



ESSAY

Caring agriculture(s) for degrowth: Against capitalist dichotomies and logic of appropriation

Na Haby Stella Faye ^a

^a Department of Human Geography, Lund University, Lund Email address: nahabystella.faye@gmail.com

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1. Introduction

Capitalist agriculture is the major driver for land-system change, as the clearance of forests for cropland and pasture use drives 80% of global deforestation. It accounts for 70% of global withdrawals of freshwater. It leads to soil, air and water pollution, and loss of biodiversity, due to the excessive flows of nitrogen and phosphorus, largely caused by agrochemicals use. It is the most significant factor behind the loss of genetic and functional diversity. It heavily contributes to climate change, emitting between the equivalent of 5.0 and 5.8 gigatons of CO2 per year in greenhouse gases, between 14 and 24% of global emissions. (Campbell et al., 2017; Springmann et al., 2018). Moreover, land use change and deforestation to obtain cropland and pastures are the primary causes for the dispossession and displacement of peasants and Indigenous peoples. This condemns communities to poverty, marginalisation and violence (Haiven, 2009; Coulthard, 2014; Federici, 2019). In turn, the removal of people from their ancestral lands causes the loss of place-based knowledge of sustainable agricultural practices and livelihoods (Chatty & Colchester, 2008; Fujikane, 2021). These are

just a few examples of the devastation caused by capitalist agriculture to ecosystems and their inhabitants.

Degrowth is an increasingly comprehensive alternative to the capitalist system, especially through the contributions of feminist, decolonial and anticapitalist thinkers (Akbulut, 2021; Dengler & Seebacher, 2019; Gregoratti & Raphael, 2019; Nirmal & Rocheleau, 2019). Given its centrality, the degrowth literature has engaged extensively with the subject of food systems, the interconnected processes and relations involving food production, consumption, sharing, distribution, disposal and governance (Vermeulen et al., 2012, p. 197). These works provide inspiring proposals and examples of food systems following degrowth principles (Fehlinger et al., 2022; Infante Amate & González de Molina, 2013; McGreevy et al., 2022; Nelson & Edwards, 2022; Plank, 2022, pp. 202-206). Nevertheless, degrowth has engaged to a lesser extent with agriculture, as a specific aspect of food production (Gerber, 2020; Gomiero, 2018, p. 1825). Moreover, this collection approach, while providing an overview of existing alternatives, often lacks an extensive critique of the capitalist and productivist agricultural system it counters. Such a critique is fundamental to avoid capitalist co-optation of the movement, and to propose a comprehensive vision for a degrowth-based alternative, for example to operate beyond the local scale and broaden its pool for transformational strategies (Guerrero Lara et al., 2023, pp. 8-9; Plank, 2022, p. 205).

In this essay, I address these gaps by engaging in a dialogue between degrowth and some authors in critical theory and eco-Marxism. The literature synthesising Marxism and degrowth is very rich and is lately becoming increasingly relevant. Many degrowth scholars have provided critiques to the capitalist system, mostly focusing on its compulsion for growth and its devastating socioecological consequences (Akbulut, 2021; Dengler & Struck, 2018; Hickel, 2021; Kallis et al., 2014, pp. 10-11; Schmelzer et al., 2022). Some scholars have employed Gramscian theory to better define the role of the state in degrowth strategy (D'Alisa & Kallis, 2020; Koch, 2022), while others have called for an eco-socialist degrowth (Akbulut, 2021; Barca, 2019; Kallis, 2019; Löwy et al., 2022). Matthias Schmelzer et al. (2022), in particular, lay out a comprehensive picture of what degrowth is in relation to the capitalist system and all the other interconnected systems of oppression, allowing for a comprehensive outline of fields of action (Schmelzer et al., 2022).

In this essay, I pick up on this method. I focus on how a structural critique of agriculture within capitalism and interrelated systems of oppression, can help in defining fields of action for a degrowth-based alternative agriculture. In the next section, I will present the theory of capitalism as an institutionalised social order and provide a critique of capitalist agriculture according to this framework. Following these reflections, in the second section I identify some priorities for a degrowth agriculture in the fields of land redistribution and regeneration, resurgence of regenerative agricultural knowledge systems, and more equal global trade relations. I conclude by summarising my argument, and by indicating care ethics and practices as a way to frame a degrowth-based agriculture.

2. Capitalist Agriculture: Dichotomies and Growth-Oriented Logic of Appropriation

In the following paragraphs, I will briefly outline my take on Nancy Fraser's (2022) theory of capitalism as an institutionalised social order. I will then explain how it defines the issues of capitalist agriculture. Capitalism as an institutionalised social order is not just an economic system or a reified form of ethical life, but something much larger (Fraser, 2022, p. 19). The functioning of capitalism relies on the institution of ontological dichotomies, enabling exploitation and expropriation out of "non-capitalist", non-economic realms, which are its conditions of possibility. These realms are social reproduction, more-than-human nature, peripheral peoples and territories, and political power (Fraser, 2022, pp. 17-20). This determines that the nature of exploitation and expropriation is not simply economic, but also social, cultural and political. Moreover, capitalist agency is characterised by a logic of appropriation. This determines the entitlement to expropriate and exploit not only the economic surplus created by labour, but also the resources coming from peripheral territories, the political realm, social reproduction and more-than-human nature (Wright, 2000, p. 10). Furthermore, capital is defined by a compulsion towards growth. As visualised in Marx's formula for the circuit of money-capital (M-C...P...C'-M'), the sole purpose of investment in production is profit. This is then re-invested in the next circuit, constituting a chain of accumulation that knows no limit (Malm, 2016, pp. 283-285; Kallis, 2019).

Thus, the distinction between "developed" core and "underdeveloped" or "developing" periphery allows for the appropriation of resources from the latter to serve the former (Dorninger et al., 2021; Rodney, 2018; Wallerstein, 1974). The duality between economy and polity determines the almost total subservience of nation states to accumulation imperatives. The gendered subordination of social reproduction to production enables the expropriation of reproductive labour, largely unpaid and performed by women. Lastly, the separation between society and nature allows for the expropriation of land and raw materials without need for replenishment. More-than-human nature is understood as a "free gift", available for appropriation for production and growth (Fraser, 2022). Capital operates through a 4-D appropriative and growth-oriented dynamic: it depends on, divides, disavows and destabilises both its economic and non-economic conditions of possibility. In fact, capitalist metabolism contains in its functioning a tendency to economic, ecological, reproductive and political crisis, what is called the second contradiction of capitalism (Fraser, 2022; O'Connor, 1988). At the same time, given its hegemonic position, the capitalist system disposes of economic and sociocultural instruments to avoid being questioned, despite its evident systemic failures¹ (Carton, 2019; Hornborg, 1992; Fisher, 2009). In the following paragraphs I outline the characteristics of agriculture within the capitalist institutionalised social order.

At the origin of capitalist agriculture, primitive accumulation out of non-capitalist realms was fundamental. Ellen Meiksins Wood (2017) argues that capitalist economic relations originated in the English countryside between the 16th and the 19th centuries, from the division of economic and political power, and the development of purely economic forms of exploitation of labour. Landowners had limited political and military power and had an incentive to pursue economic power. Indeed, the English state was relatively centralised, and provided instruments of order and property protection. Landlords rented land to tenants, rather than peasants, and rents were determined by the market to maximise profits. Thus, both landlords and tenants had incentives to increase productivity, develop commodity production and have self-sustaining economic growth. Unproductive farmers lost their lands, while many were forcefully evicted during the various waves of enclosures. Farmers no longer had access to

¹ In this essay, I will not delve into this topic, despite its incredible relevance for our current times of socioecological crisis. To explore further, see Fraser (2022), Cicerchia (2022), Malm (2020).

the means of production nor subsistence, resulting in the "triad of landlord, capitalist tenant and wage labourer" (Wood, 2017, p. 103). The division between political and economic power determined and encouraged not only land enclosures and the proletarianisation of peasants, but also an exploitative relation to agricultural land and soil, justified by the society/nature dichotomy (Fraser, 2021).

The eco-Marxist concept of metabolic rift can help us further understand the working of this dynamic (Foster, 1999; Moore, 2000). Capitalist accumulation during the industrial revolution in England required a large, concentrated mass of workers, crammed in industrial cities. Together with the process of land enclosures, and the consequent decrease in peasant population, this phenomenon intervened in the metabolic interaction between people and the land, creating a rift. People were separated from the means of production and subsistence, interfering in the relation of interdependence between humans and more-thanhuman nature, fundamental for human survival and nature's regeneration. Crops grown for profit in large estates, where soil fertility was appropriated without regeneration, travelled to towns to feed industrial workers, who generated waste. This sparked crises of soil fertility in the countryside and waste management in cities. Capitalist England dealt with the crisis in soil fertility with the appropriation of Peruvian guano, imported until its exhaustion in the 1860s, when it was substituted by Chilean nitrates and, well into the 20th century, by the increasingly available chemical fertilisers (Clark & Foster, 2009; Foster, 1999, p. 377). The economy/polity and society/nature dichotomies, together with the growth-oriented logic of appropriation of early-stage industrial capitalism, resulted in socioecological exploitation and degradation, especially in terms of land access and degradation of soil fertility. Furthermore, the protection of the economic interests of the capitalist class by political elites came to the detriment of proletarianised peasants. An additional aspect is that waged farmers living under land capitalists lost their ability to make farming decisions. This determined an additional rift "in the production and reproduction of embodied knowledge of local ecosystems and potentially sustainable agricultural practices" (Schneider & McMichael, 2010, p. 477). Thus, the loss of place-based agricultural knowledge is a crucial consequence of early-stage capitalist development.

However, primitive accumulation is both a historically contingent phenomenon and an ongoing process, essential to the exploitation of wage labour (Coulthard, 2014, pp. 9, 13; Federici, 2004; Harvey, 2003). At all stages of the process of capitalist development, the core/periphery dichotomy justified the incorporation of peripheral territories in the imperialist and later neoliberal networks of globalised trade in cash crops, and the enslavement or proletarianisation of their populations (Benegiamo, 2020; Federici, 2019; Rodney, 2018; Tilzey, 2020). The current neoliberal international order is characterised by the hegemonic imperatives of GDP growth, national debt and international financial institutions. In this context, behind apparently equal trade relations, there is a stark unequal ecological exchange in land, labour, water and raw materials, going from peripheral to core territories (Dorninger & Hornborg, 2015; Dorninger et al., 2021; Rivera-Basques et al., 2021). Peripheral territories were and continue to be bound by international financial institutions to implement structural adjustment programs (SAPs), in response to the debt crises of the 1970s and 1980s (Federici, 2000; Ferguson, 2006; Muraca, 2020). Land-grabbing and enclosures, to establish great estates for cash crop cultivation, became fundamental instruments for the implementation of the SAPs' goals, at the expense of the commons or privately owned land for subsistence production (Benegiamo, 2020; Federici, 2011, 2019; Haiven, 2009). In many instances, expropriation came to the detriment of Indigenous peoples and women. In particular, the latter have been deprived of their role as primary food producers and guardians of farming knowledge, and relegated to solely reproductive labour (Federici, 2019). This phenomenon, dependent on the production/social reproduction dichotomy, made women vulnerable to the exercise of power and violence by men. Moreover, this dynamic further fed the loss of embodied agricultural knowledge about socially and ecologically regenerative farming practices (Chatty & Colchester, 2008; Federici, 2000, 2011, 2019; Haiven, 2009).

Examples of unsustainable practices born out of these phenomena are monocropping, tillage, the commodification of seeds and the generalised (over)use of synthetic agricultural inputs (Christel et al., 2021; Ingham, 2004). These practices, that ensure the profits of agribusiness monopolies, have devastating social and ecological consequences. In particular, synthetic agricultural inputs, indispensable to continue to extract value out of impoverished soil, are often very expensive for farmers, who have to take loans to afford them. Moreover, the use

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of synthetic agricultural inputs causes excessive flows of nitrogen and phosphorus, leading to soil, air and water pollution, and biodiversity loss (Campbell et al., 2017). Similarly, when networks for non-commodified sharing of seeds are atomised by land grabbing and enclosures, the exploitation of peasants and punitive seed regulations, farmers are forced to buy seeds. In the most tragic contexts, poverty and indebtedness have caused farmer suicides, as in the case of Punjab and Uttar Pradesh post-Green Revolution (Eliazer Nelson et al., 2019; Federici, 2011, 2019; Holt-Gimenéz & Altieri, 2012; Wittman, 2009). Genetically engineered crops occupy a key role in this scenario. They are presented as a panacea for solving issues of food security, malnutrition, climate change and economic development in the so-called Global South (Dibden et al., 2013). However, breeding and cultivation of hybrid seeds entail the "misappropriation of Indigenous peoples' knowledge and biocultural resources, especially through the use of intellectual property mechanisms", a phenomenon known as biopiracy (Mgbeoji, 2006). Moreover, the large estates needed for monoculture are constituted through further land-grabbing and dispossession of peasants and Indigenous peoples, causing biodiversity loss. The widespread application genetical engineering in agriculture promotes the interests of the alliance between philanthrocapitalist foundations and agribusiness, rather than food security (Holt-Giménez & Altieri, 2012; Kumbamu, 2020; Patel, 2013).

In this section, I described how capitalist agriculture, grounded in dichotomies and a growthoriented logic of appropriation, has devastating consequences in terms of land distribution and impoverishment, deeply unequal relations of globalised trade and loss of place-based farming knowledge. In the next section, I identify fields of action to define a degrowth agriculture that can counter these phenomena.

3. A Vision for a Degrowth Agriculture

As highlighted in the previous sections, capitalist agriculture, grounded in dichotomies and driven by a growth-bound logic of appropriation, devastates livelihoods, territories, political and cultural spaces. In this section, I highlight some priorities based on this analysis, to contrast some of its devastating consequences, focusing on land redistribution and

regeneration, more equal global trade relations and resurgence of regenerative agricultural knowledge systems.

As it emerged in the previous section, the land question is fundamental. In this field, I identify two key issues. Firstly, redistribution and the democratisation of land access are key fields of action to overcome the class and political/economic dichotomies and the associated dominations. Secondly, fighting soil impoverishment requires the adoption of regenerative agricultural practices, especially to go beyond the nature/society dichotomy, and the entitlement to appropriate soil fertility and other characteristics of more-than-human nature. Both of these action fields are not new to degrowth literature, especially the latter. D egrowth has engaged with agroecology (McGreevy et al., 2022), permaculture (Leahy, 2020), and other Indigenous and decolonial farming practices that prioritise soil regeneration and that, in many instances, associate it with social and political healing (Nirmal & Rocheleau, 2019). Another crucial element to establish a regenerative relationship with the land, and free farmers from the speculations of agribusiness multinationals, is the decommodification of agricultural inputs, such as seeds, organic phytoprotectors and fertilisers (McGreevy et al., 2022, p. 1013). Examples are seed sharing and preservation networks, such as the ones put in place in India by Navdanya or in the United States by the Open Source Seed Initiative (Kloppenburg, 2014). Moreover, many rural communities are currently resisting capitalist agricultural development by trying to maintain their century-old seed sharing practices (Bezner Kerr, 2013). Furthermore, there are projects that train or favour knowledge sharing among farmers about the self-fabrication of organic phytoprotectors and fertilisers, which often also favour the social cohesion between farmers, local artisans and livestock farmers. An example is the Panafrican movement of rural women fighting for food sovereignty Nous Sommes la Solution (We Are the Solution), which has been promoting such initiatives for years, especially in the context of Senegal (Nous Sommes la Solution, 2022; Ziguichor TV, 2022).

Degrowth scholarship has engaged with the issue of land redistribution in a more indirect way, for example through calls for an alliance with the movement for food sovereignty, which centres the issue of land reform (Fehlinger et al., 2022). Land redistribution can take many forms, such as land reform at the national level or coordinated through transnational

advocacy, as in the case of La Via Campesina, but also movement driven reappropriation of land through occupations, as exemplified by the Brazilian Landless Workers Movement (Plank, 2022, p. 206; Rosset, 2011). Democratised access to land looks different in different contexts, depending on socioecological needs of communities and territories. Practical examples include land collectively owned by farmers' associations and unions, smaller parcels accessible for subsistence agriculture at the family or community level and cultivated or simply harvested non-proprietary commons, such as forests (Daněk & Jehlička, 2020; Dominguez Garcia et al., 2017; Federici, 2019; Healy et al., 2020). Land redistribution, in some instances, could also mean rewilding territories, to allow animals and more-than-human nature to re-populate their territories. Such activities can be carried in association with initiatives such as community conservation, to transcend the colonial and capitalist appropriation logic. Dispossessing peasants and Indigenous peoples to enforce the Western, colonial idea that the "Wilderness" is where there are no humans, maybe to extract profit through tourism, would definitely not promote an emancipatory future (Lenzen et al., 2022; Selwyn, 2021, pp. 799-800). Furthermore, degrowth has dedicated a lot of attention to food production within built environments, which are often food deserts. This is fundamental for the democratisation and redistribution of agricultural production, in order to heal the metabolic rift. Thus, a degrowth agriculture should continue to contribute to the regeneration of built environments through urban gardening, forestry and other forms of agriculture (Daněk & Jehlička, 2020; Dominguez Garcia et al., 2017; Leahy, 2020).

Another devastating consequence of capitalist agriculture is the loss of place-based farming knowledge. It is essential for a degrowth agriculture to provide conditions for the reconnection with ancestral farming knowledge, to heal the knowledge rift and the nature/society dichotomy. In the degrowth literature there have been calls for "repeasantisation", referring to letting already existing knowledge and practices of food self-provisioning emerge (Nelson & Edwards, 2020, pp. 7-8). I believe re-peasantisation should also entail the shift of purpose of agriculture from profit-making to nourishing communities. For this to happen, food should be decommodified and treated as commons (Vivero-Pol, 2017). Farmers and peasants are the primary holders of farming knowledge and should be regarded as the primary agents of agricultural transformation. Thus, re-peasantisation should involve farmer's collective reappropriation of the fruits of their labour, together with the

democratisation of knowledge production and decision-making regarding agricultural production (Barca, 2019). A key point is that farm labour should be recognised as both productive and reproductive, destabilising the production/social reproduction dichotomy (Pungas, 2020). Farm labour is fundamental for the subsistence and flourishing of the interconnected networks composed by humans, non-human animals, soil microorganisms, plants and minerals.

Furthermore, La Via Campesina and other movements for food sovereignty, such as the above-mentioned Nous Sommes la Solution, emphasise the role of women in the resurgence of peasant and Indigenous agricultural knowledge systems. In fact, women often occupy places of guardians and teachers of seeds, crops and agricultural practices. Women have been at the forefront of struggles over knowledge and a degrowth alternative for agriculture should definitely engage with these experiences (Federici, 2011; Nous Sommes la Solution, 2022; Shiva, 2016). At the same time, it is crucial, when talking about re-peasantisation, to avoid the romanticisation of the peasant experience, risking to end up at conservative positions, far away from the progressive and emancipatory soul of degrowth (Jansen, 2015). For example, focus should be oriented towards integrating innovations out of peasant practice and traditional academic research through a decolonial logic (Patel et al., 2020).

In the previous section, the system of globalised trade in cash crops emerged as a crucial issue to counter capitalist agriculture and promote a more just and regenerative food system. A degrowth agriculture proposal needs to address its abolishment to overcome the core/periphery dichotomy (Chiengkul, 2018, p. 89). This, in turn, requires the transformation of livestock production and consumption, especially in highly industrialised countries, given that a great portion of crop calories feed non-human animals in livestock farming (Greenpeace, 2020, pp. 11-14). Most of the degrowth literature on food systems has focused on networks bridging the gap between farmers and consumers, such as community supported agriculture, farmers collectives, etc., especially at the local level (Nelson & Edwards, 2020; Plank, 2022). These initiatives are fundamental for shortening food chains and re-localise production. Not only do they favour organic and regenerative farming practices, but they also promote the formation of stronger community ties and a participatory way of organising food

production and consumption, promoting community resilience and autonomy (Nelson & Edwards, 2020).

However, concrete proposals and strategies for the abolition of the current globalised trade system are less common. Steven R. McGreevy et al. (2022) propose a new system of international trade, where terms of trade are determined through consensus, fair distribution, social protection and capacity building (p. 1014). In order to face this issue and develop concrete action strategies, I suggest further exploring this issue through the ties that degrowth has been establishing with other movements, such as the food sovereignty and climate movement (Burkhart et al., 2022; Plank, 2022, p. 207). There are opportunities for convergence with movements like Les Soulèvements de la Terre, which has been organising peasant-driven mobilisations around climate and agricultural issues since 2021 (Les Soulèvements de la Terre, 2023). Moreover, in the summer of 2022, the German civil disobedience group Ende Gelände organised several actions targeting the harbour in Harburg, one of the biggest ones in Europe by material throughput. The aim of the actions was to protest both expanding fossil infrastructure and colonial global supply chains (Ende Gelände, 2022).

4. Concluding Remarks: Caring Agriculture(s) for Degrowth

In this essay I focused on how a structural critique of capitalism and interrelated systems of oppression, applied to the field of agriculture, can help in defining fields of action for a degrowth-based alternative agriculture. Through my interpretation of Fraser's (2022) conception of capitalism as an institutionalised social order, grounded in dichotomies and guided by a growth-oriented logic of appropriation, I identified three main issues of capitalist agriculture. These were land distribution and impoverishment, deeply unequal relations of globalised trade and loss of place-based farming knowledge. I then matched existing degrowth solutions with these issues, and highlighted areas to further entrench alliances and maybe create convergence with different movements and claims.

I would like to conclude this essay with a reflection on the role of care politics in transformative practices for a degrowth agriculture. Especially since the pandemic, there have been calls to re-centre care in our social, economic and political systems, as a way to transition to a socially and ecologically sustainable future (Feminisms and Degrowth Alliance [FaDA], 2020). The degrowth literature engaging with the concept and practice of care is incredibly rich, and reflections have been made to treat agriculture as a realm of care (McGreevy, 2022, p. 1013; Pungas, 2020). Following these reflections, I would like to point out that re-centring care directly challenges both the physical and ideological foundations of capitalism, namely dichotomies and growth-oriented logic of appropriation. Care is the ability of individuals and communities to provide the material, social, political and emotional conditions for people, other living creatures and the planet to thrive (The Care Collective et al., 2020, p. 6). It is based on ideas of interdependence and regeneration. Recognising interdependencies among humans, non-human animals and more-than-human nature is the foundation for social and ecological relations that follow a logic of regeneration.

Care can act as an anti-capitalist principle and practice through a two-fold mechanism. Firstly, the recognition and embracement of interdependencies directly challenges capitalist ontological dichotomies. Secondly, the caring logic of regeneration contrasts the capitalist growth-bound logic of appropriation. Agency is rather regulated by how much the system is able to heal and nourish its conditions of possibility. The degrowth scholarship and movement has contributed greatly to literature and practice of care-based societies, thus, I believe reflections through the lens of care are a fruitful framework to address the struggle for a degrowth agriculture.

Conflict of interest

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The authors

Na Haby Stella Faye was raised in an intercultural family in Venice and has always been interested in the relationship between humans and the environment. She felt something was really wrong, at least in the part of the world she was living in. She has a background in International Relations, with a thesis on the relations between degrowth and deforestation in Zapatista communities. She recently graduated with a MSc in Human Ecology from Lund University. She collaborates with the Panafrican movement of rural women for food sovereignty Nous Sommes la Solution (We Are the Solution). She is currently based in Venice. Her research

focuses on decolonial and feminist approaches to sustainable food systems and care-based socioeconomic systems. In her Master's thesis, she explores the relation among seed sovereignty, local knowledge systems and women's liberation in the context of rice farming in Southern Senegal. She is additionally interested in the effects of philanthrocapitalism on agricultural development in Africa and the politics of carbon capture and storage in Europe.