

Declaration

I, Antonia Kupfer, have submitted this paper on 30th June 2020 for publication in an edited volume and open access by 31th October 2020. I have been invited to submit and offered great conditions such as: double blind peer review process, no costs, no English editing, no formatting. The initial information on deadlines for submission, information on acceptance or refusal or conditional revisions and proof reading have been very tight and ambitious, but as the editors offered comprehensive support, it seemed manageable. I have met all deadlines all the time. Unfortunately, others did not. Instead of going ahead, editors decided to await. After several enquiries and no fix date for publication I decided to withdraw. While I can understand editors pressure, I do no longer want to wait. I would not have submitted, if I would have known editors' policy. Information I was given was misleading. This paper is double blind peer reviewed by two reviewers and it is reviewed by two editors. The review process improved the paper. Nevertheless, the basic arguments, thesis, ideas, perspectives of this paper never changed and have been submitted in the first submission.

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Liaison of Climate Change and Social Inequality

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1. Introduction

Over the last few years, major parts of the Amazon Rainforest have burned. Millions of hectares have been deforested and have exposed indigenous people to existential threats. Extreme amounts of floods have covered East African countries, leaving deaths, arid fields, and homeless people in rural areas. Rising sea levels impede agriculture and housing in many areas of Asia, leaving people without income. All these catastrophes are effects of climate change. They hit the utmost farmers and women in the Global South.

Climate change contains, in a nutshell, fundamental relations of social inequality such as hierarchies between the Global North and Global South and between men and women. This means that climate change and social inequality are intertwined. In order to restrict climate change, social inequality needs to be diminished. Climate change is a product of capitalism. By capitalism I refer to Marx's understanding of

capital as “a specific societal, historically developed relation of production in which the worker is stamped instantly into valorization tool of the capital”¹ (Marx [1867] 1988, p. 532). Out of a Marxist perspective, which I will follow here, capitalist societies are unequal societies. Consequently, I will argue that a transition to reduced inequality entails overcoming capitalism. Following on from this would be a restriction of climate change, which humanity and Earth urgently need. Following Arruzza (2014) in her critique of a reductionist interpretation of Marx as dealing only with economic categories, her definition of capitalism in a Marxist approach means “a living totality of social relations. Among these, we also find power relations connected to gender, sexual orientation, race, nationality, and religion, and all are put into the service of the accumulation of capital and its reproduction, but often in varying, unpredictable, and contradictory ways” (Arruzza 2014, p. 9). Later, by referring to symbolic societal relations of nature and to a couple of socially created dualisms as well as to relations between Global South and Global North I will pick up Arruzza’s argument of taking the totality of social relations into account. Thus, I will argue also for a change in society’s symbolic relations to nature by questioning dominating dualisms and material relations between world regions and nations as well as within nations. There are supporters of green capitalism and a Green New Deal, but I will argue that these suggestions fail, as they do not address the core cause of climate change, which is capitalism. Instead, proponents of a Green New Deal hold to the paradigm of economic growth that shall be realized through the invention and usage of new technologies. I will argue that degrowth would restrict climate change to a much greater extent.

This contribution aims at capturing climate change as a societal relation to violence. It is a societal relation because all members of a society are involved, although unequally, as some live at the expense of others. It is a relation of violence, as it does not only create social inequalities, but these are leading to physical and mental² injuries and deaths. This societal relation of violence extends beyond injuring human beings and includes the exploitation of non-human beings such as animals, plants, and nature³ in general. This exploitation occurs daily and materially, and it is based on a dualistic line of thought. This dualistic episteme roots in northwestern men-dominated traditions. It neglects holistic views of the world, as they are common in many indigenous communities, as for example, the Andean ones. In order to approach societies without violence and to decelerate climate change, socio-ecological transformations that transcend capitalism are required.

This paper starts with the core problem, which is capitalism, by lining out capitalism’s destructive relations with nature in Section 2. Then, in Section 3, I will explain in more detail how capitalism constitutes a basic hierarchy between the Global North and the Global South. In Section 4, I will highlight fundamental gender

¹ Author’s translation from German.

² The destruction of livelihoods is an existential threat, and people who do not deny or suppress the realization of destruction struggle with anxieties.

³ By nature, I refer to biological, chemical, and physical processes both independent from and in constant exchange with human beings and highly affected by them.

inequalities linked to capitalism, and the following Section 5 illustrates how these inequalities come together in climate change as a societal relation to violence. The final part of this chapter, Section 6, discusses the concept of degrowth as a social-ecological transformation aiming at climate justice.

2. Capitalism as a Destructive Social Relation with Nature

Different societies and economies have different relations with nature. Relations with nature always obtain a symbolic and a materialistic dimension. The ways societies conceptualize nature is an important symbolic structure and has repercussions on the material dimension. Capitalism emerged in northwestern societies during times of industrialization⁴, when the dominant world view was coined since the 16th century by seeing nature as an object that could be exploited (Merchant 1983). This perspective developed parallel to the creation of other binaries: nature versus culture, body versus mind, and men versus women were among the dominant dualisms. Former conceptualizations in which, for example, men and women were not seen as two different categories, or wherebody and minds were connected had disappeared. In addition to separating formerly related categories, dominant views imposed a hierarchy between the duos. By this, a complex world was not just reduced to binary categories, but social inequalities between the two poles were constituted. The constitution of hierarchies enabled legitimizations for domination and exploitation of the less valued category. One of these hierarchical binary categories was the separation of “nature” and “society” according to Claudia von Werlhof (1988).⁵ Nature was conceptualized as “inputs” to economic processes. In capitalist societies, bodies, and especially women, were conceptualized as nature. Therefore, the economy could be carried out by exploiting so-called natural resources—by exploiting bodies in long working hours and exploiting women in using their reproductive work without paying it. Men’s labor was paid but only to the extent they could keep themselves from being exploited further. Additionally, colonies were denoted as nature, in which robbery and slavery constituted capitalist “primitive” accumulation (von Werlhof 1988, p. 106). Binary thinking also manifested in relating the various upper categories to each other, as well as the lower-classified categories, so that an accumulation of the “positive” and the “negative” was created: Culture, mind, and men were seen as deeply interconnected, and nature, body, and women were considered as the opposite. Thus, a dynamic of reinforcement of dualistic categories occurred. These binary categories were transmitted to other social areas such as sciences and politics. Following von Werlhof (1988), this separation led to a suppression of

⁴ I am not following Wallerstein here who dates start of capitalism much earlier in times of colonization.

⁵ Jason Moore (2015) also asserts the binary between nature and society as a precondition for capital accumulation. He suggests to end the Cartesian division and see capitalism not outside nature but “as a project and process within the web of life” (p. 30). However, as Stache (2017) criticizes, in Moore’s perspective, nature loses its independency, and destruction of nature by capitalism is interpreted as a new mode of capitalism.

nature and a strict division of labor in science, supporting hierarchization in the symbolic sphere as well. With this, they consolidated a hegemonic power of dualisms in societies. In her reply to Walby's critique of feminist standpoint epistemologies, Harding (2001) offers insights into how (eco)feminist philosophy reveals the ideological structure for exploitative growth. Thus, Harding's insights extend von Werlhof's critique. According to Harding, this occurs in five ways: first, feminist standpoint epistemologies "argue that knowledge and power are internally linked" (ibid., p. 515). This implies that

any body of systematic knowledge is always internally linked to a distinctive body of systematic ignorance. [...] For example, assumptions that nature was a cornucopia, endlessly capable of serving human desires, permitted scientific questions that produced important collections of systematic knowledge but precluded asking the kinds of questions environmentalists ask today, thereby generating and maintaining vast bodies of environmental ignorance through the centuries (ibid., p. 516).

A second way of how (eco)feminist standpoint epistemology reveals ideological structure for exploitative growth is their interest "in how such knowledge [knowledge of oppressed groups] can be used to identify otherwise obscured features of dominant institutions, their cultures, and their practices" (ibid., p. 517). A third way consists of expanding "the competence of scientific methods so that researchers can detect the values and interests shared over entire social communities or even generations of them—androcentrism, Eurocentrism, race or class values and interests, as well as prodemocratic" (Harding 1991, 1998a cited in Harding 2001, p. 518). A fourth way occurs by trying "to substitute feminist values and interests not for value-neutral criteria but for those criteria or aspects of them that are androcentric and antidemocratic and that block the growth of knowledge" (ibid., p. 520), for example, the knowledge that economic growth relies on exploitation of nature. A fifth way consists of "rational decision making" (ibid., p. 523) by trying "to gather all the information and criticisms we can, we weigh these carefully, and we keep on gathering and evaluating as we go along" (ibid., p. 523) or, according to the motto of the Zapatistas, "Preguntando Caminamos". These five ways of (eco)feminist standpoint epistemologies contribute fruitfully to the "epistemological crisis of the modern West" (ibid., p. 523) and reveal capitalism as a destructive social relation with nature. In explicit ecofeminist philosophies such as Vandana Shiva (1989), feminist standpoint epistemology is reflected and carried out by arguing that knowledge of women from the Global South is to be preferred to that of Western scientists as the women obtain (greater) access to empirical data and experiences that matter for ecology.

From the more general feminist epistemology and critique of scientific theory, I turn now to specific Marxist arguments for the classification of capitalism as a destructive social relation with nature in chronological order. Marx himself described in the first volume of *Capital* (Marx [1867] 1988) how closely related the process of industrialization was with using natural energies such as wind power

(metabolism) and describes this close relation by referring to machinery. His interest in machinery is the question of the production of surplus value, which is taken by capitalists from workers whereby the social relation of inequality of two main classes is constituted. A second crucial link between capitalism and nature is the way of production, which is geared toward growth. Capitalism is geared to accumulate capital, enabling growth, which, in turn, enables further capital accumulation. In capitalist societies, companies depend on permanent growth in order to be able to compete with others and avoid being bought by other companies or going bankrupt. Permanent growth also depends on an increase in energy for production. In his chapter on the so-called original accumulation, Marx explains: “the so-called original accumulation is therefore nothing else as the historical process of divorce of producer and means of production”⁶ (Marx [1867] 1988, p. 742). The socio-economic inequality of the capitalist society has emerged from the former social and economic inequality of the feudal society by ending serfage (Leibeigenschaft), so workers no longer belonged to means of production themselves but still did not own means of production themselves. Thus, this socio-economic inequality is the fundamental condition for the reproduction of capitalism on a permanently expanding stepladder⁷. One of the major representatives of a Marxian theorization of the human–nature relationship is John Bellamy Foster (1999), who systematically revealed further important insights by classifying Marx’s theory of metabolic rift, a foundation for environmental sociology. In Foster’s reconstruction of Marx, it becomes clear that Marx related critically to industrial agriculture, loss of forests, pollution of cities, and overpopulation, by arguing for sustainability and developing a vision for future societies in which human metabolism with nature needs to be governed rationally and under collective control with lowest expenditure of energy as possible (ibid.)—a vision being adopted by social movements for climate justice, as explained below. Jason Moore (2000) ties in with Foster’s analysis of Marx’s study on the division of rural and urban areas of labor as a metabolic rift and extends the analysis by referring to Wallerstein in applying the Marxist concept of metabolism to a world-history perspective. Moore asserts that the global extension of capitalism in the 16th century also led to a reorganization of world ecology. He identifies five historical cycles of agro-ecological transformations. The last cycle started in 1950 and marks a shift from expansionist to intensification strategies. However, also this last ecological exploitation remains self-limiting, which is why Moore suggests that present ecological contradictions are rooted in the “logic of capital itself” (ibid., p. 146) closing the circle to feminist epistemologists as lined out above.

More recently, Christian Stache (2017) analyzes in detail the relation between capitalism and its relation to nature in Marx’s *Capital*. Following Stache, the overall aim in capitalist societies, i.e., to produce added value, impacts nature. Capital is related to nature in its direct exploitation and domination, using nature as

⁶ Author’s translation from German.

⁷ Critically developed further by Luxemburg ([1913] 1923), who points to imperialism and colonialization, which I will later pick up by focusing on unequal relations between the Global North and South.

available material. While productive forces develop, the destruction of nature is intensified and expanded, because nature is required for the production of an increasing number of products and means of production. Thus, nature is exploited in invasive and extensive ways. Despite nature's great ability to restore itself, there is a limit to its recovery and thus exploitation. Dietz and Wissen (2009) emphasize that what is currently perceived as natural limits are capitalistic, produced limits. Nevertheless, there are also biophysical limits as to how much society can produce before the ecological collapse. Elmar Altvater (2005) has identified this limit as one to capitalism itself. Athanasios Karathanassis (2015) differentiates between Fordist and post-Fordist relations to nature and asserts that in post-Fordist economies, information and communication technologies require much energy and produce large amounts of garbage (using nature as tap and sink). Neoliberal market-based governance enables an intensification and extension of the domination of nature.

3. Capitalism Creating a Hierarchy between the Global North and the Global South

In his book *The open veins of Latin America*, Eduardo Galeano ([1971] 1985) describes the exploitation of a whole continent from the 15th to the 20th century.

Latin America is the region of open veins. From discovery until today, *everything* has turned first into European and later into North-American capital and as such it accumulated into far-away centers of power and still accumulates. *Everything*: treasures of nature and the abilities of the population, the methods of production and the class structure of every location have been determined from outside by incorporating into the global gear of capitalism⁸ (Galeano [1971] 1985, p. 11, italics in origin).

Not only Latin America but also Africa and Asia are world regions exploited for the purpose of capital accumulation. Corporations and states in the Global North have enriched themselves by extracting gold, silver, minerals, coal, oil, gas, coltan, directly or through production. Colonialism secured the military and political dominance of Europeans in many areas of the world. Later, economic dependencies of liberated countries in the Global South continued securing benefits for the Global North. Following the UN Global Resource Outlook (United Nations 2019), extraction of natural resources increased from 27 billion tons in 1970 to 92 billion tons in 2017. "Upper-middle income economies dominate extraction of resources" (ibid., pp. 7–8).

The extraction of resources is called "plunder" by Immanuel Wallerstein ([2004] 2005, p. 28). He offers with his world-systems perspective in an analysis for the hierarchy between different regions of the world (see Moore 2000 above), and he calls core and periphery and semi-periphery that includes and extends beyond plunder. His perspective is a relational one and an alternative to the modernization theory, which assumes a rather linear path to modernity; all

⁸ Auhtor's translation from German.

countries look for in the modernization model (Coccia 2018). The object of Wallerstein's interest is the capitalist world economy. Its key characteristic ties in Marx's concept of capital accumulation, as outlined above.

For the constitution of the world regions, the division of labor is crucial. It refers to the degree of profitability of the production processes and constitutes interdependent regions. The hierarchy between core regions and peripheral regions is the constant flow of surplus value from the producers of peripheral products to the producers of core-like products. This is an unequal exchange. Semi-peripheral states have a near mix of core-like and peripheral products.

The role of each state is very different vis-à-vis productive processes depending on the mix of core-peripheral processes within it. The strong states, which contain a disproportionate share of core-like processes, tend to emphasize their role of protecting the quasi-monopolies of the core-like processes. The very weak states, which contain a disproportionate share of peripheral production processes, are usually unable to do very much to affect the axial division of labor, and in effect are largely forced to accept the lot that has been given them. The semi-peripheral states, which have a relatively even mix of production processes, find themselves in the most difficult situation. Under pressure from core states and putting pressure on peripheral states, their major concern is to keep themselves from slipping into the periphery and to do what they can to advance themselves toward the core (Wallerstein [2004] 2005, p. 29).

It becomes obvious that the status of each state depends on the status of the others. Thus, Wallerstein draws a dynamic picture of the hierarchy between states, the core ones mainly persisting to the Global North and the peripheral ones to the Global South. The main source of extracting surplus value is the low cost of salaries for workers in peripheral states of the Global South. To this, precarious working conditions add, often occurring in informal sectors, as day-laborers and in sectors of construction and tourism. Wallerstein's concept of the unequal status of countries of the Global North and Global South is supported by empirical data from household panels of more than 100 countries that Branco Milanovic (2016) analyzed. Milanovic is interested in global inequality. He asserts that "the world is unequal in a very particular way: most of the inequality, when we break it down into inequality within countries and inequality among countries, is due to the latter" (ibid., p. 132). He terms this phenomenon "The Citizenship Premium". About two-thirds of people's lifetime income depends on where they are born (as 97% of people live in the country where they are born). However, Milanovic states that this figure has changed in the last decade and dropped to the ratio in 1870. This gives rise to questions such as whether inequality within states is on the ascent (as we can observe in the Global North), which implies a more egalitarian correlation between the Global North and Global South.

4. Capitalism Constituting Gender Hierarchies

In addition to the social inequality between the Global North and South, capitalism also constitutes a relation of social inequality between men and women. Both inequalities are crucial for climate change, as I will point out below. Of course, there are many differences within the social groups of women and men in terms of income and living circumstances (e.g., Connell 1995; Hochschild 2000). Nevertheless, capitalism is a societal formation that bases on a hierarchization between men and women. Additionally, prior to capitalism, social relations between genders were unequal. Thus, capitalism emerged in a patriarchal society and continues to devalue women, as Ursula Beer (1991) describes in her historical account on the constitution of gender relations in Germany. The crucial feature of capitalist suppression of women is the assignment to work outside the production of capital (Beer 1991, p. 247). With this, women are excluded from what counts in capitalist societies: generating surplus value appropriated by corporation owners. A juridical process in which the prevailing legal situation patronizes women and denies them the status of a legal person accompanies this process of exclusion. The expulsion of women from the production of capital becomes possible by splitting off reproductive work from productive one and to relegate it to a “separate, “private” sphere, where its social importance is obscured” (Fraser and Jaeggi 2018, p. 33). Beatrice Müller (2014) puts emphasis on the process of squeezing out by explaining that the abjection of care work is a constitutive mechanism of domination in patriarchal capitalism. The abjection of care work stretches from physical care for the ones in need to mental involvement with topics of vulnerability and death. Roswitha Scholz (2011) emphasizes that value abjection (*Wert-Abspaltung*) is not simply a sub-system but constitutive for the capitalist society. She insists that the fundamental problem is not the unequal distribution of the surplus value, but the fact that in capitalism, people do not produce for immediate consumption but for the market. This affects both men and women, but women’s work, especially in the care sector, is often less gratified than men’s work. In order to prepare women and men for their different work in capitalist societies, they are socialized differently. According to Regina Becker-Schmidt (1987), modern women experience double socialization as they are prepared to work in reproduction and production. Since both areas are contradictory, women’s socialization is conflictive. They are supposed to be engaged and flexible in paid work, and at the same time, they are assigned most childcare demanding their time. Being employed part-time leads to low income and pensions—a gender pay gap through a lifetime. Women’s devaluation of work, even if it is paid, manifests also in relatively low salaries of work carried out in non-profit areas such as health. Partly, there is an alliance between capitalists and male workers in devaluing women’s work, as the former are interested in profits, while the latter, in less concurrence and unpaid care- and housework at home, as Brigitte Aulenbacher et al. (2015) point out. According to Aulenbacher (2020), the recent increase in interest in the care sector stems from its crisis and from its reorganization. Both enable an analysis of the care sector as an analysis of the transformation of capitalism.

5. Climate Change as Societal Relation of Violence

Thus far, capitalism has been identified as a major cause for climate change by its destructive social relation to nature, by its hierarchy between Global North and South, in which large extractions of natural resources occur, and by its inherent gender hierarchy in which the abjection of care work comprehends the neglect of caring for nature. In this section, I want to classify climate change as a societal relation to violence. I will point to three aspects of this violence: First, the continuity of destruction within capitalistic logic, as it could be illustrated with the trade of emission rights; second, violence as it materializes in forms of catastrophes such as hunger, and third, violence in dealing with the most affected: women from the Global South.

The trade with emission rights has been conceptualized in the 1960s and since then has been adopted by several countries. It is a market-based measure of environmental protection created by governments. Its core idea is the right to pollute. A right to pollute is closely linked to the fundamental capitalist assumption of externalization, which has a destructive relationship with nature. Chertkovskaya and Paulsson (2021) subsume similar measures such as carbon trading and biodiversity offset schemes as legalizing corporate violence. Corporate violence “refers to violence motivated or caused by material interest, profit-seeking and economic expansion” (ibid., p. 407). It often manifests in indirect and collective, thus structural, forms. However, corporative violence can also be observed in direct repression, criminalization, and violent targeting of activists, as the authors describe with examples of conflicts on dams in India. Trade with emission rights relies on the insight that pollution should be restricted, for which governments introduce caps. However, this restriction should work within a capitalist system. This offers the possibility to create profits with negotiations of emission rights, as pointed out by Carbon Market Watch (2016). Large European companies have received large amounts of free emissions allowances and sold these on an international market. Trade with emission rights is, therefore, not a rejection of but a continuity of violent relationship with nature and even an extremely tricky one, as they turn a measure intended to improve the climate into a tool of capitalization of formerly common goods such as the biosphere. Consequently, tipping points are created that obtain a dynamic power in themselves, independent from human activity. One of the tipping points is climate change, bringing with it catastrophes such as droughts, floods, and hunger, on which I will focus now.

These catastrophes are extremely violent in the way that they pose an immediate threat to the survival of humans, animals, and plants. In 2021, worldwide hunger increased, and climate variability and extremes have been identified, next to conflicts and economic slowdowns and downturns, as the major reasons for hunger (FAO 2021). According to Parry et al. (2009), the most affected are regions in the Global South, mainly Africa and Asia. FAO (2021) shows the gender hierarchy in food insecurity being globally and in every region higher among women than among men.

Direct links between environmental pressures and gender-based violence are reported (Castañeda Camey et al. 2020). For example, armed forces have deployed violence against women to ensure large-scale infrastructure projects for extractions and pressure local communities. Jeannette Cwienk (2020) reports on increased rape, domestic violence, and forced marriages as consequences of climate change.

Understanding climate change as a societal relation of violence urges the necessity to mitigate climate change. This calls for a socio-ecological transformation that extends beyond market-based tools. Therefore, I will turn to the concept of degrowth in the next section.

6. Conclusions: Degrowth as a Social-Ecological Transformations Aiming at Climate Justice

In this final section, I want to argue for an alternative way to capitalism by referring to degrowth as a social-ecological transformation aiming at climate justice. My argumentation opposes The European Green Deal, as passed by the European Union in December 2019, as it explicitly adheres to the aim of economic growth. It believes in technologies' ability to enable climate-neutral production of energy, products, and thus, wealth. It aims at a new capitalist accumulation regime without fossil resources. According to Pasi Heikkurinen 2016, "economic growth is the main cause for ecological destruction" (p. 9). Consequently, Robra and Heikkurinen (2019) argue that sustainability cannot be based on further economic growth, and a counter-hegemonic discourse on capitalism is needed. An example of a counter-hegemonic discourse is the social movement toward degrowth. It offers insights into how an alternative to the current capitalist system causing climate change could manifest as. By degrowth, I refer to a definition suggested by Kallis et al. (2018) stating,

Degrowth is a new term that signifies radical political and economic reorganization leading to drastically reduced resource and energy throughput. Related scholarship critiques the ideology behind the dogma of economic growth; contributes to documentation of negative material, social and ecological effects of growth; and assess alternatives to growth-based development (p. 1).

Thus, on a symbolic level of social relations toward nature, degrowth aims at sustainability. Together, symbolic and material levels of degrowth aim at climate justice, a social system of equality between humans around the globe. I will start with a brief description of alternative relations toward nature and tie it in with a sketch of alternative relations between humans, drawing to the concept of commons as an important part of degrowth.

The idea of sustainability contains the recognition of human dependency on nature and the limits of nature. In contrast to a dualistic view on nature as something to be endless and exploitable, humans have to take care of nature, which includes not extracting that could not be regenerated. Following the insight of being part of nature, and not opposed or independent of nature, enables, for example, a

perspective on water as an articulation of life to be accessible for everybody, as claimed by indigenous people. Here, a material level ties in immediately, because the recognition of indigenous people could help to achieve a protective relationship with nature as their ways of living contain principles of reciprocity and coexistence with plants, animals, rivers, mountains, etc. that means equilibrium. Recognition of and material rights to indigenous people would be one important element in a socio-ecological transformation for climate justice. Importantly, Eduardo Gudynas (2016) alerts to an instrumental usage of indigenous practices such as the *cha'lla*, a thanksgiving to Pachamama (Mother Earth) for legitimizing the extraction of oil, as carried out by the Bolivian president Evo Morales in 2015. Gudynas' analysis and critique of several left-wing governments in South America call for more in-depth studies. However, the Andean concept of *sumak kawsay*, of a good life, could serve as a normative point of reference for a solidarity way of living, according to Brand et al. (2017), without the destruction of biophysical foundations of life. I suppose its main power lies in its counter-hegemonic content to the current mainstream of growth. Ecofeminists such as Maria Mies (1986) have tied into indigenous perspectives and suggested as fundamental aim for future societies the creation and maintenance of life. Mies (1995) insisted on the interconnectivity of all life in her concept of subsistence. Her subsistence perspective does not mean that everybody should plant their own fruits and vegetables, but that the overarching aim of life, instead of capital, leads to economic activities that rely on constructive relations to nature and between people. Basic democracy is one cornerstone and dichotomist thinking between life-creating and product-creating activities should be abolished. Mies calls for a holistic paradigm in science and for the reintegration of culture and work, of mind and material. Ariel Salleh ([1997] 2017) coined the term "meta-industrial labour" as a strategic tool to address work inside and outside capitalism that "keeps 'metabolic value' or ecological integrity intact" (p. 306). According to Salleh (2015) "What the global North can learn from the global South—and from its own domestic periphery—is that meta-industrial labour is a tacit 'sustainability science', an economic episteme, able to provision humans in reciprocity with nature without displacing costs on to others" (p. 53). Salleh brings together eco-socialist, feminist, and decolonial perspectives that aim at a socio-ecological transition of societies globally. A way forward to such societies are the creation of commons as Silvia Federici ([2013] 2019) suggests. By commons, she refers to new modes of production, shared property to be used by everyone, not for sale. According to Helfferich and Bollier (2015), "commons and degrowth are complementary to each other" (p. 105). Commons do not need economic growth and have the potential to undermine fundamental pillars of capitalism. Kostakis et al. (2016) point to the possibility to integrate global design and local manufacturing of commons. In an empirical study, Robra et al. (2020) found that if peer production is commons-based, it is a part of degrowth if organizations are explicitly oriented toward eco-sufficiency. A year later, Robra et al. (2021) added that "a strong awareness of the contradiction of CBPP [Commons-Based Peer-Production] in the capitalist system and the aim to shift societal structures helps to survive this contradiction and align with degrowth counter-

hegemony simultaneously” (p. 363). Commons are social relations, practices, and work based on established regulations, which require community. The concept of commons develops as a collective subject. Environmental activists in Germany build on Federici’s concept of the commons in their concrete call to the socialization of energy producers, which they consider as relevant for ecology (Linda and Theresa 2019). They insist on the difference between socialization and nationalization, as the latter contains the danger that the aims of energy production for growth and profit maintain. In contrast, socialized energy production relies on democratic processes of negotiations. Here, the principle of subsidiarity could emphasize self-determination on local levels. Nevertheless, this should be embedded in an overarching negotiation on social and ecological aims and criteria of society. Socialization, too, is oriented toward an economy that serves to satisfy the needs of the majority and not raise profits for a small minority. Degrowth movements emphasize reproduction, the redistribution of income and capital, and regionally embedded economic circulations. According to Barbara Muraca (2019), degrowth refers to the feminist critique of the gross domestic product as a monetary indicator for growth and the mainstream belief that growth stabilizes societies, which the European Union shares. She points to the hegemonic creation of the meaning of growth in coining patterns of recognition and needs. Muraca follows Bloch in calling for a concrete utopia, imaging real possibilities as something already lying dormant in our world. Utopia creates an education of desire—motivating people to start with social-ecological transformations wherever they are. Commons-based peer production, meta-industrial labor, recognition of and material rights to indigenous people are already steps of a radical political and economic reorganization toward climate justice. Therefore, to conclude, the paradigm of degrowth comprehends these steps, and with it, a decolonial and feminist socio-ecological transition aiming at coexistence with nature without destruction.

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