwanted-yet-present teleology, dictated by the technological platform's need for self-preservation. Thus, I conclude that blockchain technologies are not yet adequate for fully and effectively resisting the pernicious effects of capitalism.

Nevertheless, even if we manage, somehow, to reinvent value and register qualitative intensities, this would not mean that blockchain has been successful in enabling us to resist the pernicious effects of capitalism. In section 3 (Post-value challenges), I describe other issues that remain to be solved. First, although blockchain allegedly eliminates the need to trust other people, we cannot speak of trustless technologies, and these are ultimately not even desirable. Second, the uncritical adoption of tokens combined with the tendency to tokenize everything can exacerbate the same capitalistic logic that blockchain is supposed to resist. Third, since blockchain has the potential to control economics, power relations risk being merely concealed instead of being avoided. Lastly, the firm belief that decentralization coincides with democracy can be the symptom of network fetishism: it could make us look at networks with genuine interest even if these were the causes of our own oppression.

In section 4 (Conclusion) I summarize the arguments developed in this paper and their implications.

1. Financialization and blockchain

1.1 Money, debt and desire

In 1903, William Henry Furness III, an American anthropologist, spent some months on the island of Yap in Micronesia. He studied habits and customs of the local population, including the use of "large, solid, thick, stone wheels, ranging in diameter" (Furness 1910, 93) as means of exchange. Furness observed that the value bestowed upon the stones could involve extrinsic factors, such as the number of people who died to bring the stone home (Tharngan 2000), thus showing that the attribution of value is socially constructed. Anything can potentially be turned into a currency: all that is necessary is the mutual recognition among its users. As Ferguson (2009, 29-30) puts it, money "is a matter of belief, even faith […]; trust inscribed." Ultimately, the acceptance of a specific currency is discretionary and based on the expectation that others would do the same (Goldberg 2005, 957).

The role of the rai stones as means of exchange in the Yapese society could make us think that the emergence of money is a response to the need to deal with issues of distribution of goods and allocation of work among economic agents. However, there is at least one other possible perspective to consider. For Graeber (2014, 157), we should not look at money as a medium of exchange, but rather, as a standard of deferred payment that embodies social relations. As such, money gives consistency to debt, an evanescent concept that appeared even before economic exchanges. To understand this theory, we need an investigation beyond a merely transactionalist sphere, moving from the exchange of goods to the pre-monetary organization of relations among people, something that has little to do with the accumulation of wealth.

Debt, for Deleuze and Guattari (2009, 139), is the key concept underlying capitalism, "the only social machine that is constructed on the basis of decoded flows, substituting for intrinsic codes an axiomatic of abstract quantities in the form of money." Because of the massive financialization that we experience every day, "the qualitative field of life" (Massumi 2018a, 39) is appropriated economically and quantitatively, leading to "an internalization of the creditor-debtor relation" (Deleuze and Guattari 2009, 218). The capitalistic market economy structurally entails subjugation, implemented through a system of lack exploitation that produces desires by taking advantage of people's libidinal (and not exclusively sexual) impulses. The causal relation between needs and desires is reversed: fears, anxieties and loves are coded by

debt relations; social dynamics of exchange are converted into cash (Deleuze and Guattari 2009, 27, 185). Hence, the role of money within such a human economy is to make debt infinite; "the tax on aristocrats and the distribution of money to the poor are a means of bringing the money back to the rich" (Deleuze and Guattari 2009, 197). In other words, money makes the regime of debts stronger; it is not a transparent tool of exchange, but rather a constitutive element of social relations (Massumi 2018a, 17). As Lazzarato (2012, 46) emphasizes, people are "trained" to promise to honor their debts.

The advent of neoliberalism as a major economic trend introduced a disruptive change: the deregulation of markets enhanced the emergence of new structures in the coordination of economy and state power (Vogl 2014, 150). Since the sovereign State is replaced by the economic State (Lazzarato 2015, 71), all realms of social life become submissible and eventually submitted to the economic approach (Vogl 2014, 148). As Martin (2002, 3) puts it, "money is both the means and ends of life." Financial relationships are no longer passive reflections of people's expectations, but actively affect economic activity. As Massumi (2015, 4) puts it, everything becomes "a calculus of risk," as value is now contestable and can be traded as a commodity. People are now divided between those able to take risks and those who are "at risk" (Martin 2007, 11). Although money is not the root cause of the injustices we observe in our daily lives, it often contributes to their exacerbation and perpetuation. Hence, it makes sense to look for alternative monetary frameworks, as they may mitigate these vicious cycles, but it hardly appears sufficient to fully escape capitalism.

1.2 Resistance

We have seen that financialization turns social relations into new forms of subjugation. But who benefits from them? One might say that the better off are those who have large capitals to leverage. As Piketty (2014) eloquently emphasizes, different rates of development and uneven wealth concentrations result in pervasive and increasing worldwide inequality. Yet, according to Deleuze and Guattari (2009, 346), the ultimate beneficiary is capitalism itself, as everybody works for its immortality. As Massumi (2018a, 36-37) puts it, "humans do not run capitalism; capitalism runs through the human." Progressive wealth taxation is often proposed as a potential way to counteract inequality (Cooper 2014), but arguably other issues would remain, such as those concerning human subjectivity. Redistributive policies would still be insufficient to free people from desire-induced enslavement; while supporting people's endurance to financialization, they would be ultimately functional to capitalism's perdurance.

Instead, Deleuze and Guattari (2009, 377) call for active resistance: subjugated groups should become subject-groups, having "as their sole cause a rupture with causality, a revolutionary line of escape." Seem (2009) paraphrases this concept in terms of a task: groups have to connect in new ways, construct new social arrangements. Guattari (2014, 34), in his *The Three Ecologies*, is even more radical: we need "existential mutations." Some people think that a big part of such existential mutations can be achieved with blockchains.

1.3 Blockchain's potential

To appreciate the potential of blockchain technologies, we should think of how the Yapese recorded changes in ownership of the rai stones: through an oral ledger shared within communities, stories were passed down over generations (Fitzpatrick and McKeon 2019, 9), with the risk of some information being lost or altered. A blockchain can be seen as a digital version of such ledger, with significant advantages. For instance, all records in a blockchain are linked together by means of cryptography, which prevents their alteration without need for a central authority. The ledger is globally broadcasted among individual users through the

internet (Campbell-Verduyn 2018, 1), thus making sure that all transactions are known and indisputable. Bitcoin, a peer-to-peer version of electronic cash, is the most famous example of blockchain application, but the underlying technology is much more versatile. In a blockchain-based list of records, new information can be appended by mutually distrustful parties; these can reach consensus thanks to a policy that automatically resolves any potential dispute. Furthermore, blockchains preserve privacy, enforce individual rights (such as ownership), and favor inclusion, by lowering barriers to participation (Tapscott and Tapscott 2018).

We should note that, as emphasized by Beller (2020, 218), a cryptocurrency such as Bitcoin is a communications medium, that is "a set of protocols for denominating social relations." Hence, blockchain technologies can have implications far beyond transactions of goods and services: some people even expect "a monumental shift in the power structure of the world" (Greenberg 2013). Ultimately, blockchain is the basis for the creation of new substructures for a distributed economy, or a "distributed capitalism" (Tapscott and Tapscott 2018, 99). But is a new form of capitalism what we really need? If not, can blockchain still help us design alternative, non-capitalist forms of social organization?

1.4 Technological mediation

One of the main criticisms of contemporary capitalism concerns the unprecedented influence that financial intermediaries have gained over our lives (Thomson and Dutta 2018, 3), accentuated by digitization. Whilst mainstream financial narratives push people to conform to certain standards and embrace predetermined opinions (Guattari 2014, 35), blockchain is passed off as a formidable tool for human emancipation (DeFi Capital n.d.).

However, one could legitimately disagree: after all, in some sectors cryptofinance is becoming so pervasive that human involvement could be eradicated altogether (Kruppa and Murphy 2019). A "machine-controlled economy" (Brouwer 2018) might entail an apparent impotence, as hinted by Hui (2016, 157): in a preprogrammed context, such as the blockchain, people's roles are always already anticipated. Should we see this as a form of alienation? This reduction in human involvement is something that Latour (1992, 231-232) would call "delegation," whereby humans give agency to non-human actors and technology might take over not only people's actions and attitudes, but also values and ethics. According to Akrich (1992, 211), certain behaviors can be prescriptively imposed back: technical objects define the actors with which they interact. This also applies to cryptocurrencies, as we are forced to obey some procedures that detach us from financial processes, turning us into passive operators (Brouwer 2018, 5).

A different approach could arise from a contemporary interpretation of the theories of Simondon (2017, 16), who argued that alienation is ultimately attributable to people's lack of knowledge about the nature and essence of machines. Technical mediums can still foster transindividual relations and lead to the realization of people's unrevealed potential both at the collective and individual level. Rather than technical objects, blockchain technologies should then be seen as technical platforms, able to bring people together and "organize them as a decentralized collective" (Rantala 2019, 261), possibly in ways unmediated by money. Since the individual subject is the result of the so-called process of individuation, never-ending and always incomplete (Scott 2014, 53-54), blockchain technologies could create the conditions for further individuations, by stimulating self-awareness and reflexivity (Rantala 2019, 259). This can ultimately prompt the resolution of tensions and the achievement of an equilibrium in which human relations and habits are restructured and technologies are stabilized by the same network to which they belong (Hui 2016, 56-57). One question remains unanswered: how can blockchain favor individuation? As we will see, an interesting response has been provided by Massumi in his *99 Theses On The Revaluation Of Value*.

2. Reinventing Value

2.1 Affect

Capitalism's ability to produce desire and, thus, create needs, makes it reasonable to combine the flows of capital with the economy of the libido, as Deleuze and Guattari did (Seem 2009). The capitalist machine channels life activity "toward modes of existence and manners of relation propitious for the generation of profit" (Massumi 2018a, 17). Massumi (2018a, 39) embraces the view on capitalism proposed by Deleuze and Guattari, as made evident by his description of how "the qualitative field of life is economically appropriated and subsumed under the principle of perpetual quantitative growth." This qualitative field implies a dimension of collectivity, whereby interactions among individuals give rise to vital forces that belong to different levels of life. These constitute all the subjective factors pertaining to the immanent outside of capitalism (Massumi 2018a, 9) that we can identify with the word "affect."

As the economy is an open system, its subsistence is based on processes of appropriation of potentials that are to be found in the processual field of its immanent outside (Massumi 2018a, 39). This is why, for capitalism, affect is an externality, namely a force that modulates economic logics without being part of them (Massumi 2018a, 9). Massumi (2005), in an introductory chapter of *A Thousand Plateaus*, specifies that affect is not a personal feeling, but rather, the "ability to affect and be affected." He also makes a reference to Spinoza, who defined someone's essence in terms of what one can actually do based on the body's "power of acting" (Spinoza 1994, 154). Affection, then, can either increase or decrease such power.

Deleuze (1981), interpreting Spinoza, proposes an analogy between affection and infinitesimal calculus; infinitely small quantities can be part of a differential relation, which "will present itself as the subsistence of the relation when the terms vanish." The same applies to bodies affecting each other: based on the very affection, their relation originates something new, a differential in power subsisting beyond the bodies. The encounter of two bodies mutually affecting each other results in a variation of power, but ultimately such an occasion is only completed by "the promissory note of incompleteness it envelops, in excess over its determinate character" (Massumi 2017, 352). An occasion of experience, that is the moment in which affection occurs, can ground its course on "germinal forms left by the antecedent occasion among the detritus of its passing" (Massumi 2017, 356). In other words, the encounter always results in a surplus of potential, which Massumi (2017, 362) calls "surplus value of life," part of a perpetual turnover of excess whereby every absorption is followed by a release. Capitalism systematically captures the surplus value of life and turns it into capitalist surplus value (Deleuze and Guattari 2009, 35).

For Massumi (2018a, 4), then, the goal is to "take back" the qualitative field of life by recognizing affect's irreducibly qualitative nature. To collectively counter the capitalistic capture, we need new social architectures of interaction (Beller 2017) that could be based on blockchain technologies. Yet, existing cryptocurrencies, such as Bitcoin, do not revalue value, but rather, they "repeat, each in its own way, essential characteristics of the capitalist equation" (Massumi 2018a, 24). Hence, to undermine capitalism, a new digital environment for alter-economic experimentation (Massumi 2018a, 103) should be invented to break up institutional structures and initiate a "revolutionary investment of desire" (Deleuze and Guattari 2009, 378). In this digital environment, creative collaboration would foster "different experiences of collectivity in action" (Massumi 2018b), whose qualities are to be "registered". But how can we register affect? For Massumi (2018a, 55), it is a matter of "affective resonation," through which differentials of power are given emphasis based on specific criteria. It should be observed that this appears incompatible with his claims that "affective resonance ultimately resists measure" and "relation is always more lively than its systematic registering" (Massumi 2018a, 45). Regardless, for Massumi (2018b) what we need is an "affect-o-meter," a mechanism to computationally turn qualities into binary machine codes, or as he puts it, translate "qualitative flows into a numerical expression."

2.2 Quantity vs. quality

Qualitative differentials are characterized by the variability of their intensities, something that, Massumi (2018a, 27) argues, we can try to register. Following Simondon (2017, 253), we could consider affective qualities as weights containing potentials, virtualities that constitute pre-individual realities. Across different energetic fields, there are disparities of potentials that coincide with disparities of information. When an event occurs, a new level of existence is attained qualitatively, although the corresponding discharge of energy is quantitatively measurable (Massumi 2009). Yet, for Massumi (2018a, 91), this measurement should be based on a qualitative emphasis non-reducible to quantities, something he calls "insistency." Clearly, a different emphasis is given to different insistencies, but how can we qualitatively distinguish one differential power from another? It is a matter of degrees, as insistency is precisely the degree of a quality; a quality in higher degree claims more emphasis. For Massumi (2018a, 93), a degree is not an intensive magnitude, which would imply a quantitative aspect, but rather an affective intensity, which expresses itself as "a purely qualitative difference of degree." However, I argue that his very appeal to the notion of degrees brings quantification back into the picture.

Already in the Middle Ages, John Duns Scotus had argued that forms can have different "latitudes," distinctions of degree that express variations of the quality of a form (Duffy 2016, 126). A quality contains infinite homogeneous parts "such that changes in the degree or variations in the intensities of quality can be explained by the addition or subtraction of these parts" (Duffy 2016, 127). Massumi admittedly embraces a Deleuze-Guattarian perspective towards capitalism and affect; yet, Deleuze himself argued that degrees of affective intensity are characterized by an intrinsic distinction, independent from and prior to the extrinsic distinction between figures that constitute their extensive representation (Duffy 2016, 131). Since the position on a scale of intensity that makes degrees distinguishable from one another is expressed numerically (Duffy 2016, 139), the intrinsic distinction between degrees is inevitably quantitative. For Deleuze (1992, 203) numbers cannot "adequately express the nature of modes" as they derive from an abstract way of thinking; hence, flows of power should not be treated numerically. However, variations of intensity in a linearly ordered series are inevitably perceived on a quantitative scale, constitutive of the notion of degree.

In this section, I have shown that qualitative events determine discharges of energy that are quantitatively measurable, and the notion of degree inevitably entails a quantitative aspect. Hence, Massumi's attempt to design an affect-o-meter cannot succeed in taking back the qualitative field of life. While the variability of intensities pertains to a purely aesthetic dimension, Massumi's approach cannot escape quantification.

2.3 Ecology and teleology

Massumi (2018a, 67) acknowledges that we cannot just walk out of capitalism; there is a "processual embrace" binding together surplus value of life, capitalist attempts of appropriation and postcapitalist creative processes of resistance. Hence, we are all living an ontological condition of complicity with capitalism that cannot be avoided, but should be practiced strategically, in order to make escape prevail over capture (Massumi 2018a, 67-68). Such a strategic play is called by Massumi (2018a, 69) "creative duplicity," which also involves "recognizing what works in the systems we work against" (Massumi 2018b). Furthermore, Massumi (2018a, 88) describes his new blockchain-based digital environment as a temporary autonomous zone capable of interaction with the existing economy. Here, creative duplicity is made possible by a digital membrane creating a separation between collective production of surplus values of life and the dominant economy (Massumi 2018b). Such a membrane would be characterized by a certain porosity, allowing some transactions between the two environments to take place, in order to accommodate matters

of practical self-sustenance that cannot prescind from the usual market logic and necessarily need to be sourced from the dominant economy, such as food, travel, accommodation for participants, and so on (Massumi 2018a, 127).

While I recognize that "there is no position of purity from which to oppose capitalism" (Massumi 2018a, 127), I argue that this creative duplicity has some weaknesses. Firstly, as Beller (2021, 229) puts it, Massumi's digital membrane should be "aware of capital's savage granularity but still capable of insulating a cooperative endeavor from capital's toxicity." This is a somehow naïve (and technologically rather utopian) ambition. But even if we could successfully design such a membrane, it would necessarily embody a form of delegation, whereby technologies would define the actors with which they interact (Akrich 1992, 211). There would be a high risk of blockchain-induced alienation (see section 2.4 Technological mediation) and creative encounters could be significantly hindered. Secondly, there is a contradiction in terms of teleology. Massumi (2018a, 115) declares that "no product separate from the process would guide the process teleologically" and "emergent collectivity would be valued as the product." In other words, the project's goal should be the creative process, and not the creative product. However, he also says that the project aims to "find ways of processually coupling with the existing economy in order to sustain itself" (Massumi 2018a, 123). Therefore, the participants' legitimate aspiration to find ways to keep their project ongoing risks turning the creative product into a new goal. Ultimately, I agree with Tola (2020, 403) when she argues that Massumi's new cryptocurrency appears as a way to "monetize affective intensities."

Massumi's return to quality should not be based on escaping quantification, as this would prevent him from "registering" in the first place and his affect-o-meter would be useless; rather, he should aim to express quantities in a non-numerical way. In this case, however, the registering process cannot be delegated to blockchain technologies, which are in desperate need for new components to complement their computational dimension.

We have seen that Massumi's proposal has some contradictions, partly due to the difficult coexistence between old and new socio-economic models. First, the inevitably quantitative account of variations in the intensities of a quality. Second, the naïve belief that alter-economic experimentations can be technologically sheltered from the influence of capitalism. Third, the unwanted-yet-present teleology dictated by the technological platform's need for self-preservation. Nevertheless, even after successfully registering qualitative intensities through a blockchain-based platform, other issues, that do not concern the conception of value, are still relevant and should be carefully considered.

3. Post-value challenges

3.1 Trust

The international financial crisis in 2008 was likely enhanced by an increasing loss of trust in governmental and financial institutions (De Filippi, Mannan, and Reijers 2020, 1). However well-founded, this narrative might make us foolishly think that we should "move towards a world in which we trust no one" (Zuckerman 2018) and eliminate the need for trust in the first place. Blockchain seems to go in this direction, as it presents itself as a potential solution to trust issues; Bitcoin, for instance, is described as "a system for electronic transactions without relying on trust" (Nakamoto 2008). The consensus mechanism makes it unnecessary to trust the parties with which we interact, as we can enjoy a "built-in trust" derived from the network itself (Tapscott and Tapscott 2018, 85). In this respect, however, media representations are quite fairytale like: authoritative magazines such as *The Economist* (2015) defined blockchain as "The Great Chain of Being Sure about Things," as if it provides direct access to the absolute truth. Clearly, this is not the case.

The acceptance of currencies is based on the expectation that others would do the same (see section 2.1 Money, debt and desire), and this is in fact no different for cryptocurrencies. Blockchain also creates "shared expectations with regard to the manner in which it operates, and the procedural correctness of its operations" (De Filippi, Mannan, and Reijers 2020, 2). Hence, trust is not at all unnecessary, and framing blockchain as a trustless technology is at least misleading. For instance, Bitcoin users must trust the integrity of its underlying system (Popper 2016, 55) and all involved actors, such as miners and programmers. As argued by Baldwin (2018, 3), we also need to trust algorithms and encryption software. A blockchain-based network does not operate in a self-contained manner, but rather, it is a hybrid system "made up of both technical and social components" (De Filippi, Mannan, and Reijers 2020, 7). As Winner (1980, 134) puts it, technology's impact on society "must be understood with reference to the social actors able to influence which designs and arrangements are chosen."

Algorithms embody trust in a proceduralized way, and for Iaconesi (2017) this comes at the expense of a culture of co-responsibility between human beings. If we look at Massumi's attempt to take back the qualitative field of life, we should see that proceduralized trust is not fully compatible with mutual affection and surplus value of life, since it entails a high risk of alienation. With blockchain the need for trust is reduced in the first place; people are compelled to trust an algorithm, and consequently, lose their freedom to decide if and when to trust each other. Ultimately, blockchain enhances transparency and accountability (Tapscott and Tapscott 2018, 84), but the solution to mistrust is not to eliminate trust; rather, we should look for ways to creatively embrace mistrust. This does not mean that there is no room for blockchain, quite the contrary; what needs to change is the reason why we use it. For Zuckerman (2018, 108), our goal should be to "build systems that help us trust better and more wisely."

3.2 Tokenmania

Blockchain's underlying mechanism is based on tokens, namely units of value issued by a community or an organization. Whilst tokenization ultimately amounts to a socio-financial practice, it could also be a way for artists to harvest the value of their work. Blockchain technologies are often depicted as "new avenues for experimentation toward the autonomy of art […] from the extractive logic of financial markets" (Lotti 2018, 93). This is reflected in Massumi's conception of the aesthetic dimension: affective interactions are improvisational, free from existing norms of society, and more akin to beauty, wonder, and adventure (Massumi 2018a, 113). However, we should not forget tokenization's reductive nature. As Massumi (2018a, 49) puts it, in the registering of the qualitative by the quantitative "there is much that escapes conversion" and that remains unaccounted for. In his hypothetical affect-o-meter, he even envisioned thresholds to ensure that the capturing of the creative advance gives special weight to certain passages of forces (Massumi 2018a, 125). Yet, I argue that the choice of these thresholds is detrimentally arbitrary: if certain forces are not given enough weight, they could dissolve. This could affect not only the registering process, but also the creative interaction itself, thereby turning a risk of reduction into a risk of manipulation.

The transposition of affect into a cryptocurrency takes for granted that everything is tokenizable. Nowadays, with tokenization, all kinds of assets (not only traditional assets such as bonds but also to artworks, sports teams and even celebrities) can be divided into small ownership stakes, so that they can be "fractionally owned by multiple parties" (Singhal 2019). Through blockchain, central issuance of money becomes decentralized issuance of "moneyness," whereby these assets acquire some attributes of money (Beller et al. 2020, 2). I call this fascination with tokens "tokenmania," a phenomenon entailing dangerous resemblances with capitalism. As O'Dwyer (2015) puts it, blockchain "proceeds from a perspective that already presumes a neoliberal subject and an economic mode of governance." An evocative claim is made

by Iaconesi (2017), who speaks of transactionalization of life: "all the elements of our lives are progressively turning into transactions." Our emotions and relationships are framed as parts of a procedure, and as such, tokenizable. A "tokenized mode of economic life" (Jervis 2019, 1) could degenerate into hyper-tokenization, whereby the uncritical adoption of tokens makes it impossible to distinguish between algorithms and the fabrics of society (Lotti 2018, 93). Ultimately, this would exacerbate the same capitalistic logic that blockchain is supposed to resist.

3.3 Transgression and power

For Iaconesi (2017), the transactionalization of life has a crucial implication: it is incompatible with informality and transgression. Why is this so relevant? Foucault argued that transgression enables individuals to subversively transform themselves and resist subjugation by challenging imposed limits; not aggressively, but rather creatively (Allan 2008, 92). Seventeen years after *Anti-Oedipus*, which called for "a revolutionary line of escape," Guattari (2014, 50) specifically indicated the need to cultivate dissensus. Yet, paradoxically, blockchain is a consensus mechanism. Although it is indeed a new revolutionary way of organizing the world that could create the conditions for individuation as intended by Simondon (see section 2.4 Technological mediation), we should not forget that such a process is never-ending and always incomplete (Scott 2014, 43). Hence, blockchain should not prevent, once adopted, the emergence of further ways, alternative approaches, different interpretations. Deleuze and Guattari (2005, 458) once claimed that we risk turning into "intrinsic component pieces" of a larger machine – the machine being the television. Can we make sure, now, that the same danger does not involve blockchain as well?

I have criticized capitalism for the subjugation it entails, but blockchain is not necessarily different. It could be a mere modernization of the means, while the underlying mechanisms remain unchanged. This is the theory proposed by Bollmer (2018, 6), who points at digital culture's normalizing power: the media we use carry the "specifications for the proper conduct one should internalize in a world defined by network technologies." Following this approach, we could say that blockchain users are "trained"[1] to perpetuate connections and flows within the network. Ultimately, this would amount to an imposition of nodal membership and consumption. Within such an environment, can subjugated groups become subject-groups as intended by Deleuze and Guattari? While describing the desire-producing social machine, they argued that "portions of the tasks to be performed are distributed" with the ultimate goal to generate "a residual share for each member" (Deleuze and Guattari 2009, 141-142). There is, then, little difference from how Bitcoin is organized: the consensus mechanism makes use of hundreds of thousands of participants who verify and authenticate all the transactions occurring globally and they are awarded incentives in the form of cryptocurrency.

In principle, blockchain appears democratic, but Massumi (2018a, 21) acknowledges that cryptocurrencies favor those who own the means of production, namely, energy and technological equipment. Hence, blockchain-based money per se could be a democratic idea, but its implementation makes it inherently selective. For Iaconesi (2017), the fact that our affective interaction depends on the resources needed to sustain our participation reveals that mere issues of access are, in reality, major problems of liberties and fundamental rights. For Baldwin (2018, 6), "what looks equal, democratic, and decentered in the diagram of the network […] conceals a massive distortion of power and power relations." Hence, the idea to circumvent economic power through blockchain may be a mere illusion.

[1] I use here the same verb used by Lazzarato (2012, 46) to describe people trained to promise to honor their debts.

3.4 Network fetishism

Where does blockchain draw its charm from? If we look at cryptocurrencies, their "overarching value proposition" (Hsieh, Vergne, and Wang 2018, 53) is decentralization, affecting the creation, validation and secure storage of economic transactions. The fact that everything occurs within a network is often considered a sufficient reason to assume actual democracy. The lack of a central command is "supposed to facilitate non-hegemonic, noncoercive, individualistic freedom of movement, while encouraging some kind of distributed representation and engagement" (Baldwin 2018, 5). Decentralization is often seen as inherently detrimental to the established power structures, and therefore, as revolutionary and socially transformative; even anti-globalization movements tend to ground their discourse on the spirit of networks (Fisher 2010, 225). However, this assumption reveals a myopic understanding of the nature of decentralized networks, which also have problems.

Decentralization is claimed to be superior regardless of its specific historical function, underlying politics and ideologies (Fisher 2010, 225). Yet, even post-industrial capitalism has a tendency to decentralize its sites of power (Guattari 2014, 47). In other words, decentralization is not necessarily the right response to capitalism, which is somehow already decentralized and, as Deleuze and Guattari (2009, 34) would say, feeds itself by decentralizing (deterritorializing) previously centralized (territorialized) social arrangements. Networks should not be considered *a priori* the solution to everything; describing them as autonomous and endowed with a life of their own risks concealing economic and social exploitation (Baldwin 2018, 6). To unconditionally prefer decentralization over any potential alternative could be a form of fetishism, whereby network technologies are naturalized, theologized, and teleologized (Fisher 2010, 185). In Deleuze-Guattarian terms, network fetishism might occur when "there is an unconscious libidinal investment of desire that does not necessarily coincide with the preconscious investments of interest" (Deleuze and Guattari 2009, 345). This could make us look at networks with genuine interest even if these were the causes of our oppression.

In *A Thousand Plateaus,* Deleuze and Guattari contrast tree-like centered structures with rhizomes, namely acentered networks. One could argue that these were a visionary anticipation of blockchain. However, rhizomes pertain to "a map that is always detachable, connectable, reversible, modifiable, and has multiple entryways and exits and its own lines of flight" (Deleuze and Guattari 2005, 21), whereas blockchain is characterized by preestablished paths and organizing memories. Networks are not only, and not always, indicators of freedom and lack of coercion; they also produce "stoppages, closures, dark spots" (Aranda, Wood, and Vidokle 2015, 7). Ideological discourses tend to hide the infrastructure behind cryptocurrencies, which is also characterized by bottlenecks and tensions among the network's nodes; these enjoy "emancipation without end, but also without exit" (Musiani, Mallard, and Méadel 2018, 151).

Networks are often used to map complex phenomena into abstract models, but we should not try to "remake the world in terms of our network theories" (Berry 2008, 365); this would produce a flattening of reality, since our models can only be simplifications. Networks challenge us to "think in an elemental fashion" (Galloway and Thacker 2007, 157), as their dynamics also involve unhuman aspects, sometimes not subject to human control. This entails the risk to assume that human and social interventions are ultimately futile, and power relations could therefore become depoliticized (Fisher 2010, 209). But, as Zhang (2018, 8) puts it, "the prospect of decentralizing control does not absolve us of the hard work of politics, and blockchain has so far failed to transfer power to 'We, the people', whatever the white papers might claim. Political economy cannot be replaced by technology alone."

4. Conclusion

In this paper, I have critically analyzed financialization and its connections with capitalism and debt mechanisms. I have investigated the emergence of money, showing that the acceptance of a specific currency is discretionary and based on the expectation that others would do the same (Goldberg 2005, 957). For Deleuze and Guattari (2009, 218), the capitalist system is ultimately grounded on mechanisms of perpetuation of debt, which triggers "an internalization of the creditor-debtor relation." I have argued that, as money often contributes to the exacerbation of social injustices, it makes sense to look for alternative monetary frameworks. However, since now all realms of social life become submissible and eventually submitted to the economic approach (Vog 2014, 148), this would be insufficient to solve the problem at its roots. Capitalism should be actively resisted in more fundamental and revolutionary ways, and one way could involve blockchain, often passed off as a formidable tool for human emancipation (DeFi Capital n.d.). Although blockchain is a preprogrammed context, where people's roles are always already anticipated (Hui 2016, 157), this apparent impotence can be reframed based on a contemporary interpretation of Simondon's theories. Blockchain technologies should be seen as technical platforms that can foster transindividual relations and lead to the realization of people's unrevealed potential both at the collective and individual level.

The core part of this paper is my evaluation of the viability of ongoing experimental implementations of blockchain technologies in their attempt to resist capitalism. Specifically, among these, the idea proposed by Massumi, which requires us to "reinvent" the concept of value within broader collective arrangements. Massumi calls for a qualitative account of affect, intended as a variation in power, and he aims to create a blockchain-based social architecture of interaction (Beller 2017) to counter the capitalistic capture collectively and creatively. I have criticized this project by emphasizing its main weaknesses and contradictions. First, since variations in power entail different degrees of intensity, their orderability makes it impossible to avoid quantification. As argued by Deleuze, different degrees of power belong to a scale of intensity, and therefore, they should be considered quantitatively distinguishable from one another (Duffy 2016, 139). Second, Massumi argues that, within his new digital environment, people should exploit "the two-sidedness of intensive magnitude" by means of a digital membrane, that would create a separation from the dominant economy (Massumi 2018a, 124; Massumi 2018b). I have argued that such a digital membrane would embody a form of delegation, entailing a risk of blockchain-induced alienation that could significantly hinder any creative encounter. Third, Massumi declares that "no product separate from the process would guide the process teleologically," but he also says that the project aims to "find ways of processually coupling with the existing economy in order to sustain itself" (Massumi 2018a, 124; Massumi 2015, 123). This contradiction I called an unwanted-yet-present teleology, dictated by the technological platform's need for self-preservation.

Finally, I have argued that even if we manage, somehow, to reinvent value and register qualitative intensities, other issues will remain to be solved. First, although blockchain technologies present themselves as a potential solution to issues of trust, we cannot speak of trustless technology, as blockchain users still need to trust the integrity of the underlying system (Popper 2016, 55) and all involved actors. Proceduralized trust would come at the expense of a culture of co-responsibility between human beings (Iaconesi 2017). Rather, we should look for ways to creatively embrace mistrust. Second, nowadays everything is tokenizable, to the extent that we may speak of a "tokenmania," whereby the uncritical adoption of tokens makes it hard to distinguish between algorithms and the fabrics of society (Lotti 2018, 93). Ultimately, this exacerbates the same capitalistic logic that blockchain is supposed to resist. Third, when "all the elements of our lives are progressively turning into transactions" (Iaconesi 2017), informality and transgression could become a problem. Guattari (2014, 50) specifically indicated the need to cultivate dissensus, but paradoxically,

blockchain is a consensus mechanism that exerts an imposition of nodal membership and consumption. Therefore, the idea to circumvent economic power through blockchain may be a mere illusion. Fourth, decentralization is often claimed to be superior regardless of its specific historical function, underlying politics and ideologies (Fisher 2010, 225). However, it is not necessarily the right response to capitalism, which is somehow already decentralized. To unconditionally prefer decentralization over any potential alternative could be a form of fetishism, whereby network technologies are naturalized, theologized, and teleologized (Fisher 2010, 185). As Zhang (2018, 8) puts it, "the prospect of decentralizing control does not absolve us of the hard work of politics."

Since, in general, cryptocurrencies are more akin to financial speculation than cultural relations (Beller 2017), we need to achieve a more effective insulation from capitalism, social rather than technological. Massumi (2018a, 118) seems to be aware of the risks of his approach, as he acknowledges that the digital platform cannot be considered the process, but rather, the mere "technical engine" of the creative event. However, I argue that we risk shifting from the opportunity to use blockchain to reinvent value towards a fervor to reinvent value to use blockchain. Furthermore, reinventing value is not only reinventing currency; it is something much more complex and difficult, that transcends the technological domain. If we accept the theory that the emergence of money precedes trade, market transactions and barter (Graeber 2014, 58), the rupture with causality that could free us from capitalism should take place on a pre-monetary level. Hence, before looking for adequate technological infrastructures, we should improve our sociality. For Gabel (2017), for instance, we need an egalitarian reorientation of our creative forces and "the movement of desire toward each other, toward genuine empathy, compassion, and love through mutual recognition." This would be quite an impressive existential mutation.

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