

## Towards an ecology of care: Basic Income after the nation-state<sup>1</sup>

### I. Introduction

This essay is about care. It proposes a political vision to move towards a care-centred society that will allow the flourishing of everyone while keeping the planet inhabitable and thriving. For this utopian horizon that we name *an ecology of care*, we propose the creation of a Basic Income system that is constituted outside of and beyond the realm of the nation-state, as a means of changing humanity's relationship to itself and transitioning from capitalism to a commons-based society. It argues for a dis-embedding of work — and the time allocated to it — from money, through a reformulation of the production of money in the form of an income distributed as an equal share to all those who are part of the commons. Finally, it connects this Basic Income proposal with degrowth as a radical and necessary reformulation of society that considers its ecological roots and replaces the obsession with endless economic growth with the principle of taking care of people.

This paper argues that if we are to fundamentally revert the crisis of today and create this ecology, there are three simultaneous transformations to start:

1. **Money Commons:** which means the re-appropriation of the money system outside the realm of the state and banks and into the commons, where value is created and wealth is defined, reproduced, shared and maintained by all those who participate in the reproduction of the commons, beyond the borders of nation-states.
2. **Degrowth:** in order to encourage self-reliance for all within planetary boundaries, a money system which is alive and hence decays when it is not used is proposed as the basis for the creation of a different type of money, made itself with a different set of values. Creating ecologies of money means bringing diversity to monetary ecosystem as a way of healing the

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harm done by today's money monoculture, where money is created as a form of a debt with an interest on people's time. Making money alive aims at creating money within and for the commons to have the life needed for them to achieve a viable economic alternative.

3. **Pluriversal Basic Income:** A recentering and awareness of care as the source of the value in work, which decouples labor from income or wage slavery from people's time can be achieved through the distribution of a Basic Income given to people unconditionally, just because they exist. This formulation of a Basic Income is epistemologically different from nation-state proposals, and it can be a tool for the emergence of new political projects and social forms. Politically, the pluriverse is a weaving together of different forms of knowing, imaginations and practices of freedom organized democratically as a confederation in order to transcend the nation-state.

The ecology of care rests on an argument that the establishment of a free society is underpinned by a flourishing of relationships that foster care and that these practices of caring are means to the creation, expansion and maintenance of the material and immaterial elements of the commons. These three prospects are therefore to be seen as implying each other and as a whole, each forming a leg for a table which cannot do without one of its three pillars.

## II. Recovering care as a precondition for freedom

Bringing care to the core of our thinking requires a deep questioning of the way in which the discipline of economics has built its object ('the economy'). Most of the sub-schools in the field of economics tend to treat the work of care — by some conceptualised as social reproduction — as invisible, making it a valueless and unaccounted form of labour. This labor is treated as pre-economical and is therefore not measured in metrics like GDP. Today, this care or reproductive labor is socially assigned predominantly to women. Its invisibilization is constructed through a hierarchy of value which dualistically divides between some forms of labor as material (and hence productive) and others as immaterial (and hence communicative or 'feminine') (Yanagisako 2012; Bear, Ho, Tsing, & Yanagisako, 2015).

This is not a casual theoretical mistake. The invisibilization of reproductive work completely decenters the processes that make human life possible by putting them outside the sphere of

what is considered as part of the economy. But in fact, what we call production is only a secondary moment in the process of social reproduction, of the production of people (Graeber 2013). Any economy is fundamentally a human economy, and it is only by invisibilizing things like reproductive work that capitalism can justify its costs of production and pretend that the economy is about things and not social relations (Hart and Laville 2010; Federici 2014).

In reality, the freedom of the proletariat to sell his labor is only possible because of the unfreedom of the housewife which subsidizes their reproduction for eventual capitalist exploitation (Mies 1998). As some note, the level of freedom in a society can be measured by the level of freedom that women have (Öcalan 2015). Hence, without the systemic liberation of women and all others who perform the basis upon which life is built, and therefore the reproduction and defense of the commons, society as a whole cannot be liberated. The exploitation of those mainly dedicated to care is the material counterpart of the theoretical overlooking of this form of labour.

It is through fostering and encouraging the recognition of care work as a source of value in work that another world can be built: a care centered economy (Praetorious 2015). This implies a shift from valuing the end point of things, as done under capitalism, to a valuing of the processes that make life possible to begin with.

An economy based on care, or the care economy, is a response to capitalist and patriarchal systems of domination. The care economy tries to recenter the value of care labor (as these reproductive activities have come to be known) at the center of the human economy, or rather, an ecology for human relations that is strengthened through their interdependence. Thus, the reproduction of human processes is the first step and precondition for the production of what is known under capitalism as the production of 'goods and services'.

Underpinning this economy is an ethics of care, a moral system which recognizes the interdependence amongst humans and their capacity to autonomously decide which relations they wish to enter, change or exit. Most importantly, it is based on the universal experience of being cared for and the giving of care. At its core, an ethics of care is about 'attending to and meeting the needs of the particular others for whom we take responsibility' (Held 2006).

With this in mind, we can think of the ecology of care as the soil that nourishes human relationships directed at mutually making each other free through an acknowledgement of our interdependence and the care that goes into making us who we are. Care is therefore a precondition for free relationships to be established. As argued below, this type of morality and system of value is embedded within a reformulation of how money is created; shifting to a system which provides every human being with an amount of money necessary to live in harmony with nature and within planetary boundaries.

### **III. Money, Basic Income and the Critique of Capital: But where will the money come from?**

*Money is a new form of slavery, and distinguishable from the old simply by the fact that it is impersonal—that there is no human relation between master and slave.*

Leo Tolstoy

The circuit of capital, identified by Marx's formula  $M-C-M'$  denotes the fact that, under the capitalist mode of production, money begets more money through the exchange of commodities (Marx 1982). These are produced through a mixture of humanity's labor power and nature i.e. the means of production, all mediated by the circulation of value in the form of money, given as an interest-bearing debt.

Monetary creation under capitalist conditions is the ignitor and precondition for economic growth. It is the fuel that mobilizes the expansion of future production with the sole goal of profit maximization. The endless expansion of economic growth using this type of money creation leads inevitably to ecological disaster, as enclosures on land and people's labor power become the means of money's infinite reproduction, making wealth inevitably accumulate at the top 1%, as recent studies have demonstrated (Piketty 2013).

This happens through the issuance of interest bearing debt, which makes money scarce and hence competitive for people to obtain, tying humanity's fate with an expansive spiral of destructive growth. Some economists have empirically demonstrated that monetary interest

rates set by central banks follow and are positively correlated with GDP growth. Bank credit creation not only mobilizes future production but is the basis for economic growth (Werner 2016; Werner and Lee 2018). As evidence is increasingly showing, we cannot have infinite growth in a finite planet (Meadows, 1972; Hickel & Kallis 2019).

More recently, feminist autonomous Marxist intellectuals like Silvia Federici, among many others, have traced the historical changes in the circuit of social reproduction and its relationship to the circuit of capital, namely women's historical central function in the process of primitive accumulation as the producers and reproducers of the most essential capitalist commodity: human labor power (Dalla Costa and James 1975; Federici 2014; Praetorius 2015). The enclosure of the commons and of women's bodies was the pre-condition for the rise of capitalism. As historian Peter Linebaugh puts it: 'reproduction precedes social production. Touch the women, touch the rock' (Linebaugh 2008).

Our ecology of care draws and is inspired by already existing political efforts to overcome the state\capitalist system. The rebuilding of the commons as a viable political project has been defined and practiced dispersedly around the world. This essay is an attempt to deepen the imagination of the economic self-reliance of the commons. As Federici herself notes, talking about the recent appropriation of the commons discourse by hegemonic forces:

while international institutions have learned to make commons functional to the market, how commons can become the foundation of a non-capitalist economy is a question still unanswered (Federici 2011).

The idea of Basic Income, without having been implemented fully anywhere, has stimulated already stirred the political imagination of a wide political spectrum (Standing, 2017). In this essay, more than engaging in creative solutions of how we could redistribute diverse funds for a Basic Income, we propose instead to unpack current understandings of the monetary system and its underpinning institutions to formulate politically relevant questions about the nature of the system itself. Understanding (1) what money is and (2) how could our current monetary institutions be transformed for the horizon of political emancipation are the purpose of the following sections.

## Money is Debt

From the archeological record, we know that money historically emerges in human civilization from our social relationships of debt. Underpinned by violence and mathematics, the creation of credit has been employed throughout history as a mechanism of enslaving human beings, from ancient Sumeria to today's International Monetary Fund and World Bank (Hudson 2004; Graeber 2011).

The history of debt is a history of patriarchy, defined here broadly as the rule of fathers. The long structures which underpin this logic of domination, the long *durée* of money, have remained roughly the same for the past 5000 years, going through different oscillations<sup>2</sup>. Traditionally, kings and bureaucrat priests who had power over the hegemonic ideology would pair up with armies in order to enslave people into becoming their subjects through debt. This 5000 year old pattern has been reproduced to today's Federal Reserve and Wall Street, underpinned by the violence of the US army.

This phenomena could be described as the Military-Coinage-Slavery complex; whereby a king would hire an army in order to subject people to his command, enslave them and make them work in order to pay the wages of soldiers in newly minted coins (Graeber 2011: 229; Ingham 2004: 99). This complex continues to exist until today, with elite groups in private banks having the privilege over monetary creation, making everybody else indebted and enforcing payment through state violence. Banks are thus the temples of today, where the debts of the many get accumulated by the few. But what is money?

Economic textbooks define money as a neutral thing: a means of exchange, a store of value and a unit of account. This formulation assumes that money, to exist as such, has to achieve all of those three characteristics, with people often arguing about each of these as what makes

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<sup>2</sup> Anthropology has countless examples of what some call 'social currencies', which are aimed at rearranging social relations rather than the mere movement of commodities for the sake of the capital accumulation. Just as markets are not the same thing as capitalism, money does not necessarily imply capitalism and can thus be transformed.

money 'really' money to begin with. In reality, these are the functions of money, what it does, not what money *is* (Lietaer and Dunne 2013).

Money is just a set of promises we make to one another (Graeber 2001). As a mutual promise, money is not just one thing but is fundamentally a social convention or an agreement, a semantic system similar to language, underpinned by the trust people give to it (Aristotle 1954; Polanyi 1977: 97-119).

This acknowledgement of money as a mutual promise is based on an arrangement that recognizes our interdependence to other people, which is constantly renewed and revised. It is a recovery of money fundamentally as a social process before a commodity-like thing (Simmel 2004; Dodd 2014). Money is not a mere commodity, it is a social relationship of debt and credit, a process and a thing *at the same time* which guides the whole of what we call 'the economy' (Hart 1986)<sup>3</sup>.

But the way that money works today follows a logic that goes against the natural yield of ecosystems to reproduce themselves. This is because money can infinitely make more money through arbitrary positive interests, which necessarily implies some form of material resource extraction somewhere down the line. But there is nothing natural about interest rates (Gesell 2007)<sup>4</sup>. Those who possess money and reproduce these cycles of accumulation often take the ability of those with none of it to reproduce their livelihood; through the repayment of debts, wage-slavery, rent and interest rates, money's relationship to human beings has been, for the most part of the last 5000 years history, one of domination and exploitation.<sup>5</sup>

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<sup>3</sup> Money as a commodity is how most people and schools of thought, including orthodox Marxists, defined it up until now. The aversion towards money is prescient in most leftist circles as it is equated with capitalism and slavery and hence is seen as something rotten which should be abolished. Against this, we follow the view that money is always utopic (Dodd 2014) and we should therefore appropriate monetary institutions within the realm of the commons, making it multiple, a plurality.

<sup>4</sup> In fact, interest rates have shifted according to various religious and philosophical traditions, from the famous Saint Ambrosio exception in the Middle Ages which stated that a Christian cannot charge an interest on another person's time, to Calvin and Luther who argued that, in fact, you can. See Graeber (2011) for a detailed analysis of this history.

<sup>5</sup> The global slowing down of economic growth in recent decades has seen new forms of perpetuating this process of wealth and accumulation of power. See Robbins (2017).

Modern money is produced in the form of debt by private and central banks, which often do not use it to mobilize production but to speculate in financial markets. Today, 97% of all the money supply in most countries is produced in the form of bank deposits issued by private banks. The remaining 3% is produced by states in the form of cash (Mcleay et al. 2014). These institutions both produce money out of thin air, by merely typing a number on a computer screen<sup>6</sup>.

There is no fortuity in this. The so-called divine power once used by temples and priests to create something out of nothing today rests in the hands of private bankers, who issue money as debt, and ultimately with nation-states, whose sovereignty guarantees that they can perpetually issue money without having to pay it back, as modern monetary theory (MMT) proponents have argued, synthesizing both state and credit theories of money (Mitchell-Innes 1914; Knapp 1924).

Ultimately, to understand money we need to understand debt. In German, *schuld* is the word for both debt and guilt. This “demonic ambiguity” as Walter Benjamin called it, is why money has such a powerful effect on human beings (Benjamin 1996). According to Benjamin, it is the internalized morality of guilt in human civilization which underpins the current agreement of how money works, from the origins of patriarchy to early Christianity, to the Protestant work ethic, to today’s ‘post’ modern world. This guilt over money is ultimately what reproduces the moral economy of debt which capitalism is based upon. How do we start to change this?

#### **IV. The first leg: Money Commons**

In this section, we rely mostly on Massimo De Angelis’ study of the commons as social systems. In his approach, De Angelis analyzes the processes and complex dynamics that go into the creation and reproduction of different commons and the different values and practices embedded within such processes (De Angelis 2007).

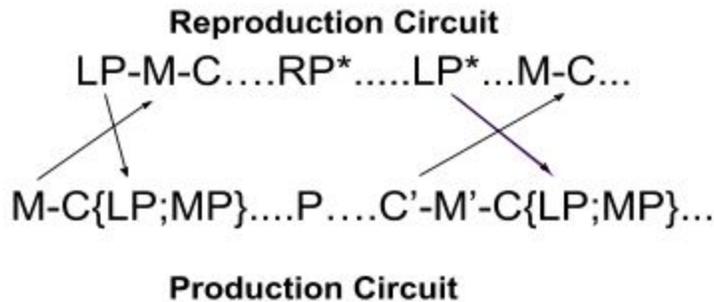
In *Omnia Sunt Communia* De Angelis draws out the circuit of social reproduction as a moment in a set of moments that reproduce the commons and its relationship the circuit of capitalism

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<sup>6</sup> The latin word fiat is used today to denote the type of money made by nation-states: fiat money. The term can be found in Genesis i.3 - “let there be light” or fiat lux - denoting the making of something out of nothing.

(De Angelis 2017). The relationships between the different moments in the reproduction and capitalist (production) circuits are outlined as follows:

Figure 1: Coupling Between Production and Reproduction Circuits



Where:

**LP: Labor Power**

**C: Commodities**

**MP: Means of Production**

**RP: Reproductive Labor**

**M: Money**

**P: Production**

Source: adapted from De Angelis 2017: 189

In the reproduction circuit drawn in Figure 1, the money (M) obtained in exchange for labor power (LP) is used to buy commodities (C). These commodities are then processed in the household through an expenditure of reproductive labor (RP), which allows for the physical and psychological reproduction of regenerated labor power (LP\*), which is then sold to capitalists in order to make more commodities. Similarly, in the capitalist circuit of production, the M-C-M' formula is expanded to take into account the means of production (MP) and labor power that goes into the production process (P), in order to produce more commodities.

The reproduction circuit is here expanded from the C-M-C formula used by Marx to show “the general metabolism of the reproduction of labour power, but also the ‘circuit of production of commodities involving self-employed, petty producers, craft people, small organic farmers, reclaimed factories, water associations and so on” (De Angelis 2017: 192).

This is only but a moment in a larger set of moments of social reproduction. Unlike the production circuit of capitalism, the reproduction circuit serves as a means and not as an end. Taking a broader view, the reproduction circuit at large could be conceptualized as a set of moments that recreate the commons (De Angelis 2017: 193).

As seen from Figure 1, the sphere of reproduction is inevitably tied to money that is created outside in the sphere of production *as an end in itself*, hence making social reproduction — or rather, the commons — dependant on the circuit of capital for their survival. From this we can observe how capitalism and patriarchy are subsidized by and depend at large on reproductive labor for them to continue functioning.

An approach to solve this exploitation has been the post-keynesian argument of having states rather than private banks creating and allocating credit (Jackson and Dyson 2013; Pettifor 2017). This ‘productive versus speculative’ debate in the monetary realm fails to recognize the feminist critique that production is a secondary moment in the process of social reproduction. There cannot be goods and services and much less workers without the reproductive, domestic, intimate, emotional and care work done by those who make life what it is to begin with. But today, the money system values only that which is seen as ‘productive’, invisibilizing unwaged work and the dependence ‘the real economy’ has on it.

To go to the root, we must therefore create a type of money system which not only breaks with the monoculture of today but is aimed at issuing *unconditional reproductive tokens* to all people in society, produced within itself. These tokens are not meant as a debt to be paid back with an interest to a bank or to a state, as is consumer credit, but as an income with purchasing power based on the acknowledgement of human interdependence and the commonwealth which reproduces their livelihood.

The link between human work and the money received for the labor expenditure is part of the mechanism through which systems of exploitation are reproduced today. Private and state money are the medium through which capitalism and the state reproduce themselves at the expense of the commons. This money nexus hinges on the reproductive capacity of the commons to become a viable alternative, as the people who are often involved in their

reproduction rely on wage labour for their livelihood or spend their time on earth paying back unpayable debts.

Decoupling work from income would mean that the energy expenditure and resources that goes into reproducing existing systems would decrease. This would fundamentally change the arrangement of the systems themselves, as people are free to decide what they wish to embody their time without the pressure to produce in the same way. This decoupling necessarily implies a change in the source of monetary creation as the basis for a new economic paradigm. This new monetary system would serve as the means for the reproduction of people's livelihood through the expansion of the commons.

Thus, the ecology of care requires the links between labor and money to be severed and then to create them anew, with radically different values and practices that follow an ethics of care to emerge from the already existing spaces where the commons live. This can be done in the form of a Basic Income which favors the circulation and the sharing of wealth, rather than its accumulation.

Through a plural dividend which functions as a commons, it becomes possible to change how money is designed, whilst distributing communities with the money necessary for social reproduction to take place without the need for waged labor. This process of transforming money — its production and circulation — can be understood as the appropriation and collective transformation of the institution of money into a commons (De Angelis 2017).

According to De Angelis, the autonomy of the commons can be derived in two ways. The first is through the point of view of a social system vis-à-vis others, where autonomy defines the dynamic of the commons in relationship to other systems in their environment i.e. the state and capitalism. In this sense, autonomy is understood as a political struggle, a struggle over the values that constitute different social spheres (De Angelis, 2007; 2017, p. 226). The politics of the commons are not one of patriarchal productionism but a politics of distribution, which acknowledges the reality that today's systems of production have cut off and do not need human labour power as they once did (Ferguson, 2015). In this sense, the autonomy of the commons is the ability to re-appropriate and to redistribute the wealth produced inside of them

and to define what value is and where it moves. Money as a commons is also thus a means of commoning resources together.

The second notion of autonomy is a property derived through the internal workings of the commons, whose components recursively interact in such a way that the network that produced these interactions is regenerated and a boundary is defined (Varela 1981:15). Rethinking money as a commons, under democratic control, keeps the value of the system inside its boundaries, which helps to nurture sufficiency within any given community. The people who use this money commons would interact with other people without having to be subjugated to state money or private debt issued by banks. Basic Income in this sense would be the means for communities to claim autonomy in horizontal interconnectedness with other communities and social forms.

The commons are also interdependent to the constituent parts that reproduce it, which at times might in turn be dependent on the state, capital or other structures for their reproduction. The interdependence between the commons and capitalism today ensures the reproduction of capitalism at the expense of plundering the commons. The Lauderdale Paradox — which states that the private riches grow by degrowing public wealth — has its correlate in our currency monoculture system, as the private money issued by the private riches is what reduces the public wealth of the commons. In this context, resolving the Lauderdale paradox implies the creation of a monetary circuit which increases public wealth and decreases massive accumulation of private wealth (Hickel 2019).

### **Commonifying money<sup>7</sup>**

Making money a commons means severing money's long standing relationship to states and banks and bringing its very creation to the realm of people. In this sense, the issuance of money is decentralized to potentially all human beings on the planet with confederated currencies that fit the local conditions of each particular place.

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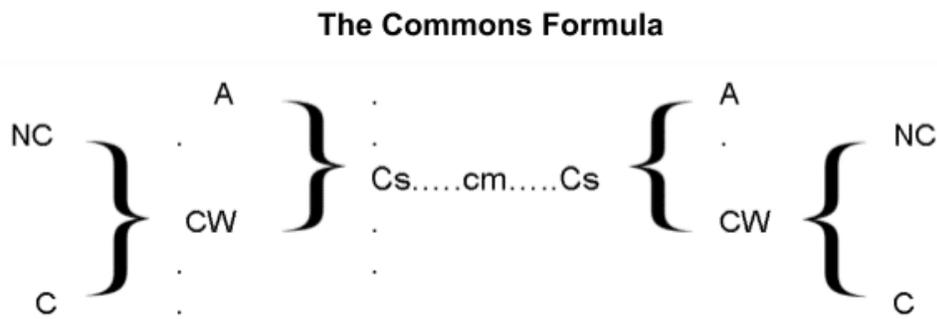
<sup>7</sup> The idea of the money commons is not new. Many theorists and financial activists have explored the concept and its practical implementation at great length. See, for example, Greco (2009); Dodd (2014); Slater and Jenkins (2016)

Commoning money means that the issuing of credit starts at the individual level and runs through the circuit of reproduction and the circuit of the commons for its own regeneration before going into the realm of the state and capitalism. Through this bottom-up monetary creation, the shareholders of the planet's resources become the commoners who issue their own reproductive income on an unconditional basis.

Divided as an equal share of the total wealth, money in the commons is transformed into what could be called autonomous or libre money<sup>8</sup>, as it is produced from within the commons themselves and for the commons to use. This fulfills De Angelis' understanding of the commons as systems that put money at the service of their own existence, and not the other way around. Before expanding on this point, let us first outline how the commons are reproduced.

The Commons Formula, drawn by De Angelis, is as follows:

Figure 2: The circuit of the commons



Where:  
**NC= Non-commodities**      **CW = Commonwealth**  
**C = Commodities**          **Cs= Commons**  
**A = Associations**          **Cm = commoning process**

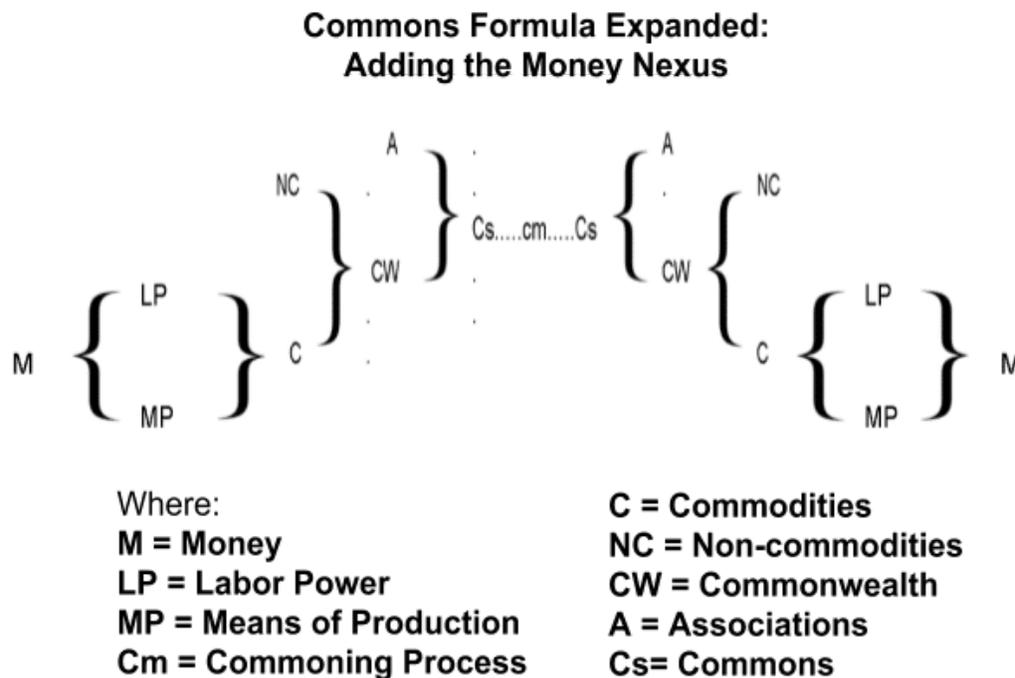
Source: adapted from De Angelis 2017:193

<sup>8</sup> Today, there is already an autonomous monetary movement all over France called Libre Money, where people issue their own money on an equal basis from the bottom up, based on a peculiar 'Relative Theory of Money', which uses Einstein's theory of relativity to produce money. See: <https://duniter.org/en/>

The commons (Cs) come into contact with the outside world either as buyers or sellers (left and right side of the picture). Commons are constituted by people's associations (A), understood as any group with common goals, practices and values, together with the common wealth (CW) they hold, which is in turn made up of both a mixture commodities and non-commodities like knowledge, dexterity and public spaces (De Angelis 2017: 193).

The process of commoning (cm) is inherently a social process that takes place whenever all these aspects come into play. Yet this picture still misses the relationships that make commodities (C) come into being i.e. the circuit of capital we saw in Figure 1. Figure 3 adds the money nexus that connects the circuit of the commons to that of capital:

Figure 3: The circuit of the commons expanded



Source: adapted from De Angelis 2017:193

Expanding the commons formula, we come back to the question of commodities and the material forces that go into their production. As noted above, it is through the mixture of labour

power (LP) and means of production (MP) that commodities are produced. But the precondition for these two forces to mix, the root link that ties them together, is money.

The only missing part of De Angelis formulation of the commons is the root of all money. As mentioned, the institutions that are responsible for the production of money are private banks and states. Capitalists who pay wages get their money, at some point or another, from banks and high-finance, which lend it to them at an interest. Making money a commons means that the traditionally 'divine' power over monetary creation held by the sovereign would be decentralized and distributed by all humans from the bottom-up, without intermediary banks but by the people who want to collectively share the commonwealth of society as a whole, through their individually distributed incomes.

This new promise is given individually to everybody, distributed constantly and equally, and governed by the principles of the commons and direct democracy. It is an attempt at explicitly acknowledging that our existence is shared interdependently. It is not tied to the protestant work ethic (Weber 2001) but is given unconditionally of one's actions, just because we exist and without a positive interest embedded to its creation.

The commons have as an ultimate goal the reproduction and the care of their people, the planet and what they consider valuable. Is the means to the end of taking care of people. Having this understanding of money as commons in mind, we can re-think a Basic Income that allows for people to take care of each other without the 'where will the money come from?' concern that implicitly underpins current Basic Income debates. If the objective is to take care of people, then the question is not how will the state finance a Basic Income, but what is the form of money that will allow us to take care of people and the monetary institutions that bring it into being.

In so far as finance is the imagination of capitalism (Haiven 2011), the appropriation of the means of the production of money as a commons is a key step to move towards a more comprehensive transformation of society. This approach to money as a commons is a way of fighting back against finance as an appropriation of the commons (Hardt and Negri 2009).

## **V. The second leg: Degrowth and the life and death of money**

So far we have argued for a re-making of money into a commons. In this section, we argue that a monetary system like the one we propose fits with the principles of degrowth. Moreover, we also suggest that any serious attempt to move towards a degrowth society must consider the transformation of money as central to its political objective.

While many social movements and political projects have fought back the destructive consequences of capitalism (Kothari, Demaria, & Acosta 2014), in this paper we focus on the degrowth tradition for its explicit and central critique to economic growth, as well as the articulation of robust evidence of the implausibility of ideas like ‘green growth’ or ‘sustainable growth’ from an ecological perspective (Kallis and Hickel 2019). This expansive, extractory and predatory nature of economic growth as the goal of a society is precisely the main point of critique in the varied thinking that can be labelled as ‘decroissance’ or ‘degrowth’ (Latouche 2009; Kallis et al 2018).

Degrowth gives ground to think about money as ‘alive’ while being consequent in putting care as the centre of economic life. Degrowth not only acknowledges the ecological limits of wealth accumulation but also restores the role of care and maintenance to the centre of society. Based on this, we also develop an expansive and democratically grounded understanding of care that this form of Basic Income would allow. As we explored in previous sections, growth and the way the money system works are intimately intricately. Compounded interest demands the constant increase in profit beyond covering ‘needs’ to satisfy the profit of those producing the money (R. H. Robbins, 2018). In order to get more growth, more debt has to be issued.

Many proponents of degrowth base their approach on the principles of ecological economics and the limits of the ecosystems in their ability to regenerate and sustain all forms of life. Initially, economists focusing on the ecological implications of production and consumption in the rich world emphasized the impossibility of sustaining economic growth in a finite planet (Meadows et al 1972; Gorz 1977; Georgescu-Roegen 1979; Latouche 2009). When counting and embedding economic activity in society and the environment, it becomes clear that compounded growth cannot continue indefinitely when the ecosystem’s capacity to regenerate is limited, and, in

some cases — like with fossil fuels — almost null. Rather than aiming for detachment from limits — as some forms of green growth and techno-optimism do — more recent iterations of degrowth embrace this recognition of limits in a (re)productive, liberating manner (Kallis 2019; Pueyo 2014).

The serious theoretical acknowledgement of the biophysical world and its boundaries (Raworth 2017) makes explicit that trying to pursue infinite growth in wealth (of which the increase of money is its only measure) will exert violence over people and ecosystems alike (Patel & Moore 2018)<sup>9</sup>. With this ground, degrowth has made its way in recent proposals to address the climate and ecological breakdown in dialogue with the care debate.

Degrowth has already shown the need to revalorise and strengthen the circuits of care. Growth sceptics have recognised how some of the most beneficial economic activities (usually care related) are not just uncouned in traditional GDP accounts, but actively discouraged and displaced by the need to increase commoditised production and consumption (Jackson, 2017). Jackson's proposal of 'prosperity without growth', for instance, relies on the advancement of the 'Cinderella economy', which includes some of the daily activities which are usually underplayed or ignored in mainstream economic accounting, as 'these sectors of the economy – care, craft, culture (...) are inherently labour-intensive as well as being potentially lighter in environmental terms.' (Jackson 2017: 204).

Feminist scholars working with the concept of degrowth have made explicit the conflict of existing economic model with care work (Pérez Prieto & Domínguez-Serrano 2005; Dengler & Seebacher 2019; Pérez Orozco 2017) and call for feminist perspectives to be put at the centre when thinking how to 'scale down' the economy. They reinforce the already theorized role of women in the provision of care — disproportionate, exploitative and unrecognised — that has been displaced for the sake of profit and accumulation. The core message is put by Pérez Orozco as 'ecofeminist degrowth or barbarism' (Pérez Orozco, 2017:223). As we understand that surviving the ecological breakdown requires moving to a care-centred society, transforming our paradigm of what economics is for (Praetorius 2015), we see an affinity between degrowth and feminist critiques to lead the way conceptually.

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<sup>9</sup> To see how this contrasts with forms of modernist socialism, see Robbins (2019).

More practically, when it comes to visions and formulas to move towards a degrowth society we can find concepts like low tech (Alexander & Yacoumis, 2018), low energy demand (Grubler et al., 2018), and strategies for making food systems sustainable as in agroecology (Mier y Terán Giménez Cacho et al., 2018). All follow the idea of ‘cooling down’ the economy and focusing more on keeping things going — the work of maintenance — and regenerating ecosystems rather than producing and discarding. In other words: an economy that fosters care as the core of society, rather than being put conceptually in the margins (an ‘externality’) as our current model does. It is a counter-movement against accumulation through the exploitation of care to a circulation of care as the basis to build the commons.

## Degrowth Money

Even though the degrowth movement has shown the limits of our civilization’s obsession with growth, and has promoted and proposed complementary currencies for its implementation (Hornborg 2017), the degrowth critique has yet to incorporate the role money/credit creation plays more explicitly. Ecological economics has still to develop a monetary theory of its own as well (Ament 2019). To become a viable alternative, the second leg of our ecology of care aims at outlining the relationship between growth and monetary creation and lay the foundation of what we call degrowth money. We argue that money’s ‘nature’ itself also has to be changed and expanded in order to avoid the growth imperative from destroying the diversity of the world’s ecosystems.

Silvio Gesell<sup>10</sup> is considered to be the first person in the modern era to think about the idea of demurrage, or letting money “rot like potatoes, rust like iron and evaporate like ether” (Gesell 2007; Dodd 2014, 348). We suggest that the concept of demurrage, or degrowth money can help us solve our current economic, social and ecological crisis for the following four reasons:

1. **Time Horizon:** The way the money system works today affects our time horizon, as the short term is valued over the long term. Any investment which provides profit faster is given

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<sup>10</sup> John Maynard Keynes referred to Gesell as a “strange, unduly neglected prophet” and that “the future will learn more from the spirit of Gesell than from that of Marx”. Of demurrage Keynes thought that the “idea behind stamped money is sound. It is, indeed, possible that means might be found to apply it in practice on a modest scale.” See Keynes (2008: 298-300).

priority over long term production and planning. Because money today is made scarce through the production of credit, people have to compete over the interest in labor markets, making humanity's time on earth an endless cycle of debt (Guyer 2007; Eisenstein 2011; Lietaer and Dunne 2012) In contrast, demurrage or degrowth money incentivizes long term decision making via discounted cash flows (Macleod 2009). Demurrage is a way of going slow, valuing the long term present value of things over the short term. Using the words of an economist, we have a situation where money has a negative interest rate embedded in its design.

2. **Liquidity Trap:** Modern central banks are theoretically responsible for setting interest rates and managing the supply of money. These are the initial conditions which private banks use to issue credit to people. But as it is widely known, capitalism is prone to boom and bust cycles. A liquidity trap is a term economists use to describe the situation when money in an economy stops circulating regardless of the actions of central banks to increase the supply of money and affect interest rates. As trust in the economy disappears and a financial crisis starts, people start to hoard any money they can get their hands on. Degrowth money solves the liquidity trap by putting a limit on the amount of time money can carry value. As complementary currency expert Bernard Lietaer put it, it is like charging 'a parking fee on money' (Lietaer and Dunne 2012). Because people do not want their money to decay, they start to circulate it, as the many historical experiences during the Great Depression demonstrate<sup>11</sup>.
3. **Integrating Entropy:** We know from thermodynamics that energy can neither be created nor destroyed, just transformed. Degrowth money integrates the second law of thermodynamics into monetary theory by designing a money that is meant for circulation

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<sup>11</sup> Yale economist Irving Fisher is perhaps the most famous exponent of Gesell's ideas of rotting money during the time of the Great Depression. He wrote extensively about the positive 'miracle' experiences of demurrage currencies used in the German speaking countries and in the US during the 1920s and 30s. He even took the idea to congress but it failed to pass legislation. At the time, these monies were referred to as "emergency currencies" and were seen as an alternative to the New Deal. In the end, President Roosevelt opted for the New Deal and it became official government policy, favoring centralized government spending ala Keynes over decentralized decision making via local currencies. Situating these historical lessons in the context of today, it is worthwhile to question the limits of proposals invoking the past such as the "Green" New Deal and see where their predecessors led today's economy after the war. Can we afford to repeat the Liberal/Keynesian pendulum once more or is there a third way yet to be explored? See Fisher (1933) for a detailed description of the stamp scrip movement of the 30s.

rather than accumulation (Macleod 2009). Money today expands through bank credit creation. Debt produces a vacuum for the extraction of value which centralizes wealth in the hands of a few people at the expense of the planet's resources and most of humanity's labor power. The accumulation of wealth made by our current systems of production implies the production of a lot of waste, or energy that irreversibly increases the total level of entropy of the planet. Increasing entropy levels lead to an overshooting of our planetary boundaries and the useful energy needed to reproduce life. Put more simply, *wealth is waste* (Dodd 2014: 163-210). By making the value of money have a life-span<sup>12</sup>, a degrowth money system has the potential to change the way energy is distributed and reintroduced within the system (and hence reduce its waste). This not only makes perceived wealth increase due to the higher velocity of money in circulation but also makes the deterioration of the quality of energy (entropy) slow down.

- 4. Ending the Material Growth Imperative:** The way money is designed today favors money lenders and money holders. A positive interest on money creation necessarily leads to economic growth. A degrowth money would stop the imperative to increase our material output as the effective interest rate on a yearly basis is zero or negative in comparison to previous years, instead allowing for qualitative growth in individuals and communities alike (Macleod 2009). This allows for complementary monies to be used for investment in local infrastructure, basic services, health and education. Degrowth money is fundamentally a different type of money which has the potential to make our human ecosystem more resilient as a whole through the introduction of monetary diversity, separating money's functions in multiple money forms (Polanyi 1977; Lietaer and Dunne 2013).

As the social ecologists remind us, the very notion that men can dominate nature is rooted in the real domination of men over other men and over women (Bookchin 1982). While the planet's biosphere might recover without us as a species, we will not recover without it. The extraction of nature's resources for the sake of short term profit and people's capacity to reproduce and produce their life is organized by how money works. The ecology of money today is thus one of a monoculture, where we use the same type of money to arrange everything in our lives, from

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<sup>12</sup> Demurrage is different from inflation in that in demurrage the amount of currency one holds decreases over time while its purchasing power remains the same. In contrast, with inflation, the amount of currency held today stays the same but it loses its purchasing power over time.

education to housing to the marketplace. While it might be efficient, money without a break or escape valve is dangerous as it makes the system in which we live in very fragile (Lietaer 2002).

Just like red blood cells which are created in the bone marrow with the purpose of supplying the entire body with nutrients which then die and are discharged with time, so should money also help to nurture people's social reproduction and decay when not in use. Instead of private banks creating most of the money supply as a interest-bearing monoculture which extracts the yield of living ecosystems, we should think of money holistically in its full diversity, embedding the principles of permaculture into its very design and the institutions that maintain it (Scott 2014)<sup>13</sup>.

The ecology of care thus aims at giving people money unconditionally, with the goal that income is divorced from work and people do not have to rely solely on a wage in order to get what they need to reproduce their daily life. This Basic Income is distributed as a share of the yield of the wealth held in common. The issuance level necessary for people to have self-reliance should be equivalent to the price of the material conditions needed to meet people's basic needs: housing, food, education, health, etc.

Making money alive through demurrage means that money will also gradually die when not in use. Adding demurrage as the second step of the three legged table allows us to limit the extent to which accumulation can take place in the system and instead foster circulation and exchange within the values of the commons. Like this, both the issuance and the decay of money take place constantly and adapt to the seasonal needs of people who govern it, following the principles of the commons outlined by Östrom and others (Östrom 1990).

A currency that decays requires us to rethink the whole structure of the interdependent social relations which keep the economic, biophysical, and social systems together. The ideas of the degrowth literature discussed so far share an expansive notion of care, in the sense that the provision of social care cannot be detached from the care of nature and its regenerative limits. Degrowth requires the care of our environment in harmony with the care of people; to go beyond 'the illusion of an independent human existence' (Praetorius 2015:50), both independent of other people and of the worlds we form part of. This intertwined human condition

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<sup>13</sup> For example, the three ethics of permaculture are people care, earth care and fair share. See more at <https://permacultureprinciples.com/principles/>

becomes clear when we try to figure out how to take care of people at a practical level: we understand that no care is possible in a destroyed, biodiversity poor and polluted environment. People are, after all, part of their ecosystems. We suggest a degrowth money to move towards this utopia.

## VI. The third leg: Pluriversal Basic Income

*'In our dreams we have seen another world, an honest world, a world decidedly more fair than the one in which we now live. We saw that in this world there was no need for armies; peace, justice and liberty were so common that no one talked about them as far-off concepts, but as things such as bread, birds, air, water, like book and voice.'*

— Subcomandante Marcos

The third and last element of our ecology of care is the political leg. The version of a common dividend that we have called a Pluriversal Basic Income (PBI). This formulation of a Basic Income is epistemologically different from nation-state proposals, as it aims to go beyond and within its boundaries to weave a pluriverse (Kothari et al. 2019). The pluriverse serves as a practical and conceptual tool to overcome the homogenization of reality made by the violent social relations of capitalist modernity, that has brought about the destruction of our ability to understand the world (Öcalan 2015).

The formulation of the pluriverse goes against the modernizing logic of the nation-state, in that it does not create a separation between the subject and the object but instead looks at reality as one interconnected whole, where the past and the future are contained in the present (Rivera Cusicanqui 2019). This 'indigenization' of the world is also a recognition that all languages are in fact indigenous languages from the communities in which they emerge from. But as Rivera Cusicanqui stresses, colonialism has a very specific usage for words: they encover instead of designating what things are. History is filled with countless examples of double-think, where the meaning of words is twisted in order to control and dominate others.

Similarly, if we are to think of money as a semantic system akin to language, a promise which carries values and meanings about the world, a memory bank, it becomes clear that its fiction as a commodity is what reproduces the colonization of the planet (Hart 2001; Polanyi 1977;

Zelizer 1997). To decolonize money we need an episteme that recognizes that people are all part of nature before they are anything else, interconnected to the whole<sup>14</sup>. This decolonization practice aims at understanding the roots of our individual and collective trauma. It is an exercise at healing the internal colonialism of our experiences and their relationship to money and the bureaucratic institutions that underpin it (Rivera Cusicanqui 2015: 175).

As some note, the emancipatory value of a Basic Income is higher than its monetary value (Standing 2017). The gradual production of this new money thus aims at challenging the long standing guilt over our debts, work and wealth, through its equal, abundant and unconditional redistribution. It is therefore an attempt at reformulating the relationships we have with each other and with the world. It is different in the sense that it is constituted democratically as a political plural entity with the potentiality to encompass all human beings in a planetary federation<sup>15</sup>. This pluriversal dividend is a share of the wealth of the collective and it only becomes basic once it can pay for people's basic livelihood needs such as food and housing, which in turn is inherently embedded with the reproduction of the commons, understood in their holistic sense.

Underpinning this planetary politics is a weaving of epistemes is the theoretical formulation that money itself is a chaotic system, a complex social system whose institutions reproduce the boundaries of our political imaginations through the distribution and circulation of wealth. We propose that the social form any given society takes is marked by its monetary institutions. These institutions are responsible for allocating the means of production (land, labor, capital) and ultimately determine what value is through the circulation of currency, whatever its form. The monetary institutions of the day are a remnant of enlightenment rationality and do not reflect current understandings in the field of complexity science or even quantum physics. In so far as money is a credit that can be individually issued as a promise to pay another person,

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<sup>14</sup> Social ecologists speak of first nature as non-human nature and second nature as an emergent property of life in the form of human consciousness and society. At a systemic level, money today is one of the links that ties first nature to second nature together in a hierarchical relation which must be severed and made anew. See Bookchin (1982).

<sup>15</sup> We base this on the already-existing organizational practices and systems of communal indigenous government in Latin America, confederated systems based on direct-democracy in the Middle East and elsewhere. See, for example, Xochitl, L. et al. (2008); Rivera Cusicanqui (2015: 17); Sousa Santos et al. (2018: 127); Kothari et al. (2019: 151).

money can be conceived as an emergent property of human relations, regulated through strange attractors such as debt, which tie people together and to their ecosystem.

The banking structures of today have the monopoly over society's trust to issue credit. This privilege produces a centralized and fragile monetary structure which creates a scarcity of money and a vacuum for the extraction of value. The decentralization of the production of money as a mutual commons, organized democratically by all who use it, would potentially create more resilient and ecological circuits that go beyond the binarism of nation-states and their globalized financial institutions. A relocation of the source of money means the transformation of how value is produced, defined and distributed.

Currently, the nation-state is the sovereign of money, the ultimate backup of promises based on fear and violence. If we want to reclaim the control of money, we need to change how it is produced; through the reformulation of the principle of sovereignty in human organization. Whether the decentralization of sovereign, its transformation as a pluriversal, planetary commons or its abolition; the imagination required to change the sovereignty of nation-states today is deeply tied together through money and the violence it upholds. Money as a promise means that the *fiction* of the nation must continue to exist in the near future. Otherwise, the money would not be worth anything. In a way, it is the very threat of violence that which gives future value to nation-state money.

Embedding money into the pluriverse means to start creating institutions which embody the diversity of the world without commodifying it. A monetary pluriverse forms the basis for a democratic confederation of political imaginations. It is a union of what we are and the identities that capture our individual and collective stories. All respecting each region with its own democratic control, where power is seen and embodied by all, distributed equally.

A planetary income is the recognition of our interdependency to the whole and to each other. It aims at emerging from capitalist modernity through the reshaping of the tokens of value that fetishize the definitions of our wealth and their corresponding institutions. The pluriverse sets the stage for a fundamental break from the patriarchal systems of sovereignty, which include by excluding *the other* into its formulation of the self and its cosmic-polities (Sahlins 2017). Instead,

the pluriverse tries to weave the different epistemologies in order to understand the impermanence of reality in its different emergent levels and let the polity emerge from there (Kothari et al. 2019).

Only in this way can we ease the crashing of the wave. In this way we can ease the death of the world as we know it and lay at rest the ashes of the old. As the Zapatistas and other groups often remind us, the world has ended many times before. We must accept that. Once we do we will realise that the phoenix of rebirth is ever more near.

## **VII. Conclusion: The Commonification of Care and the Decolonization of Money**

So far we have presented the possibilities of a degrowth money system that is alive, created as a commons in the form of a Pluriversal Basic Income, as a means for building a caring society. Now we want to go back to what care *is* and how we can give each other the best possible care.

If care is understood as a commons (Akbulut 2017), no one should be denied basic care. This care takes a relational shape in a double sense: primarily between someone caring and someone being cared for, but also inside a community of care practitioners. What constitutes proper care hardly relies on a single individual's judgement, but is rather carefully and constantly debated and negotiated. Giving more space and power to those spaces of deliberation — as well as making them more democratic — improves the care that is given.

This point is fundamental to avoid a usual critique of the political use of care as a principle: that care is only a cover of relations of domination. Many forms of care can be controlling, repressive or authoritarian. Anthropological scholarship is full of examples in which hierarchies are introduced and those in higher positions claim to take care of those dependent on them (Haynes & Hickel, 2018).

We acknowledge that there is a tension between care and dependency or control. But still, people in their everyday lives use criteria to say that some relations are not built on care, but in forms of control and oppression that are ultimately damaging those being dominated. For instance, we can probably agree in saying that a prison is not a caring institution — even though those within are fed and given shelter. They are still deprived of freedom, and that takes away

all the emancipatory aspect of receiving care. One's agency is taken away. This is why we propose the working definition of care not as the satisfaction of need under some objective physical standard, but as *whatever action is taken to increase someone else's freedom* (Graber 2018).

This is why, for instance, we should be suspicious of forms of care — or at least, labelled as care — that work under a logic of 'human capital' or 'social investment' (as in some Conditional Cash Transfer programs in Latin America). Such policies rely on a logic of stigma, including people as productive citizens as a substitute for social justice. These concepts put people not as an end in themselves, but at the service of production (Carrasco 2001). They work as a temporary support to 'lift' people from poverty by introducing them in the formal employment market. Rejecting this conditionality as a prerequisite for receiving care goes with the idea of 'a life worth being lived' under which sustaining life is not put at the service of the market economy (Perez Prieto and Dominguez-Serrano 2005).

In institutions and communities where there is space for debating how care is being actively produced, this horizon is better actualized. This is why professions that are mainly care work — teachers and health workers for example — give so much importance to sharing practical experiences and being able to consult how to deal with a difficult situation. The same can be said about child-rearing.

Care given during our early years can work as an exemplar case for our point. The more people are involved in it — and let's remember that most societies until very recently practised alloparenting<sup>16</sup> beyond the nuclear family — there are more chances to balance potential mistreatments or controlling behaviours. When everyone has a say in what you do with your child it is harder to fall into abusive forms of care. Controlling or 'corrupted' forms of care usually imply the limitation of decision-making to one actor or one body of actors that keep the influence of other people away. Bureaucracy does this work particularly good: it is designed to keep any other perspective of how things should get done as irrelevant (Graeber 2015).

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<sup>16</sup> Alloparenting is a form of shared childrearing that implies the involvement —in addition to the mother, as it is common in other animals— of other relatives like fathers and grandmothers, but also other more distant relatives and non relatives as well, in the care given to dependant children (Hrdy 2009).

We suggest that the **democratization of care is the improvement of care**. Not just as the distribution of care ‘burden’ but also as an issue in which all the community has a say and there are legitimate spaces for debating and changing care practices. The capacity to adapt and accept something could be done better is crucial to keep care on track and stop oppression from emerging. These democratic care institutions are also the spaces where people’s Basic Income is administered.

In sum, a Pluriversal Basic Income (PBI) would enhance care in two ways: democratising the possibilities of giving and receiving care, and giving more space to the political debate on how to better care for one another.

### Towards a decolonised money and society

The current form of money has been a fundamental tool of colonial projects. Moving to an ecology of care would allow us to decolonise money. This decolonization would mean a change of what value is, where it comes from and where it stays. It is a means of changing the political categories of the day to ones that embody the will of the masses through the parallel and gradual redistribution of wealth. The decolonization of money is therefore the political struggle over the definition of what value means as a common human project. This political deliberation necessarily implies a direct-democratic break from the representative bureaucracies of capitalist modernity.

Our proposal of a new monetary system and degrowth offers a way to think of integrating multiple challenges. For PBI to succeed in the ultimate goal of making people freer, it must rethink both the nature of money and the destructive logic of growth that is deeply inscribed in our global economic system. If Basic Income is about taking care of people, then it must be created and managed bottom-up, to avoid the extraction of value from the financial institutions that rely on money for accumulation and do not care for the ‘real economy’. Having different currencies for different things could help with this: Basic Income money just cannot be used for accumulation and speculation.

This transformation of money would also allow to question and rebuild our political institutions. The sovereignty of millions is bought and sold every day by the institutions that control the flow of money. Without properly addressing the question of the production of money, any revolutionary project which aims at changing the system is doomed to failure. Without dis-embedding money from capital and the state, the enclosure of the commons will continue until full collapse. An acknowledgement of our systemic crisis requires a *reconstitution* of value, money and wealth, and not just their redistribution.

Our proposal is not about the commodification of care, but the *commonification* (or commonalisation, following De Angelis) of care. The money produced for the goal of taking care of people will be a different money. There is no better time than the present to bring down the walls of our political imagination and make this ecology of care possible.

## Bibliography

- Aristotle. (1954). *The Nicomachean ethics of Aristotle* (The World's classics ;546). London: Oxford University Press.
- Bear, L., Ho, K., Tsing, A., and Yanagisako, S. (2015). "Gens: A Feminist Manifesto for the Study of Capitalism." *Fieldsights—Theorizing the Contemporary, Cultural Anthropology*, 30 March.  
<http://www.culanth.org/eldsights/652-gens-a-feminist-manifesto-for-the-study-of-capitalism> (accessed July 10 2019).
- Benjamin, Walter. (1996). "Capitalism as Religion." *Selected Writings*, Vol. 1. 288–91. Ed. C. Gödde and H. Lonitz. Frankfurt am Main: Suhrkamp
- Bookchin, M. (1982). *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy Rev.*, Palo Alto, Calif.: Cheshire Books.
- Dalla Costa, M., Selma, J. (1975). *The Power of Women and the Subversion of the Community*, Bristol, Falling Wall Press.
- De Angelis, M. (2007). *The Beginning of History: Value Struggles and Global Capital*, London, Pluto Press.
- De Angelis, M. (2017). *Omnia Sunt Communia: On The Commons and the Transformation to Postcapitalism*, London, Zed Books
- Dodd, N. (2014). *The Social Life of Money*, New Jersey, Princeton University Press.
- Eisenstein, C. (2011). *Sacred Economics: Money, Gift and Society in the Age of Transition*, North Atlantic Books.
- Federici, S. (2011). *Feminism and the Politics of The Commons*, [www.commoner.org.uk/?p=113](http://www.commoner.org.uk/?p=113)
- Federici, S. (2014). *Caliban and the witch: women, the body and primitive accumulation* . Brooklyn, NY: Autonomedia.
- Fisher, I. (1933). *Stamp Scrip*, New York; Adelphi Company Publishers.
- Gesell, S. (2007). *The Natural Economic Order*, Frankston, TX. TGF Publishers.
- Graeber, D. (2001). *Toward an Anthropological Theory of Value: The False Coin of our Dreams*, Basingstoke, U.K.: Palgrave Macmillan.
- Graeber, D. (2011). *Debt: The First 5000 years*, Brooklyn, NY/London, Melville House Publishing.
- Graeber, David. (2013). "It is value that brings universes into being." *Hau*, 3(2), 219-244.

- Graeber, D. (2015). *The Utopia of Rules. On technology, stupidity, and the secret joys of bureaucracy*. Brooklyn and London: Melville House.
- Greco, T. (2009). *The End of Money and the Future of Civilization*. Vermont. Chelsea Green Publishing.
- Haiven, M. (2011). Finance as Capital's Imagination? Reimagining Value and Culture in an Age of Fictitious Capital and Crisis. *Social Text* 108, Vol. 29, No. 3, Duke University Press.
- Hardt, M and Negri, A. (2009) *Commonwealth*, Cambridge, Mass., Harvard University Press.
- Hart, K. (1986). Heads or Tails? Two sides of the Coin, *Man, New Series*, Vol. 21, No. 4, pp. 637-656.
- Hart, K. (2001). *Money in an Unequal World: Keith Hart and his Memory Bank*. London, Texere.
- Hart, K., Laville, J. et al., (2010). *The Human Economy*, Cambridge, U.K., Polity Press.
- Haynes, N., & Hickel, J. (Eds.). (2018). *Hierarchy and value: Comparative perspectives on moral order*. New York: Berghahn Books.
- Held, V. (2006). *The Ethics of Care: Personal, Political, Global*, Oxford University Press.
- Hickel, J. (2019). Degrowth: A theory of radical abundance. *Real-World Economics Review*, (87), 54–68.
- Hickel, J., & Kallis, G. (2019). Is Green Growth Possible? *New Political Economy*, 1–18. <https://doi.org/10.1080/13563467.2019.1598964>
- Hrdy, S. (2009). Meet the Alloparents. Retrieved 1 April 2019, from Natural History Magazine website: <http://naturalhistorymag.com/features/15270/meet-the-alloparents?page=3>
- Hudson, M. (2004). "The Archeology of Money: Debt versus Barter Theories of Money's Origins." *Credit and State Theories of Money: The Contributions of A. Mitchell Innes*, L.R. Wray, Ed. Cheltenham, U.K., Edward Elgar Publishing: 99-127.
- Ingham, G. (2004). *The Nature of Money*, Cambridge, U.K., Polity Press.
- Jackson, A., Dyson, B. (2013). *Modernising Money: Why our monetary system is broken and how it can be fixed*. Positive Money.
- Jackson, T. (2017). *Prosperity without growth: Foundations for the economy of tomorrow* (Second Edition). London ; New York: Routledge, Taylor & Francis Group.
- Kallis, G., Kostakis, V., Lange, S., Muraca, B., Paulson, S., & Schmelzer, M. (2018). Research On Degrowth. *Annual Review of Environment and Resources*, 43(1), 291–316. <https://doi.org/10.1146/annurev-environ-102017-025941>

- Keynes, J. (2008). *The General Theory of Employment, Interest, and Money*, New York, Classic House Books.
- Knapp, G.F. (1924). *The State Theory of Money*, London, Macmillan.
- Kothari, A.; Salleh, A.; Escobar, A.; Demaria, F; Acosta, A. (Eds.). (2019). *Pluriverse: A Post-Development Dictionary*, New Delhi, India, Tulika Books.
- Lietaer, B. (2002). *The Future of Money: Creating New Wealth, Work and a Wiser World*, Boulder, CO, Qiterra Press.
- Lietaer, B. & Dunne, J. (2013). *Rethinking Money: How New Currencies Turn Scarcity Into Prosperity*, San Francisco, California, Brett Koehler Publishers.
- Linebaugh, P. (2008). *The Magna Carta Manifesto*, University of California Press.
- Macleod, J. (2009). *New Currency: How Money Changes the World as We Know It*. Integral Publishers.
- Marx, K. (1982). *Capital Vol. III*, Harmondsworth, U.K., Penguin.
- McLeay, M., Radia, A., & Thomas, R. (2014). Money creation in the modern economy, Bank of England. *Quarterly Bulletin*, 54(1), 14-27
- Meadows, D. et al (1972). *The Limits to Growth; A Report for the Club of Rome's Project on the Predicament of Mankind*. New York: Universe Books.
- Mier y Terán Giménez Cacho, M., Giraldo, O. F., Aldasoro, M., Morales, H., Ferguson, B. G., Mateo Mier y Terán Giménez Cacho, Omar Felipe Giraldo, Miriam Aldasoro, Helda Morales, Bruce G. Ferguson, Peter Rosset, Ashlesha Khadse & Carmen Campos (2018) Bringing agroecology to scale: key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*, 42:6, 637-665, DOI: [10.1080/21683565.2018.1443313](https://doi.org/10.1080/21683565.2018.1443313)
- Mies, M. (1998). *Patriarchy and accumulation on a world scale: women in the international division of labour*, London, Zed Books.
- Mitchell-Innes, A.M. (1914). "The Credit Theory of Money" *Credit and State Theories of Money: The Contributions of A. Mitchell-Innes*, L.R. Wray, Ed. Cheltenham, U.K., Edward Edgar Publishing: 50-78.
- Öcalan, A., (2015). *Civilization: The Age of Masked Gods and Disguised Kings – Manifesto for a Democratic Civilization: Volume 1*. International Initiative Edition, Norway: New Compass Press.
- Östrom, E. (1990). *Governing the Commons: The Evolutions of Institutions for Collective Action*, Cambridge University Press.

- Pettifor, A. (2017). *The Production of Money: How to Break the Power of Bankers*. London, Verso Books.
- Piketty, T. (2013). *Capital in the Twenty First Century*. United States, Harvard University Press.
- Polanyi, K. (1944). *The Great Transformation*, Boston, Beacon Press.
- Polanyi, K. (1977). *The Livelihood of Man*, New York, Academic Press Inc.
- Praetorius, I. (2015). *The Care Centered Economy: Rediscovering what has been Taken for Granted*, Heinrich Böll Foundation, Publication Series Economy + Social Issues, Volume 16.
- Raworth, K. (2017). *Doughnut economics: Seven ways to think like a 21st century economist*. White River Junction, Vermont: Chelsea Green Publishing.
- Rivera Cusicanqui, S. (2015). *Sociología de la Imagen: Miradas Ch'ixi desde la Historia Andina*, Ciudad Autónoma de Buenos Aires, Tinta Limón
- Rivera Cusicanqui, S. (2019). *Ch'ixinakax utxiwa: A reflection on the practices and discourses of decolonization*, *Language, Culture and Society* 1:1, pp. 106–119, John Benjamins Publishing Company.
- Sahlins, M. (2017). *The Original Political Society*. *Hau Journal of Ethnographic Theory* 7 (2): 91-128.
- Simmel, G. (2004). *The Philosophy of Money: Third Enlarged Edition*, London, Routledge.
- Slater, M., Jenkin, T. (2016). *Credit Commons: A Model for the Solidarity Economy*. Retrieved from [www.creditcommons.net](http://www.creditcommons.net)
- Sousa Santos, B. et al (2018). *Epistemologías del Sur - Epistemologias do Sul*, Ciudad Autónoma de Buenos Aires: CLACSO; Coímbra: Centro de Estudos Sociais -CESStanding,
- G. (2017). *Basic income: And how we can make it happen*, London, Pelican.
- Varela, F.J. (1981). *Autonomy and Autopoiesis*, In G Roth and H. Schwegler (eds).
- Weber, M. (2001). *The Protestant Work Ethic and the Spirit of Capitalism*, London, Routledge.
- Werner, R. (2016). *A lost century in Economics: Three theories of banking and the conclusive evidence*. *International Review of Financial Analysis*, 46, 361–379.
- Werner, R., Lee, K. (2018). *Reconsidering Monetary Policy: An Empirical Examination of the Relationship Between Interest Rates and Nominal GDP Growth in the U.S., U.K., Germany and Japan*. *Ecological Economics*, 146, 26-34.
- Xochitl, L., Burguete, A., Speed, S. (Eds.) (2008). *Gobernar (en) la diversidad: experiencias indígenas desde América Latina: Hacia la investigación de co-labor*. México, CIESAS, Flacso Ecuador y Flacso Guatemala.

Yanagisako, S. (2012). "Immaterial and Industrial Labor: On False Binaries in Hardt and Negri's Trilogy." *Focaal* 64:16–23.

Zelizer, V.A. (1997). *The Social Meaning of Money: Pin money, Paychecks, Poor Relief, and Other Currencies*, Princeton, NJ, Princeton University Press.