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To cite this article: Julien-François Gerber (2020) Degrowth and critical agrarian studies, The Journal of Peasant Studies, 47:2, 235-264, DOI: [10.1080/03066150.2019.1695601](https://doi.org/10.1080/03066150.2019.1695601)

To link to this article: <https://doi.org/10.1080/03066150.2019.1695601>



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Published online: 21 Jan 2020.



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Degrowth and critical agrarian studies

Julien-François Gerber

International Institute of Social Studies, Erasmus University Rotterdam, The Hague, Netherlands

ABSTRACT

Degrowth refers to a radical politico-economic reorganisation that leads to smaller and more equitable social metabolisms. Degrowth posits that such a transition is indispensable but also desirable. However, the conditions of its realisation require more research. This article argues that critical agrarian studies (CAS) and degrowth can enrich each other. The Agrarian Question and the Growth Question should be addressed in concert. While degrowth should not fall into the ‘agrarian myth’, CAS should not embrace the ‘myth of growth’, even when green and socialist. Ideas of one philosopher and four agrarian economists are presented, with illustrations from Bhutan, Cuba and North America, hoping to offer a preliminary research agenda for ‘agrarian degrowth’.

KEYWORDS

Sustainability; anarchism; Marxism; agrarian and environmental justice; Bhutan; Cuba

1. Introduction

Compounding growth, environmental degradation, and widespread alienation are the three most dangerous contradictions for our time.

– David Harvey (2015, 57–8)

If the spectre of communism was haunting Europe in the mid-nineteenth century, even though ‘all the powers of old Europe [had] entered into a holy alliance to exorcise this spectre’ (Marx and Engels 2011 [1848], 61), it is perhaps the spectre of degrowth that is today haunting the industrialised world, while all the imperial powers tend to deny the urgency of the situation (Akbulut et al. 2019). For the economic élites, the lack of growth is a most frightening idea, but for other people, degrowth may represent a way out, a ‘concrete utopia’ (Latouche 2009; Muraca 2017) from which alternatives can be rethought.

The current state of our Biosphere does not indeed look good, and the measures taken are grossly insufficient. We are reaching the peak of raw materials that are foundational to our economies, such as oil and phosphorous, while myriads of ecosystems have been damaged beyond repair and are no longer able to absorb our emissions and waste, as evident in the phenomenon of climate change (Steffen et al. 2011). On the socioeconomic front, things look hardly better. Disconnected from ecological reality, capitalism continues to deploy its inbuilt tendency to grow and seek new accumulation opportunities, both virtually (financialization) and materially (extraction and production). Debts and derivatives have reached unparalleled levels worldwide, increasing the risk of economic meltdown

CONTACT Julien-François Gerber  gerber@iss.nl

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(Durand 2017). Relative poverty is on the rise everywhere (WIR 2018), while global GDP shows no sign of absolutely decoupling from ecological impacts (Hickel and Kallis 2019). Not unsurprisingly, then, more and more people and movements are starting to question the world's trajectory of maldevelopment (to borrow Samir Amin's word), not only from an environmental and economic perspective, but also politically and existentially. Among these different mobilizations, degrowth is steadily emerging as a central counter-narrative.

This article argues that critical agrarian studies (CAS) and degrowth can bring essential elements to each other, and that the bridges have so far remained too rare (but see Roman-Alcalá 2017; Gomiero 2018; Scheidel, Ertör, and Demaria *forthcoming*). The word 'degrowth' only appeared four times in *JPS*, and always in passing (except in Martínez-Alier et al. 2016, where it occupies a small paragraph). In reverse, a recent overview of the field of degrowth (D'Alisa, Demaria, and Kallis 2014) does not explicitly mention any distinct CAS sources and remains sketchy on agricultural issues. This lack of communication is surprising because the Agrarian Question, after all, is about the deployment of capitalist *growth* in the countryside and about how to transition to egalitarian alternatives. Additionally, the political economy of land and food is a central concern for degrowth scholars, and so have been other traditional strongholds of CAS, like agroecology and productive 'sovereignities' as in food sovereignty. But beyond their mutual overlaps, the two fields can also usefully address each other's blind spots. Degrowthers should be wary not to fall into various versions of the 'agrarian myth' and base their alternative models on naïve ideas about 'peasant economies'.¹ Similarly, CAS scholars should be careful not to endorse the pervasive 'myth of growth' – even when green and socialist – according to which the constant development of the productive forces ultimately leads to more welfare and can decouple from ecological impacts with appropriate technologies.

Building on these elements, the present article seeks to bring the fields of degrowth and CAS closer, or to bridge the Agrarian Question with the Growth Question. I define the latter with the following basic interrogations: what are the effects of growth 'on the ground'? Who benefits from it and until what point? What are the alternatives and who will support them? To me, the Growth Question needs to be incorporated at the core of the Agrarian Questions (see also Gerber and Veuthey 2010).

I will start with a short exposition of some of the key problems with growth and with a brief presentation of what degrowth is and is not. After that, the core of the article will explore fundamental connections between CAS and degrowth through the contribution of one philosopher and four agrarian political economists. I contend that the approach of these five authors, taken together, provide an already fairly coherent glimpse at what research and activism in 'agrarian degrowth' might look like. The key ideas are Simone Weil's notion of rootedness within limits, Alexander Chayanov's multiple balances of reproduction, Joseph Kumarappa's democratic decentralisation, Nicholas Georgescu-Roegen's social metabolism, and Joan Martínez-Alier's alliance between environmental justice and degrowth. These ideas will, as much as possible, be illustrated with empirical examples, and especially with vignettes from Bhutan, North America and Cuba. I am not normatively endorsing every aspect of each of these authors' work or of each case study; my goal is

¹Today's version of the 'agrarian myth' refers to an unspecified 'older time' when undifferentiated peasant communities generated eco-friendly knowledges, values and practices, while the subsequent fall from grace came with urbanization, globalisation and the rise of the modern state and its doctrines of development and modernisation (Brass 2000).

simply to show that they all raise crucial questions for 'agrarian degrowth'. I then suggest some lines for future research and end with a few remarks.

2. Where are we and what next?

The crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appears.

– Antonio Gramsci (quoted in Weis 2010, 332)

2.1. What is wrong with economic growth?

The ideology of growth – or growthism – is at the core of capitalism. Growthism sustains capitalism politically because it allows avoiding redistribution by giving the impression that everyone will continually benefit from it. Growthism pacifies class struggle while justifying existing structures of inequality (Schmelzer 2016). This ideological function of growth can be observed in mainstream economic theory too, as for example in the Kuznets curve narrative (Palma 2011). The latter acknowledges that problems of inequality and ecological destruction may increase during the initial stages of developments, but it posits their resolution in the near future thanks to accrued economic growth. In the West, growth was instrumental to diffuse demands of the workers' movement, in the East, to excuse the lack of democracy and worker control (Dale 2012), and in the South, to justify dispossession and extractivism (Gerber and Raina 2018b). Today, GDP growth remains the key stabilising mechanism of capitalist economies.

Apologists of growth regularly claim that it will be able to 'dematerialize', and hence become 'green', with the advancement of cleaner or more efficient technologies and with renewable energies (see e.g. UNEP 2011). However, to date, no country has experienced an absolute reduction in material use while growing (taking trade into account) and no trends indicate that this will occur anytime soon (Hickel and Kallis 2019). As a result, it is highly improbable to envisage effective climate mitigation scenarios that involve growth (Jackson 2016). Some scenarios estimate that it is possible, but their models typically assume some kind of 'magical' technical fix after 2050 (Kallis et al. 2018).

Furthermore, the relationship between growth and well-being are complex and open to debate. In industrialised countries, the increase in self-reported well-being typically stagnated somewhere between 1950 and 1970, or even turned into a negative trend, despite a steady growth in GDP since then (Layard 2005). Good levels of well-being are achieved by countries such as Cuba and Vietnam – two countries led by communist parties – at a fraction of the output, energy and resource use of countries like the USA. However, even these lower levels of resource use could not be extended to the entire world over the long-term. *No country currently satisfies social well-being standards while staying within its share of planetary boundaries* (O'Neill et al. 2018). But nothing indicates that this is an impossible goal, even in the developing world. Some radical changes are thus clearly needed.

2.2. What is degrowth?

Degrowth is a field of scientific research and activism that starts with the recognition that the flows of material and energy used in the global economy are unequally distributed and often massively oversized, especially in industrialised countries. A radical reorganisation

and resizing of our economies is thus needed if equity and sustainability are to be taken seriously. The fundamental degrowth proposition is that it is possible to live well in egalitarian societies with much smaller resource throughputs (Latouche 2009; Pallante 2011; Kallis 2018; Schmelzer and Vetter 2019).

The ideas behind degrowth are old and have roots in many parts of the world.² But as a slogan in social movements, the word itself was first used in France ('décroissance') in the early 2000s and it then rapidly spread elsewhere. It became a focus of scientific research at the end of the same decade. The term was originally not a concept but a 'missile word' that would trigger discussions on limits, hit at the core of capitalist modernity, and re-politicise the false technocratic and pro-market consensus around 'sustainable development' and 'green growth'.³ There are four immediate sources to the modern notion of degrowth (Demaria et al. 2013): first, the radical western environmental movement of the 1960s and 70s, with two famous women in particular, Rachel Carson who wrote *Silent Spring* in 1962 and Donella Meadows who coordinated *The Limits to Growth* report in 1972; second, the political, cultural and existential critique of capitalist modernity, as in the works of Erich Fromm and Cornelius Castoriadis; third, the heterodox current of ecological economics, and particularly the work of Nicholas Georgescu-Roegen as we will see below; and fourth, the critique of 'development' seen not as a liberation process but as the continuation of western capitalist hegemony, with the works of Arturo Escobar or Ivan Illich.

Degrowth thus goes much beyond the ecological critique of GDP growth and includes a broader reflection on what constitutes an existentially meaningful mode of co-existing. Its answer has to do with concepts like sharing, commoning, caring, healing, horizontality, conviviality and simplicity – notions that can all have subversive implications when taken seriously. Defined in this way, the ideas behind degrowth go also beyond the European origin of the label and beyond the four modern sources I just mentioned. It is obviously in industrialised countries that metabolic flows and imperialism need to be tackled the most urgently, but growthism and the resulting maldevelopment have also taken solid roots in the global South. There is therefore scope for creative and radical measures beyond growthism in the global South as well (see e.g. Gerber and Raina 2018b; Kothari et al. 2019).

Contemporary systems of production/consumption have been the object of perhaps four major critiques from the radical Left. In a nutshell, the latter has problematised *capitalism* as in Marxism, *capitalism and any state* as in anarchism, *developmentalism* as in post-development theory, and, most recently, *growthism* as in degrowth. Of course, one does not have to stick to one critique since they may all complement each other well. But from this perspective, the degrowth critique is arguably broader than the classical Marxist one because it includes the critique of any growthism. 'Growth is the child of capitalism', noted Kallis (2018, 73), 'but the child outdid the parent, with the pursuit of growth surviving the abolition of capitalist relations in

²The word 'degrowth' was first used in the modern sense in 1972 by French political ecologist André Gorz (Demaria et al. 2013), but one could look for older related concepts (since 'degrowth' is so closely linked to GDP). The term 'post-industrialism', for example, was coined in 1914 by Ceylonese philosopher Ananda Coomaraswamy (Marien 1977; Calmé and Taleb 2017). Going much further, Latouche (2016) argued that Lao Tzu (6th c. BC) is an early proponent of degrowth in his defence of simplicity and autonomy, his refusal of the superfluous, and his critique of existing power.

³The word has been criticised for being economic, 'negative' and/or Eurocentric (see e.g. Drews and Antal 2016).

socialist countries'. Today, very different political movements and regimes share the imaginary of permanent economic growth. However, this has not been the case of anarchism and post-development theory, two currents of thinking that have had a profound influence on degrowth.

Just like Marxism classically seeks to generate 'socialism' or 'communism', what sort of systemic alternative does degrowth seek to give birth to? The labelling exercise is open to discussion and many degrowthers would not find it useful, but 'eco-municipalism' could be a candidate. The term is regularly seen in the social ecology literature (Gerber and Romero 2014) and was praised by Latouche (2009). It originally refers to a multi-level network of egalitarian and sustainable communal entities governed by direct democracy. The term resonates well with other non-Western candidates like Shrivastava and Kothari's (2012) 'radical ecological democracy'. The term also nicely transcends the urban and the rural as well as the local and the nation-state while excluding none.

Before pursuing further, I will try to briefly clarify six common misunderstandings about degrowth. *First*, degrowth is not just about reversing GDP growth rates. This phenomenon already has a name and it is called a recession. The point of degrowth is not to have 'less of the same', but to organise appropriation, extraction, production, distribution, consumption and waste differently. *Second*, degrowth is not about imposing 'austerity' everywhere and shrinking 'everything'. Some items (like local products) will surely be consumed and produced much more in a degrowth society, and many economic activities will increase in such a society (like agroecology, urban gardening, and so on). *Third*, degrowth is not anti-technology. After almost two centuries of extraordinary technological progress (and also disruptions), degrowthers simply advocate for the right to choose what to take and what to leave behind. *Fourth*, degrowth is not just about celebrating the local. Small can be beautiful, but not always, as we will also see below. In fact, serious post-growth thinking can only be world-systemic – and therefore internationalist – because socio-metabolic flows are globally so unequally distributed and dimensioned. *Fifth*, degrowth is not soluble in capitalism. There are different currents within post-growth thinking (e.g. steady state economics, agrowth, post-GDP) and not all of them are post-capitalist, but degrowth is.

Finally, degrowth is not anti-Marxist, but it is against a certain Marxism that has a blind faith in industrial productivism, technological progress, and modern science as the only valid source of knowledge. To give just one example, Leon Trotsky was a formidable thinker, but his futurist eagerness of 1924 sounds today rather frightening:

Faith merely promises to move mountains; but technology, which takes nothing 'on faith', is actually able to cut down mountains and move them. Up to now this was done for industrial purposes (mines) or for railways (tunnels); in the future this will be done on an immeasurably larger scale, according to a general industrial and artistic plan. Man will occupy himself with re-registering mountains and rivers, and will earnestly and repeatedly make improvements in nature. In the end, he will have rebuilt the earth, if not in his own image, at least according to his own taste. (quoted in Foster 2017, 2)

Since critical agrarian studies (CAS) have been profoundly influenced by Marxism, the next section on Simon Weil will continue exploring the relations between Marxism, degrowth and CAS.

3. Bridging CAS and degrowth: one philosopher and four agrarian economists

We see the need to dream for more radical change than contemporary politics offers.

– Patel and Moore (2017, 41; quoted in Borrás 2019, 20)

3.1. Simone Weil: rootedness within limits

Marxism and the important branch of CAS that claims the Marxist tradition have usually not, of course, been about degrowth but about socialist growth. However, this does not imply that the critique of endless growth has never been made by the revolutionary Left. The thought of Simone Weil (1909–1943), a French philosopher, activist and mystic, is an early and remarkable example of this. Already in the 1930s, she denounced the violence of industrialism that ‘uproots’ workers and peasants, denies limits, and negates the material and immaterial ‘necessities’ of the body and the soul.⁴

After graduating in philosophy and while working in revolutionary trade-unionism, she spent long periods of time as a factory worker and as an agricultural labourer in order to better understand the condition of the working class. She took part in the Spanish revolution alongside the anarchists and participated in the French resistance before dying in London at age 34. Her short and busy life did not, however, prevent her from writing extensively. She can be seen as a precursor not only of political ecology but also of degrowth – albeit without, of course, using the term. Her own political evolution shows how her ‘degrowth’ ideas were nourished by Marxism, but also how they began to differentiate in some important respects (Azam and Valon 2016). Weil’s thought is therefore an entry point into the relationship between Marxism and degrowth as well as into degrowth’s existential critique of industrial modernity, including in the rural world.

Against Marx, she did not believe that the constant development of the productive forces is the key progressive power behind human history, a ‘materialist’ idea that reverses Hegel’s unfolding of the spirit as the main engine of history. Instead, Weil (2004 [1955]) proposed to take materialism *really* seriously and thus came to emphasise limits and energetics. She problematised the contradiction between capitalist accumulation, on one hand, and the limited availability of natural resources and the irreversible degradation of energy on the other hand (see Georgescu-Roegen, below). ‘[T]o hope that the development of science will one day bring about, in some sort of automatic way, the discovery of a source of energy which would be almost immediately utilisable for all human needs, is simply day-dreaming’ (Weil 2004, 47). She also noted, anticipating the idea of the Anthropocene, that the industrial society has become a ‘force of nature’ changing the face of the Earth (Weil 2004, 19).

In her critique of technocratic industrialism, Weil argued that ‘the worker’s complete subordination to the enterprise and to its managers is founded on the factory’s structure and not on the system of property’ (p. 40). She criticised Trotsky, both in print and in person, saying that the Bolshevik élite would become just as oppressive as the capitalists it was supposed to replace. As an alternative, she advanced the notion of ‘rootedness’ built around autonomous communities, cooperatives and interconnected smaller production

⁴Weil was not afraid to use the word ‘soul’ in a metaphysical sense. She was deeply interested in spirituality and read extensively on Christianity, Hinduism (she learned Sanskrit), Mahayana Buddhism, Taoism as well as on ancient Greek and Egyptian religions.

units (Weil 2005 [1949]). Such a system would have both collective as well as regulated private ownership rights.⁵ Those who work the land, she thought, should be able to control their plot and manage it themselves. In a way that may sound unfashionable today, she defended the potential ‘grandeur’ of work, of efforts, seen as a central element of being in the world and engaging with it, biophysically as well as spiritually. She did not, thereby, seek to celebrate ‘artisan’ or ‘peasant’ work per se, although she had a great respect for it, but to radically change the nature of labour, very much along Marx’s critique of alienation. People should control the process and fruit of their labour, including the techniques it involves, as in Illich’s (1973) idea of convivial technology.

Weil’s notion of ‘rootedness’ involves the need to be soundly situated in time, space and social relationships. Many peasants in Europe and the (neo-)colonies, she noted, have been forcefully uprooted by agriculture’s industrialisation, and those who stay are uprooted too, through debt, contracts and a widespread ‘inferiority complex’ (Weil 2005, 79). Farming, for her, should somehow subjectively reclaim ‘the wonderful cycle whereby solar energy, poured down into plants, [...] becomes concentrated in seeds and fruits, enters into Man [...] and spends itself on preparing the soil’, supporting the sustainable cycle of life (p. 84). However, Weil refused the conservative forms of rootedness, as expressed in the ‘Land’ or the ‘Nation’. She replaced the Land with the ‘field’, and the Nation with ‘friendship’. Her idea of rootedness is about ‘a re-localisation of effective and affective solidarities’ (Latouche 2016, 116). Rootedness refuses violence and speed, and embraces limits, cooperation, decentralisation, autonomy, friendship and beauty – the material and immaterial ‘necessities’ of a degrowth society (Azam and Valon 2016, 66).

Broadly speaking, the problem of limits has been underestimated by Marxist CAS scholars who have devoted more time and energy to deconstruct ‘green populism’ and/or ‘essentialist ecofeminism’ than to elaborate new and creative insights on viable alternatives. It is not rare to find CAS researchers that seem to be supporting socialist development models that could not be generalised within planetary boundaries. Bernstein (2010, 300), however, acknowledged the deficiency of CAS on these questions and noted – in a way that would have pleased Simone Weil – that the “‘orthodox’ materialist conceptions of the development of the productive forces in capitalist agriculture’ show ‘an inherited weakness’ when they embrace ‘such development as forever “progressive”’. Reviewing three decades of CAS, Bernstein and Byres (2001, 28) recognise that ‘very few contributions engaged with theorizing issues of technical change’ and with analysing ‘the ecological conditions of farming and environmental change’. There is thus, according to Bernstein (2010, 301), an urgent need to reduce the intellectual deficit of CAS on the relationships between technological and ecological change, or, in other words, between ‘growth’ and ‘nature’.

Since then, CAS contributions in agroecology, extractivism and the metabolic rift have expanded, but biophysical analyses and the theorization of broader alternatives remain scarce. Weis (2010) is among the welcome exceptions in CAS, clearly exposing the ecological and social costs of the productive forces in today’s ‘most advanced’ agriculture, and seeking a way out. In a very degrowth way, he wrote that

⁵She specified: ‘The principle of private property is violated where the land is worked by agricultural labourers and farmhands under the orders of an estate-manager, and owned by townsmen who receive the profits’ (Weil 2005, 33).

Table 1. Rough differences/complementarities between the research agendas of CAS (within the Marxist tradition) and degrowth.

Research in critical agrarian studies (Marxist) ...	Research in degrowth ...
Focuses on the deployment of capitalism in agriculture and on its relation with industrial growth and socialism (Agrarian Question)	Focuses on the deployment of growth(ism) in society and ecosystems, and on its relation with post-growth politics (Growth Question)
Debunks the agrarian myth Sees the development of productive forces and technology as generally progressive	Debunks the (green) growth myth Sees the development of productive forces and technology as a central object of critical enquiry
Focuses on the first contradiction of capitalism (clash between capital and labour)	Focuses on the second contradiction of capitalism (clash between capital accumulation and living conditions [O'Connor 1988])
Emphasises problems of economic reproduction, especially through processes of appropriation, production and distribution	Emphasises problems of socio-ecological reproduction, especially through processes of extraction, consumption and excretion (waste)
Problematizes exchange value and abstract labour (as potentially exploitative)	Problematizes use value and concrete labour (as potentially meaningless and unsustainable)
Evaluates agriculture's performance in monetary and production terms	Evaluates agriculture's performance in socio-metabolic terms, including all its 'side-effects'
Is politically sceptical of 'the community' (seen as differentiating and hence divided)	Is politically open to 'the community' (seen as central to work and living conditions)
Supports, normatively, agrarian justice initiatives and class struggle	Supports, normatively, environmental justice initiatives and prefigurative politics as 'incubators'
Argues that Marx is central in laying out the processes of capital accumulation, crises and class struggle	Agrees but argues that 'Marx cannot help much in understanding cooperation and self-organisation from below' (O'Hearn and Grubačić 2016, 148)

the need to radically restructure agriculture is at the very core [of] any hope of making the 'human relation to the earth' more ecologically sustainable. It is also, simultaneously, at the core of attempts to build more socially just and humane societies. Agricultural systems must be vastly more labour-intensive and biodiverse, and geared towards much less meat production, as finite biophysical overrides diminish and in order to reduce the untenable environmental and atmospheric burden of industrial methods. (p. 334)

This does not mean, however, that Weis embraced any version of the agrarian myth, as 'agrarian social relations have rarely been equitable or even sustainable' (p. 335). Yet there is no reason to think that work in urban or rural industries represents a real progress for the many smallholders who leave the sector. If class and non-class forms of oppression can be overcome, farm work 'has an unmatched potential to generate autonomous, skillful, experimental, healthy and meaningful work' (p. 335).

Table 1 outlines some of the differences between Marxist CAS and degrowth research. The purpose of the table is to show strengths/weaknesses on both sides in order to promote more dialogue and integration. I would like to make the basic point that CAS and degrowth would gain from considering 'socialist degrowth' and hence enrich each other's theory and praxis. Along this line, Kallis (2019a) convincingly argued that if socialism is serious about curbing the exploitation of 'the soil and the worker' (Marx 1867, 638), it can only go post-growth (see also the entire special issue in *Capitalism Nature Socialism* on these questions: Andreucci and Engel-Di Mauro 2019).

In a line pioneered by Simone Weil and others, research in degrowth is an attempt to move beyond economic analyses and to include socio-ecological relations as well as existential questions (Latouche 2009). Accordingly, degrowth research would not only

problematise exchange values and abstract labour as potential sites of exploitation; it would also critically examine the actual usefulness and implications of ‘use values’ (as in new technologies and products) as well as the existential nature of concrete labour and community relations. This renewed interest in the *quality* of use value, work, and social relations can not only be linked to Weil’s central concerns, but also to Harvey’s (2014) critique of ‘widespread alienation’ and to Graeber’s (2018) recent take on ‘bullshit jobs’. To reopen these fundamental questions is essential to the degrowth project and may, to some extent, resonate with the Chayanovian arts of balancing.

3.2. Alexander Chayanov: the multiple balances of (re)production

Chayanov (1888–1937) was a Russian economist and sociologist who theorised the ‘peasant economy’ and who, without a doubt, remains one of the most influential and debated authors in CAS. Chayanov considered himself a Marxist, along a neo-Narodnik line, and believed that the ‘peasant economy’ represents a non-capitalist system that requires its own economic theory. He championed the development of agriculture on the basis of cooperative peasant households instead of the standard soviet policy of large-scale state farms. After two arrests followed by five years in a labour camp, Chayanov was arrested again in 1937 and executed the same day (Shanin 2009).

Chayanov’s analysis of the family farm can nourish aspects of degrowth theory and praxis (Garcia 2017). He noted that because the economy of middle peasants is organised outside the traditional profit/wage couple of capitalism, its economic logic does not purely rely on quantitative necessities. Instead, it crucially depends on qualitative *balances* defined within the family farm and its context. Chayanov (1925) mentioned two key balances: the labour/consumer and the utility/drudgery balance. They both indicate that labour increases until it meets the needs of the household, and then it stops, largely because the extra efforts (the ‘drudgery’) are not worth it. There is thus no clear process of accumulation (or growth) as in the capitalist firm (see also Sahlins 1972). In other words, *the middle peasant family farm has no inbuilt growth imperative and can potentially live well without it.*

Chayanov advanced many hypotheses that could have been investigated further (or corrected) had he lived longer. A few contemporary scholars – like Teodor Shanin or Jan Douwe van der Ploeg – have continued this task. Van der Ploeg (2011) has, for example, identified several other balances that are essential to the family farm, like the delicate balance between the farm’s and its ecosystem’s reproduction (a balance also discussed in Toledo’s pioneering article, 1990) or the balance between internal resources (fostering autonomy) and external ones (fostering dependence). Chayanov (1925) attributed a strategic importance to the degree of commodification of the household and was well aware that debts or taxes may completely destabilise the family farm. This disruption may come from the market, but also from the state (as also discussed in e.g. Scott 2009). Ploeg mentioned as well the balance between scale and intensity, between the short and the long term, between the known and the unknown, between innovation and conservatism, and between the peasant family and the community. In sum, for the Chayanovians, farming is about finding the right balances for fulfilling human needs – it is not necessarily about growing. The resource base of the farm represents an organic unity controlled by those directly involved in it, but embedded in the broader politico-institutional-cultural context (Sahlins 1972).

But Chayanov did not stop at the farm level. He also theorised a cooperative-based economic system where different types of production are associated with their appropriate scale (Chayanov 1927). Forests, for example, can be well managed at the regional level, pastures at the community level, and salad production at the household level.⁶ Such a multiscale model does not follow a dogmatic ‘small is beautiful’ principle (as also noted by Bernstein 2009) sometimes seen among the proponents of the degrowth movement.

Chayanov’s greatest contribution to degrowth is perhaps to help us imagine an economy that is free from the fundamental categories of capitalism and simultaneously based on the popular knowledge of balancing, defining the right scales, and seeking autonomy (Garcia 2017). But the link with post-growth has never been mentioned by today’s Chayanovian scholars, probably because it would have been counterproductive to add another ‘controversial’ topic to their already ‘controversial’ agenda of defending smallholders and arguing that they can ‘feed the world’ (J.D. van der Ploeg, pers. comm.). This is unfortunate because degrowth, as we have seen, does not imply that ‘everything’ would need to shrink. While capitalist farming would indeed shrink, other elements would need to multiply, and very much so, like cooperatives and commons.

Like Chayanov’s Russia, Bhutan is today largely an agrarian economy. Agriculture occupies almost 70 per cent of the population, and among them, middle peasants are the majority. Bhutan is an important case study for degrowth research, not only because it may offer a good setting for investigating Chayanovian balances and their evolution, but also because of its alleged ‘new development paradigm’ that is also said to be about balancing different objectives.

Bhutan is one of the last countries to be currently, and probably partially, transitioning to capitalism. One can thus observe in ‘real time’ processes of differentiation and resistance as well as persisting ‘traditional’ family farms and artisans whose logic may correspond to a Chayanovian model of slow or no growth. Feudal-like relations of production (including serfdom and slavery) were abolished between 1953 and 1959. Up until then, most peasants were owners of their land but heavily taxed in kind and labour (T. Wangchuk 2001). From the 1960s onwards, Bhutan’s cautious development has been orchestrated by state planning through a series of five-year plans. In 2008, the country became a constitutional monarchy (Phuntsho 2013).

While a small capitalist class has been able to emerge, largely originating from the aristocracy, there are important spheres of the country’s economy that do not seem to follow a capitalist logic of production (Basu 1996). Traditional (non-capitalist) institutions are still strong (S. Wangchuk 2001) and petty commodity production is important. Like in neighbouring Arunachal Pradesh studied by Harriss-White, Mishra, and Upadhyay (2009), Bhutan never experienced an important enclosure movement or widespread rural indebtedness, two key

⁶In Chayanov’s first novel, published in 1920, one can see an outline of his agrarian utopia which combines Narodnik, anarchist and socialist-cooperativist elements (Chayanov 1976). It describes a peasant Eden where large cities have been replaced by a network of rural communities, the industry does not override agriculture, cooperatives have become the central way of producing and consuming, and the role of the state, while important, is to stay in the background and to focus on a few key resources like fossil fuels. However, in 1928, Chayanov published another utopian text, *The Possibilities of Agriculture*, which takes a completely different path and speculates about the future power of industrial agriculture, off-ground and without family farms. ‘Such drastic change in ideals could be explained by the change of political situation in Soviet Russia and the inner decision of Chayanov [who refused to emigrate in 1922–23] to cognitively cooperate with the Soviet regime’ (Raskov 2014, 11).

mechanisms which would have accelerated processes of social differentiation (Gerber 2014). The countryside is largely free from large-scale agribusiness investments and from a prominent class of commercial landlords.⁷ The introduction of a full-fledged market economy could thus be unrealistic in these conditions, and this could be Bhutan's greatest chance, if only the situation is correctly understood and creatively used.

Despite a tight dependency on the Indian economy, Bhutan is trying to avoid some of the negative consequences of neoliberal globalisation. The government has thus invited various post-growth thinkers to provide advice (RGoB 2013).⁸ The results so far contain contradictory but also inventive elements. On one hand, Bhutan's GDP has been growing at a fast rate over the past three decades, but largely because of a series of growth peaks following important state-run hydroelectric projects (Mitra and Jeong 2017). On the other hand, the country has put in place a number of policies limiting GDP growth and seeking to enhance welfare and sustainability. One can cite: free education and healthcare; severe restrictions on foreign investments; no WTO membership; no outdoor advertising; heavy taxes on car imports; limits on mass tourism (and ban on alpinism); limits on mining; half of the country under protected areas; constitutional 60 per cent of forest cover; declared willingness to generalise organic agriculture.

Bhutan has also developed the concept of Gross National Happiness (GNH) which has attracted a lot of attention. GNH was formalised after a particularly 'unhappy' period in the country's history. In the late 1980s, Bhutan's external situation was tense: its debts to India were swelling while India had turned neoliberal around 1990 and annexed Sikkim in 1975 (following strong anti-monarchy movements). Fearing a possible loss of sovereignty, the Bhutanese government sought to reinforce the Buddhist Ngalop identity shared by much of the élite (western Bhutan), to the detriment of other groups in the country, especially the Hindu Lhotshampa minority (southern Bhutan). A violent crisis followed, leading to the eviction of thousands of Lhotshampas out of the country (Hutt 2003; Phuntsho 2013). GNH began to enter the country's policy arena about a decade after these events, partly as a resistance to neoliberal globalisation threatening existing structures, and partly, possibly, as an attempt to rebuild the country's image but also to alleviate many internal wounds (Phuntsho 2013).

Today, GNH remains a contested notion. It encompasses different interpretations, more or less radical (Gerber and Raina 2018a). For some Bhutanese, GNH is a loosely-defined 'green growth' and a brand name to fit every occasion. For others, GNH is synonymous with the GNH Index, a sophisticated indicator seeking to measure well-being holistically⁹ and intended to replace GDP in guiding development policies (Ura et al. 2012). And still for others, albeit a minority, GNH is not just a new indicator but a philosophy of social flourishing integrating

⁷As a result, characteristically, the government has been unable to find a Bhutanese labour force willing to carry out unpleasant work like road construction, and the necessary workforce of landless peasants is hired from India.

⁸Some of their contributions can be found here: <http://www.newdevelopmentparadigm.bt/2013/11/29/contributions-to-the-ndp-report/> (accessed on 18 February 2019).

⁹The GNH Index is based on nine domains – i.e. living standards, education, health, environment, community vitality, time-use, psychological well-being, good governance, and cultural resilience and promotion – measured with 33 fine-tuned indicators. The indicators have sufficiency thresholds which are benchmarks of 'how much is enough' for a 'good life'. They are based on international or national standards, normative judgements, or the outcome of participatory meetings. Concretely, a GNH Screening Tool has been implemented to help the GNH Commission – a powerful committee orchestrating the economy's planning process – in assessing policies and projects for their compatibility with the GNH Index (Hayden 2015).

outer and inner needs and seeking sufficiency with respect to economic growth – a position that gets close to degrowth provided it is egalitarian and democratic (Hayden 2015).

One of the main architects of GNH, Karma Ura, wrote that ‘it is possible that a GNH state is analytically different from socialist, liberal or free market states. [Our] strategy [is] to take the country from being a late starter in modernization directly to a sustainable society’ (Ura 2005, 1–5). More research is needed to substantiate this claim – that Chayanov would probably not have rejected – and clarify the nature of growth and post-growth in Bhutan, from the family farm to the state level.

3.3. Joseph Cornelius Kumarappa: decentralisation and autonomy

Kumarappa (1892-1960) was an Indian economist, the founder of ‘Gandhian economics’, but an original theorist in his own right and a man of action. After studying economics in London and at Columbia University in New York, he joined the Indian nationalist movement in the 1920s. He was in charge of Gandhi’s schemes of village reconstruction and helped create and run the All India Village Industries Association (AIVIA), the organisation that was intended to promote and actualise Gandhi’s economic ideas (Kumarappa 1951). His extensive travels, many surveys, and work with AIVIA gave him a deep understanding of the conditions of rural India. Among his numerous books, *Why the Village Movement* (1936) and *Economy of Permanence* (1946) – written while in jail for more than a year during the Quit India period – are arguably his best known publications, and they inspired several of the forefathers of degrowth, including Ivan Illich and Ernst Schumacher. At the heart of his views lie the concepts of autonomy, non-violence, and the idea of a ‘natural order’ to be cared for, and defined as a moral web of connections between all sentient and insentient beings. These concepts serve as the ontological foundation for his critique of the moral and material dimensions of industrial modernity.

In a nutshell, *his theory and praxis can be seen – at their mature stage – as an effort to promote a decentralised and self-sufficient economy that would abolish class and caste distinctions and that would seek to keep the emancipatory possibilities of modernity while building on the strengths of peasant and artisan production* (Govindu and Malghan 2017). His focus on the village economy was thus, as he specified, ‘no ancestor worship’ (quoted in Govindu and Malghan 2017, 9), but an attempt to protect the autonomy and dignity of the Indian villager by enabling control over his or her own economic destiny. Similarly to Chayanov, Kumarappa proposed the model of an agrarian economy that would rebalance the countryside and cities, based on the smallest possible scale at which a decentralised economy could fulfil the basic needs of its members. Accordingly, he suggested regional units of 100,000 people with ‘balanced cultivation’ of cereals, pulses, vegetables, dairy, and so on, ensuring a daily diet of about 3000 calories and cotton for making clothing. He recognised that some sectors such as the railways had to be centralised and was also aware of the limitations of existing practices in the village economy, but for him ‘[t]he remedy is not to abandon cottage units but to bring the light of science to cottage workers’ (Kumarappa 1936, 110).

Any reformulation of modernity – like in the degrowth movement today – has to begin by examining the notion of ‘standards of living’. For Kumarappa, ‘high’ vs. ‘low’ standards are repeatedly not describing a gradation in the quality of life but a difference between ‘complex’ vs. ‘simple’ material standards where ‘complex’ ones are artificially created by

the market and tend to undermine sufficiency and autonomy. Both capitalist and state élites, he argued, shape for their own benefits normative ideals of what constitutes the 'good life', ideals that one has to question radically. Kumarappa was critical of deriving market prices from individual preferences and proposed instead that valuation standards had to be found at a deeper level, in the moral economy. The distance between the producer and consumer hinders the moral assessment of an exchange, he observed, and this is one of the key reasons behind his defence of local production and consumption. Moreover, he noted that an economy that encourages unrestricted accumulation is antithetical to the 'natural order', thereby clearly resonating with degrowth.

A critic of AIVIA ridiculed its approach, calling it 'a cloak of tattered patches' that stitched Kumarappa's 'economic notions' together with 'elements of Ruskin, William Morris, Proudhon, Bakunin and Tolstoy ... [to] try to furnish a *swadeshi* ["made in India"] alternative to the imported ideas of socialism'; Kumarappa simply replied that indeed 'certain aspects of our reasoning can be paralleled from anarchists and others but that is not sufficient cause to hang us' (quoted in Zachariah 2005, 191, 193). Kumarappa's work refutes the common assumption that degrowth ideas are an invention of industrialised countries. He anticipated by several decades many contemporary notions on the topic, and the Left is slowly rediscovering the relevance of his thought (Guha 2006; Gerber and Raina 2018b). Shrivastava and Kothari's (2012) 'radical ecological democracy' could be seen as a contemporary take on some of Kumarappa's core ideas. But as it is often the case with 'pro-peasant' thinking, right-wing farmers' movements have also sometimes misused Kumarappa's idea for their own purposes (see e.g. Brass 1995).

Are there today networks of agrarian communities that would embody elements of Kumarappa's ideas and exemplify degrowth in practice? Would the Amish of North America be a candidate? The Amish form a network of religious and mostly agrarian municipalities which hold simplicity and mutual aid as core values and reject many aspects of capitalist modernity. They represent without a doubt a rich and complex experience that degrowth theory and praxis can learn from. Because 'after all,' wrote Daly (2000, 72), 'any group that can make a good living from small farms for a century without government aid and without mining the soil might be doing something right'.

In the sixteenth century, Anabaptism – the theological foundation of the movement – was a radical ideology, 'the left wing of the Reformation', which was seen by Kautsky (1895) as the apex of medieval communism. The first Anabaptists were urban intellectuals in Zurich who rejected state-based religion and advocated pacifism, egalitarianism, community life, the free religious choice of adults (against the baptism of children) as well as a return to the New Testament. After intense persecutions (due in part to revolutionary leanings during the German Peasant War), the movement became agrarian and a number of schisms divided them into various orders of Mennonites, Hutterites and Amish.

Unlike the Hutterites, the Amish do not collectivise their resources nor do they pool their income. They engage in local entrepreneurial capitalism and may hire labourers, mostly from within the community. Class differentiation is thus visible and economic inequality has appeared within the communities. According to Hurst and McConnell's (2011, 213) survey, 'nine out of ten [Amish respondents] considered the accumulation of personal material wealth to be a threat to the internal harmony of the community'. This was seen as conflicting with their adoption of simplicity as a core principle through

plain cloths, organic farming and a selective rejection of modern technology (like cars, tractors, radios, TV, internet). This does not mean, however, that all modern technologies are rejected. Electricity is produced locally and used for refrigerators, lamps and sewing machines. In a way that would certainly please Kumarappa, every new technology, before being adopted, gives rise to careful discussions supported by an exegesis of the sacred texts. Marglin (2008, 255) argued that the key criteria when discussing technology is the extent to which it might undermine the community: 'It is clearly a balancing act', he wrote, and not an easy one, as 'Amish communities have fractured on the issue of technological choice'.

In order to balance their commitment to simplicity with their insertion into the wider society, the Amish make a useful distinction between ownership and access (Kraybill, Johnson-Weiner, and Nolt 2013). Amish households may for example rent the services of a non-Amish driver to deliver goods, or if they have a stand in a large market house, they may use the lights and refrigeration made available to them by the building's non-Amish owner. 'Some observers see hypocrisy in this use-but-don't-own approach, but the Amish see a deep consistency', argued Nolt (2014, 79). Private ownership of technology, from an Amish perspective, quickly runs against the community as it promotes unnecessary individualism. In contrast, to have to pay for access to services or technology is rooted in the ideal of co-dependence, humility, and practical limits, seen as a healthy way of being in the world, but it also allows some flexibility in terms of technological use. It is of course debatable to what extent the Amish are self-reliant and autonomous, as much benefit seems to be gained from their insertion in the larger world.

The same remark applies to many neo-rural intentional communities – with various degrees of political radicalism – that have been looking for an alternative, simpler, and self-sufficient lifestyle free from wage labour. They are, without a doubt, present in the degrowth movement, and this is why Calvário and Otero (2014, 143) described back-to-the-landers as 'actors of a diversified strategy of socio-ecological change towards a degrowth future'. While these experiences could be theorised as 'incubators' for larger transformations (see below), some authors have argued that alternatives that reinforce the notions of consumer (like food) sovereignty, state failure, and self-reliant ordered communities are in fact reproducing neoliberal subjectivities and practices (see e.g. Guthman 2008; Argüelles, Anguelovski, and Dinnie 2017); others have argued that by remaining local and by not targeting state power, 'from below' alternatives are basically toothless if not counterproductive (see e.g. Brass 2014).

Research on degrowth has little choice but to go back to these old questions that continue to divide Marxist and anarchist orientations. Community economies like the Amish raise important Kumarappan questions about 'the ongoing negotiations between the individual and the community, between freedom and regulation, and between tradition and modernity' (Halteman 2014, 250), as well as between genders, classes, and between growth and no-growth.¹⁰ A *Science* article on the energetics of Amish agriculture concluded that

¹⁰The Amish are not quite degrowthers when it comes to population expansion as their birth rate is very high. Bernstein (2010) convincingly suggested tackling the leftist taboo of population growth more openly, while Martínez-Alier (2009) explicitly connected feminist neo-Malthusianism with degrowth (Masjuan and Martínez-Alier 2004).

The Amish experience should make us more confident about the future if [fossil] energy should become progressively scarcer. It is often said that the Amish provide a vignette of early America; is it also possible that they may provide an image of the future? (Johnson, Stoltzfus, and Craumer 1977, 378)

3.4. *Nicholas Georgescu-Roegen: the solar economy*

Georgescu-Roegen (1906-1994) was a Romanian-American mathematician and economist who is seen as the father of ecological economics and a key intellectual influence in the degrowth movement. After studying statistics in Bucharest, Paris and London, he spent a short but decisive time at Harvard where he became the protégé of Joseph Schumpeter. Harvard was a vibrant place at the time and his colleagues included Wassily Leontief, Nicholas Kaldor, Paul Samuelson, Paul Sweezy and Oskar Lange. Schumpeter offered him a position in 1936 and asked him to work with him on a book, but Georgescu-Roegen declined and decided to return to Romania to 'help his native land become a happier place for all' (Georgescu-Roegen 1992, 132). It is in the Romanian agrarian economy of the interwar period that Georgescu-Roegen truly discovered economic problems. From 1937 to 1948, he held several important posts in the government, but after the victory of the Stalinists and the following repression, he managed to flee to Turkey with his wife and then to the United States, where he stayed until the end of his life, mostly at Vanderbilt University.

His work on agrarian economies (Georgescu-Roegen 1960, 1965) signalled the beginning of his radical epistemological critique of economics based on the principles of thermodynamics, ecology and the role of institutions. In agreement with Chayanov (whom he quoted in 1960, some years before he was revived and translated in the West), Georgescu-Roegen argued that the theories of capitalism – whether neoclassical or Marxist – do not neatly apply to non-capitalist economies. The latter have their own institutions that one has first to understand. Of course, it is still possible that propositions coming from the different theories of capitalism are relevant to them, but the validity of each proposition must be empirically reconfirmed. The difficulty of building a general analytical framework for agrarian economies, he argued, mainly stems from their immense variability.

Like Chayanov, however, Georgescu-Roegen suggested a few general principles of agrarian economies. The one that is perhaps the most relevant to degrowth relates to the agriculturalist's dependence on biotic resources, which have a radically different potential than mineral resources. From this, Georgescu-Roegen developed what became the central idea of his magnum opus, *The Entropy Law and the Economic Process* (1971), namely that the common terms of 'production' and 'consumption' obscure the Lavoisian fact that nothing is created or destroyed in the economy, but everything is transformed. The second law of thermodynamics – the entropy law – tells us that energy always tends to be degraded to ever poorer qualities. Accordingly, *economic processes irreversibly transform valuable (low entropy) natural resources into valueless (high entropy) waste and emissions.*

There are mainly two sources of low entropy available to humans: the finite *stocks* of mineral resources like fossil fuels and the *flow* of solar radiation that will be available to us for another four billions of years. Whereas stocks can be extracted at high rates, solar energy arrives at a constant and fixed rate, beyond human control. This natural asymmetry helps explain the historical opposition between urban and rural life: the frenetic pace of

modern cities is associated with industrial growth fuelled by mineral resources, while the slower tempo of rural life is associated with a zero or slow growth structured around the reception of solar flow. Given that biotic resources depend on the cyclical rhythms of nature, they cannot be used continuously and this explains why economic activities in agrarian economies must be diversified. In contrast, the flow of mineral resources from stocks (e.g. oil) allows an industrial organisation of production in line, which makes it possible to use production funds at their full capacity and to have specialisation (Georgescu-Roegen 1969).

Georgescu-Roegen showed that the mechanisation of agriculture is unsustainably mimicking the industrial logic: machinery, chemical fertilisers and pesticides all rely on mineral resources, rendering modern agriculture – and the industrialised food systems associated with it – as dependent on non-renewable stocks as the industrial sector. This is, Georgescu-Roegen (1975, 373) explained, ‘in the longrun a move against the most elementary bioeconomic interest of the human species’. The implications for sustainability are thus clear and radical: the kind of economic growth that is needed is not a stationary one – as his student Herman Daly was already arguing in 1971 – but a ‘declining’ or a degrowing one (1975, 369). Georgescu-Roegen suggested a utopian ‘minimal bioeconomic program’ in eight points: after opening all borders and equalising the conditions to ‘arrive as quickly as possible at a good (not luxurious) life’ for everyone, the global objective is to ‘gradually lower [the world’s] population to a level that could be adequately fed only by organic agriculture’ (1975, 378; see also Martínez-Alier 1997).

Any glimpse into aspects of such a transition is worth examination, and Cuba’s Special Period of the 1990s could be one such instance. It represents ‘the largest conversion from conventional agriculture to organic and semi-organic farming that the world has ever known’ (Murphy 1999, 9). For almost a decade, it involved deep socioeconomic changes and, unlike other similar crises like the Russian, it succeeded in some important respects that could echo elements of a degrowth transition (Boillat, Gerber, and Funes-Monzote 2012; Borowy 2013).

By 1989, Cuban agriculture was a showcase of the Green Revolution, heavily relying on one crop – sugarcane – and importing 60 per cent of its food. While this model guaranteed a good standard of living to the Cuban population, it was dangerously dependent on the Soviet Union, politically authoritarian, and ecologically quite destructive. After the collapse of the Soviet Union, Cuba brutally lost 85 per cent of its trade relations. Many industrial complexes closed, and transportation and electricity consumption were reduced to a minimum. In brief, the crisis forced the Cubans to take seriously Georgescu-Roegen’s ideas (although the Cuban leadership probably never mentioned him), namely to produce and consume locally, to refrain from credits, to replace tractors with oxen, agro-chemicals with bio-pesticides, industrial fertilisers with compost, machinery with manual labour, long-distance with face-to-face communication, and, above all, to live a simple, low-consumption lifestyle (Borowy 2013).

Large state farms were transformed into cooperatives, the Basic Units of Cooperative Production (UBPCs), seen as more flexible, but it turned out difficult to convert farm workers into peasants, and the UBPCs have had mixed results. The peasant families who own the land and group together in cooperatives to share farm machinery proved to be much more rapidly adaptable to the crisis than the UBPCs and other collective

farms. The facts that decisions are taken at the family level and that ‘their members typically exhibit a strong sense of belonging to, and caring for, the land’ (Rosset et al. 2011, 167) made them initially very quick and very open to alternative ecological methods.

The growth of urban agriculture and gardening is also a well-known outcome of the crisis (Altieri et al. 1999), and so was the movement of city dwellers to the countryside, supported by the government, to reinforce organic production. Cuban authorities took several other measures (e.g. legalisation of the dollar, boost of tourism) that were ‘conservative’ since their goal was to get back to a more standard growth model. In any case, by the end of the 1990s, the acute agricultural crisis was over, while food was being produced with much less inputs and equipment. What is more, Borowy (2013) documented surprising improvements in public health indicators including maternal and infant mortality, obesity, and mortality from diabetes, tumours, strokes and external causes. The ‘degrowth period’ brought about lifestyle changes with tangible health benefits.

It is encouraging to see how Cuba has been able to substitute fossil fuels with renewable energy and with positive effects on health and sustainability. But one should not ignore the important role of a solid welfare state and a low level of inequality, which would make the generalisation of the Cuban successes difficult. Also, the Special Period was never intended as the beginning of a new era and the country is now back on the track of economic growth, largely based on tourism. However, agroecological production is still thriving in a context where food continues to be partly imported (Machín Sosa et al. 2013; IPES 2018).

Georgescu-Roegen’s goal was to be as rigorous as possible when assessing ecological sustainability. His recommendations were accordingly oriented towards a downscaling of the social metabolism rather than towards ‘Green New Deals’ that promote a world-scale transition to renewable energies but without emphasising the need for a differentiated reduction in levels of consumption. Such proposals – like Pollin’s (2018) one, which is also an unfortunate attack on degrowth – are quickly biophysically naïve and end up justifying the ideology of growthism that created the problems in the first place. For Pollin, degrowth is ‘utterly unrealistic’ and the Left cannot afford to dream that another world is possible given the urgency of climate change. ‘We are [thereby] asked to accept’, remarked Kallis (2019b) in his reply to Pollin, ‘that the only game in town is capitalism, and that questioning capitalism and its destructive pursuit of growth is a luxurious waste of time. *If not now, then when, one might wonder?*’ Biophysically speaking and with current technologies, a wind-hydro-solar economy could only support much smaller economies, and a transition to renewables would therefore have to be a degrowth transition.

3.5. Joan Martínez-Alier: the politics of degrowth

The Catalan economist and political ecologist Joan Martínez-Alier (1939-) is one of the most influential figures of the degrowth movement and a former board member of *JPS*. There are a number of similarities between his intellectual path and Georgescu-Roegen’s. Like the latter, he spent more than a decade studying agrarian economies, especially in Spain, Cuba and Peru; and like Georgescu-Roegen, agrarian questions led him to be interested in ecological sustainability and confirmed his dissatisfaction with the ‘Leninist’ lens to apprehend rural problems – a dissatisfaction sustained by his own anarchist sympathies. In an observation that echoes Georgescu-Roegen’s (1965) views

on the great diversity of rural institutions, Martínez-Alier (1974, 158) wrote that ‘the variety of rural social formations makes it difficult to accept that anything very specific can be said about peasant politics in general’. Much more than Georgescu-Roegen, however, Martínez-Alier has been interested in grassroots conflicts over processes of exploitation, dispossession and contamination. In the 1960s and early 1970s, he studied struggles over agrarian production relations¹¹ and he is engaged today in the immense work of compiling a global inventory of ecological distribution conflicts (see www.ejAtlas.org).

In the Peru of the early 1970s, Martínez-Alier became for the first time in contact with indigenous peasants who explicitly rejected a certain modernisation and fought to preserve their traditions, communities and identities – something that would resonate with post-development theory a decade later. In addition, it is in Peru that he began to immerse himself in ecological questions, at first through the ecological anthropology of Andean peasants, and later on, through the untold history of agricultural energetics and ecological economics in general. The resulting book (Martínez-Alier 1987) provided an intellectual lineage to the nascent field of ecological economics.¹² The book’s epilogue politicises socio-metabolic analyses, criticises the ‘the belief in economic growth’ (p. 236), and puts forward ‘ecological neo-Narodnism’ – later called the ‘environmentalism of the poor’ – a neglected current of environmentalism that became his research and activist focus for the next three decades, culminating in another influential volume in 2002 (Martínez-Alier 2002).

This current of environmentalism – also referred to as the environmental justice movement – combines ecological concerns and social justice. It literally fights the impacts of economic growth and their unequal distribution. The environmentalism of the poor typically involves impoverished, working-class or indigenous populations, struggling against the state or the corporate sector. The Chipko movements against state plantations in India, the Seringueiros against large-scale ranchers in Brazil, and the Ogoni struggle against Shell in Nigeria are emblematic cases of this current. Taken as a whole, the myriads of such conflicts on extraction, transport and waste disposal represent one of the most powerful socio-political forces in the global South today, and they are on the rise as the metabolism of industrialised regions requires ever more energy and materials (see e.g. Gerber 2011; Martínez-Alier et al. 2016; Conde 2017; Scheidel et al. 2018).

However, this massive mobilisation strength has arguably failed, so far, to translate into an equal theoretical strength, despite the fact that many creative concepts have been forged through socio-environmental activism, such as the ‘ecological debt’, ‘climate justice’, ‘biopiracy’, ‘food sovereignty’ or ‘land grabbing’ (Martínez-Alier et al. 2014). This is not to say, also, that environmental justice movements lack broader conceptual frameworks – like *buen vivir* or *swaraj* – that may influence their interpretation of problems and guide alternative projects (Kothari et al. 2019). Yet, overall, many

¹¹One of Martínez-Alier’s main interests was in sharecropping that he described as ‘akin to piece-work’ (Martínez-Alier 1983, 94). He argued that sharecropping tends to be more profitable for the landlord than wage labour because it rests on both class exploitation and the peasants’ self-exploitation. Sharecropping is thus neither ‘inefficient’ (from a conventional perspective) nor ‘semi-feudal’ (from a certain Marxist perspective).

¹²With José Manuel Naredo, Martínez-Alier rediscovered the work of Sergei Podolinsky in agricultural energetics and Engels’ rather negative reaction to it (Martínez-Alier and Naredo 1982; Martínez-Alier 2011). Podolinsky was a Ukrainian Narodnik Marxist who could have, they argued, bridged Marxism and ecology for the first time in a systematic way (but see Foster and Burkett 2016, for a diverging opinion). Podolinsky was critical of industrial agriculture on energetics ground. He understood agriculture as a system of energy transformation and was familiar with thermodynamics.

grassroots movements remain local and narrow in their conceptual scope. The resulting fragmentation can obstruct wider synergies and the broader societal alternatives that can be imagined and constructed. This is why Martínez-Alier (2012) suggested that *there is an important potential alliance between the large global environmental justice movement and the ideas of the emerging degrowth movement*. He has promoted this alliance on analytical grounds – i.e. there is a convergence of material interests between the two movements – but also on normative grounds, as degrowth can offer a radical political project to environmental justice.

Martínez-Alier emphasises concrete socio-ecological struggles as key sites where ‘degrowth’ demands are being formulated. For him, such conflicts are ‘degrowth in practice’, since they de facto seek to prevent growth from taking place, be it in the form of a new highway, a new power plant, a new plantation, or more contamination with industrialisation. But is it the case that environmental justice movements and degrowth are natural allies?

A recent special issue in *Ecological Economics* explored this relationship and revealed different opinions (Akbulut et al. 2019). Some authors argued that there is a clear affinity between the two movements. Alcock (2019, 267), for example, analysed the New Rural Reconstruction Movement (NRRM) in China and argued that ‘the links between the sources of degrowth and NRRM theory as well as how that theory is put into practice mean that the NRRM can be seen as a type of degrowth movement’. Refuting the charge of western-centrism, the author calls for radical knowledge co-production by scholar-activists aware of ‘the specifics of different countries and localities’. Similarly, Forst (2019) reviewed First Nations sovereignty and environmental struggles in British Columbia, Canada, and found that ‘many of the core and repeated aims found within Degrowth conversations parallel grassroots First Nations goals’ (p. 140).

In contrast, some authors have been more sceptical about the ‘naturalness’ of the alliance. Rodríguez-Labajos et al. (2019) argued that there are ‘significant differences’ between the two movements and that the policies proposed by degrowthers are often perceived as western-centric (like reducing working time). More attention should therefore be placed on the specificities of places and histories before any substantial alliance can be built. Scheidel and Schaffartzik (2019) wrote that environmental justice protesters and degrowthers have not exactly the same aims: while the former often seek to protect ‘traditional livelihoods and ways of living’, the latter seeks ‘new livelihoods and new ways of living, within alternative societies’ (p. 332). Many grassroots resistance movements may indeed start with the defence of a local status quo, hence the normative quest for a radical theory able to transcend this. The key point, from a degrowth perspective, is to transform NIMBY movements (not in my backyard) into NIABY movements (not in anyone’s backyard) actively seeking broader transformations.

Muradian (2019, 257), for his part, argued ‘that the degrowth movement reflects the values of a particular social group, namely the well-educated European middle class that share progressive-green-cosmopolitan values’, a situation that ‘creates significant barriers for its dissemination among lower-income social groups in other parts of the world’. If one defines degrowth as an undifferentiated call for ‘voluntary frugality’ for all, then such ideas will understandably not speak to many people. The present article has, hopefully, offered a different view on what degrowth is all about. Having said this, I can only agree with Muradian that degrowth is still largely today a white middle-class movement of the global North. Yet

Marx and Engels were also white middle-class Northerners. If it took some time for Marxism to establish some connections with the world's working class, could it be that it will also take some time for degrowth (or other labels for the same ideas) to establish some connections with various agrarian, urban and environmental justice movements?

Vía Campesina seems hesitant to endorse degrowth, but this does not mean that things will not change (Martínez-Alier 2011). In 2014, for example, the movement wrote a petition that was clearly degrowth-oriented, saying that 'we need to replace capitalism with a new system that seeks harmony between humans and nature and not an endless growth model that the capitalist system promotes in order to make more and more profit' (quoted in Roman-Alcalá 2017, 119). Similarly, degrowth ideas are still rarely discussed among workers' organisations. Yet again, a clear pro-degrowth stance appeared in the French Confédération Nationale du Travail (CNT) in 2011: 'the defense of the environment implies the fight against capitalism; our labour class union is ecologist and in favour of degrowth' (quoted in Bayon 2014, 273).

Kallis (2018) suggested a Gramscian framework for understanding the dialectical role of the state and the grassroots in a degrowth transition. For him, grassroots alternatives, little by little, generate a counter-hegemony that influences the 'common sense':

Alternative economies are not then just microcosms or prefigurations of a degrowth world. They are *incubators*, where people perform every day the alternative world they would like to construct, its logic rendered common sense. [...] As they expand, they undo the common senses of growth and make ideas that are compatible with degrowth hegemonic, creating the conditions for a social and political force to change political institutions in the same direction. (p. 138, his italics)

In turn, alternative policies open space for new alternative practices that reinforce the new common sense in a kind of virtuous cycle.

The point here is to emphasise that grassroots alternatives are essential but insufficient in themselves (Buch-Hansen 2018). After a certain point, food sovereignty, to take just one example, faces structural constraints (Kallis 2018): it is limited by access to land, by legislative rules that prioritise agribusinesses, by price dumping, or even by the erosion of the welfare state and the rising costs of health or education, which may all push people towards more profitable cash crops monocultures. In the necessary upscaling process, 'bottom-bottom' networks for environmental and agrarian justice (Borras and Franco 2018) could become platforms where a new 'common sense' and new 'bottom-up' post-growth politics and policies could emerge. But more empirical research is needed, as I will propose next.

4. A research agenda on agrarian degrowth

It is clear that [...] capitalist expansion has now nearly reached the point where it will be halted by the actual limits of the earth's surface. [...] We are in a period of transition; but a transition towards what? – Simone Weil (1933, 3)

As here, Levien et al.'s (2018) introduction to a *JPS* special issue on agrarian Marxism concluded with suggestions for future research. In their penultimate paragraph, the authors wrote this:

Finally, there is the question of socialism itself, and [of] socialist alternatives, experiments and praxis. This draws something like a blank in contemporary Marxian analysis. It's all very well to

dig back into Russia in the 1920s, or Maoism in the 1960s, but there is not much that is forward looking. (p. 878)

That contemporary Marxian research has little new to say about ‘forward looking’ socialism is indeed quite dismaying, and it seems clear that this should constitute the starting point of a degrowth research agenda in CAS. We need to go back to the messiness of concrete practical-political ‘alternatives, experiments and praxis’.

The vignettes presented in this article were intended as stimulants for further research on such ‘experiments’. I will now try to identify more systematically what a research agenda in ‘agrarian degrowth’ could look like. The suggested lines of inquiries follow the definition of the Growth Question I proposed above.

4.1. What are the effects of growth and who benefits?

The political economy/ecology of growth is a fundamental area of future research in ‘agrarian degrowth’, an area that would immediately speak to both CAS and degrowth scholars. In what ways has growthism – be it neoliberal, social-democrat or communist – shaped the countryside? To what extent has it lessened/increased ‘poverty’? What kind of ‘wealth’ does it create and for whom? ‘[India’s] pattern of dazzling economic growth’, noted Walker (2008, 561), ‘has been propelled by a powerful “reinforcing mechanism” through which “inequality drives growth and growth fuels further inequality”’. Such mechanisms must be clarified in order to demystify the current common sense that growth ultimately leads to more welfare.

4.2. What are the limits to (agrarian) economies and how to deal with them?

The extractive and commodity frontiers are another big topic for research in ‘agrarian degrowth’. These frontiers epitomise the ever shifting ‘limits to growth’ and they need more theoretical and empirical investigations. Does agroecology represent a way to stay within planetary boundaries? The kind of agriculture that would match a degrowth society needs to be conceptualised more rigorously. Infante Amate and González de Molina (2013, 32) suggested a degrowth strategy for agriculture and food based on four ‘Rs’: ‘Re-territorialization of production, re-localization of markets, re-vegetarianisation of diet, re-seasonalisation of food consumption’ (see also Altieri and Toledo 2011). Gomiero (2018), for his part, argued that biotech-based agriculture such as genetically modified crops are not suitable for a degrowth society. Building on these initial efforts, research in agrarian degrowth needs to develop appropriate socio-metabolic approaches (see e.g. Padró et al. 2019), and reversely, analyses of the social metabolism must be enriched with CAS insights into its politico-institutional determinants which are often grossly under-incorporated (Gerber and Scheidel 2018). More research on the socio-political metabolism of rural systems would represent the royal road for rigorous assessments of what is possible/desirable to maintain over the long term. Giampietro and Mayumi (2015), for example, used a state-of-the-art metabolic approach to investigate biofuel production and end up with a demolition of the ambitions of large-scale biofuel production from agricultural crops.

4.3. *What are the alternatives and who will support them?*

How do social movements – agrarian, indigenous or environmental – ‘undo’ growth in practice? How do they contest (if at all) the capitalist growth imaginary? How likely are they to become the ‘natural’ allies of the degrowth movement? A systematic study of the alternative narratives and practices that emerge from these movements would be much needed (see e.g. Holt-Giménez 2010; Martínez-Alier et al. 2016; Borrás 2019).

In a world where the vast majority of those working in agriculture are ‘small’ farmers, what can degrowth learn from pre-, semi-, non- or anti-capitalist smallholders? What is the place of ‘small’ farmers in a degrowth transition? What kind of politico-institutional context would make them ‘degrowth-compatible’? (see e.g. Paech 2012). The central Kumarappan ideas of autonomy, decentralisation and simplicity are to some extent practiced in contemporary ‘community economies’ (see e.g. Gibson-Graham 2006). How and under what conditions may their successes be scaled up? And more generally, what can degrowth learn from the anthropology and history of non-capitalist and non-growing economies?

The Cuban experience with ‘degrowth’ also relates to the role of crises, which needs more attention. Crises of capitalism must be understood, as Moore (2015) emphasised, in the framework of its total conditions of reproduction, including the contradictory relations of capital and nature. Ecological crises are thus likely to also play a major role in generating alternatives. How do rural economies adapt to crises like resource depletion or recessions? ‘Involuntary declines are not degrowth in themselves, and countries in recession or depression are not degrowth experiments, unless communities make a virtue out of necessity, building low-impact livelihoods that enhance wellbeing and equality’ (Kallis et al. 2018, 302). This is an important area for further research in ‘agrarian degrowth’, with plenty of possible fieldwork sites, from Greece to Venezuela. Under what conditions do crises reinforce authoritarian populism instead of creative responses like in Cuba of the 1990s?

CAS is in a strong position to examine some of the key proposed policies for degrowth – such as those concerned with commoning, decommodification, post-extractivism and resource extraction caps, debt audit, and tax and subsidy reforms. What can we learn from past and current implementations? ‘Reclaiming the commons’, for example, is a strategic point for many land-based social movements; but to what extent do they thereby succeed in transcending capitalist relations of private property and reconnect inhabitants with their territories? If a viable post-capitalist degrowth alternative is to be organised, new ownership institutions will need to be designed (Gerber and Steppacher 2017). For Harvey (2015, 60), ‘the long-range perspective is to displace private property arrangements by greater and greater degrees of commoning [...] including in some instances the creation of alternative common property rights or even non-markets rights’. Along a similar line, Amin (2017, 156) argued that a transition to socialism requires an agrarian reform not based on standard private property. What Harvey and Amin have in mind here is the necessity to design post-capitalist ownership arrangements that do not foster the same deleterious dynamics as capitalism.

Another crucial example of degrowth policies to be investigated from an ‘agrarian degrowth’ perspective concerns the organisation of work. Reductions of working hours, in particular, are included in all major degrowth scenarios (Latouche 2009; Kallis 2018; Schmelzer and Vetter 2019). They are meant to prevent unemployment in non-growing

economies and free up time for reproductive, social, creative and recreational activities. Yet small-scale and organic agriculture typically requires *more* work (Sorman and Giampietro 2013). Woodhouse (2010, 451) summarised the issue as follows: 'While there is evidence that smaller-scale production is more efficient in terms of energy use, it generally involves lower labour productivity, and hence lower earnings, than either large-scale agriculture or non-farm work'; in this context, can small-scale organic farmers survive without non-farm activity and hence without losing autonomy? How is work to be organised in post-growth agriculture?

Finally, new (and old) values are said to be expressed in various alternative initiatives like the slow food movement, permaculture, vegetarianism/veganism, radical homemakers, back-to-the-landers, alternative conceptions of the good life, eco-spiritualities, etc. What is the broader political potential of these initiatives and movements? To what extent are they 'incubators' for further and deeper transformations, or simply the object of new forms of commercialization? Are we witnessing the uneven but overall encouraging emergence of a 'new consciousness' (see e.g. Dussel 2018) for which the current spread of authoritarian populism is just a confirmation in reverse? Can this new consciousness (revealed also in the sudden growth of environmentalism among young people, including their school strikes and mass demonstrations) come into alliance with the revival of indigenous militancy in many areas of the world around ecological and cultural issues? Values of respect for nature and sacredness of nature are frequently claimed by indigenous peoples and also by peasants. About 40 per cent of all environmental conflicts registered in the EJAtlas (almost 3000 cases by October 2019) are led at least partly by indigenous people (J. Martínez-Alier, pers. comm.). Is this new consciousness the foundation for a degrowth transition?

5. Concluding remarks

The less you *are* and the less you express your life; the more you *have* and the greater is your *alienated* life. [...] Everything which the economist takes away from you in terms of life and humanity, he replaces for you in the form of *money* and *wealth*. – Karl Marx (1988 [1844], 119, his italics)

One should distinguish between a myth as a false idea and a myth as a conveyor of symbolic meanings. Even if the agrarian myth and the myth of growth are factually untenable, they may nonetheless both symbolise very real needs to resist the alienating tendencies of capitalist modernity. The agrarian myth is a tale of lost harmony with one another and with nature, while the myth of growth could be seen as a compensation for the impossibility to 'express our lives', as Marx's quote alludes to. If this is true, then the Left should take these two myths seriously, as an unconscious expression of distress, and should gently help people see where and how these fundamental needs can be actualised in the real world. Degrowth could be a direction of choice for that.

This article argued that CAS and degrowth can enrich each other, not only in the problematization of the causes, nature and effects of capitalist growth in agriculture, but also in the empirical analyses of alternative experiences and proposals at different levels. I particularly focused on the work of one philosopher and four agrarian economists which, in my view, can show what a research and activist agenda in 'agrarian degrowth' might look like (even if these authors did not necessarily intend to do so). Simplifying their respective contributions to the extreme, one could say that Weil offers fragments of a

rooted *consciousness* for degrowth, Chayanov suggests basic elements for a degrowth *economy*, Kumarappa theorises a *governance* for degrowth, Georgescu-Roegen offers its *ecological* foundation, while Martínez-Alier provides an initial *political* subject/movement.

All five thinkers became critical of capitalism, of large-scale industrialisation and of political centralisation – but none of them became dogmatically localist or anti-technology. All five authors have been influenced by Marx – but all of them have followed their own path, often highly critical of official communist party lines. All five, except Georgescu-Roegen, have expressed anarchist sympathies. All five, except Chayanov, have praised agroecological practices and/or the ecological soundness of ‘traditional farming’. And they would possibly all five doubt that wage labourers are more easily radicalizable than smallholders when it comes to getting involved in what they regard as progressive politics.

Having said this, all five thinkers may underestimate the extent to which petty commodity producers are entrenched – consciously or not – in capitalist relations of production, for example through various forms of debt arrangements. Thirty years ago, Utsa Patnaik (1979, 1981) wrote a critique of Chayanov’s *Theory of Peasant Production* (1925) complaining that the book is blind to class relations and broader systemic considerations. She also criticised Georgescu-Roegen along the same line, and her points were largely valid as Georgescu-Roegen’s article of 1960 (that she was concerned with) is indeed weak on class. One can only regret that Georgescu-Roegen (1981) did not take the opportunity of his reply to Patnaik, surprisingly short and awkward, to agree with at least some of her points, but to add that *CAS would gain from taking ecological relations as seriously as social relations*. This would not only reinforce the critique of capitalism and the elaboration of viable alternatives; it would also help bring closer CAS and degrowth.

Acknowledgments

Thank you to Bengi Akbulut, Murat Arsel, Jun Borras, Federico Demaria, Wendy Harcourt, Shivani Kaul, Joan Martínez-Alier, Rajeswari Raina and Arnim Scheidel for numerous discussions on these questions. Three anonymous reviewers were extremely useful in sharpening the argumentation and are gratefully acknowledged. All remaining shortcomings are mine. *This article is dedicated to Joan Martínez-Alier.*

Disclosure statement

No potential conflict of interest was reported by the author.

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Julien-François Gerber is Assistant Professor at the International Institute of Social Studies in The Hague. After completing his PhD in Barcelona and postdoc at Harvard University, he lived in India and Bhutan before moving to the Low Countries. He has published on the relationships between the economy and the conditions for sustainability, flourishing, alienation and resistance. He is also interested in bridging science and activism and has been active in the degrowth movement.