Overconsumption as Ideology Implications for Addressing Global Climate Change

Diana Stuart, Ryan Gunderson, and Brian Petersen

Abstract: In response to climate change projections, scientists and concerned citizens are increasingly calling for changes in personal consumption. However, these calls ignore the true relationship between production and consumption and the ongoing propagation of the ideology of overconsumption. In this article, we draw from Western Marxist theorists to explain the ideology of overconsumption and its implications for addressing global climate change. Drawing from Herbert Marcuse and Guy Debord, we illustrate how production drives consumption, how advertising promotes false needs and excess, how these power relations are concealed, and how they undermine social and ecological well-being. Specific to climate change, continued widespread support for increasing levels of production and economic growth will undermine efforts to reduce carbon emissions and limit global warming. Given the relationships between production and carbon emissions, effective mitigation efforts will require significant systemic changes in work, production, consumption, advertising, and social norms.

Keywords: advertising, climate change, consumption, degrowth, economic growth, production, work

In October 2018, the Intergovernmental Panel on Climate Change (IPCC) released a special report stating that "rapid, far-reaching and unprecedented changes in all aspects of society" are necessary to keep Earth's average surface temperature within 1.5 degrees Celsius above preindustrial levels (IPCC 2018). This resulted in copious news articles and opinion pieces discussing what needs to be done to heed the IPCC's call. Many of these articles focused on changing individual behavior, specifically in terms of personal consumption. For example, a CNN article highlighted "what consumers can do," listing changes in personal transportation (e.g., buy a hybrid car) and housing (e.g., buy a more efficient air conditioner), among others (Mackintosh 2018). However, these "solutions" overlook how increases in efficiency are in many cases offset by increases in consumption (York et al. 2011; York and McGee 2016). This suggests that it is not only what we buy that matters but how much of it. Some authors, such as Stephen Leahy (2018) in



National Geographic, acknowledged this, arguing that reducing material consumption would reduce greenhouse gas (GHG) emissions. This is rational given the evidence showing how the production of material goods translates into GHG emissions (Burke et al. 2015; Jorgenson and Clark 2012; York et al. 2003). However, all of these solutions focused on consumption choices involve a critical assumption: that consumption drives production.

Does consumption drive production? Neoclassical economics portrays production as responding to consumer demand—that there is "consumer sovereignty." However, as illustrated by Allan Schnaiberg (1980), evidence contradicts this relationship and supports the Marxist notion of structured consumption, where the profit-seeking behavior of firms drives increases in production and, secondarily, workerconsumers play a key role in keeping aggregate consumption high to maintain the growth of the economic system. He explains that consumption "cannot be treated as independent of the changing structure of producer power and producer technology," and therefore there are "limits to a consumption oriented environmental reform policy" (ibid.: 161). Schnaiberg (ibid.: 192) concludes his analysis by stating that "consumption cannot be the leading factor in the expansion of production. Increased consumption may permit expanded production, but it does not generally cause it."

Scholars before Schnaiberg (ibid.) reached the same conclusion. Contradicting the economic theory that "it is the marginal *consumer* who determines the direction of production," Max Weber (1978: 92) argued that "given the actual distribution of power, this is only true in a limited sense for the modern situation. To a large degree, even though the consumer has to be in a position to buy, his wants are 'awakened' and 'directed' by the entrepreneur." In his popular book *The Affluent Society*, John Kenneth Galbraith (1958: 136) famously put forth his notion of the "dependence effect," which posits that increased consumption is driven by increased production and the artificial desires created through advertising: "wants thus come to depend on output." A more precise way to model the relationship between production and consumption in capitalist societies was abridged by the Marxist economist Anwar Shaikh in a recent interview:

firms engage in production (create supply) on the basis of short-term profitability. To produce, they must buy raw materials, hire workers, purchase investment goods, and distribute dividends and interest to their owners and lenders. So profit-based decisions to create supply generate the demand for raw materials, and through the payments of wages, dividends, and interest, generate the consumption demand. At the same time, long-term profitability regulates investment demand. In other words, profitability regulates both supply (production) *and* demand. (2020: n.p., emphasis in original)

The subjective aspect of this profit-mediated relationship between capitalist production and consumption was described well by the Marxist phenomenologist Enzo Paci:

In an affluent society . . . men become consuming animals or a *commodity which consumes* those commodities that abstract capitalism needs to have consumed. From the very beginning, capitalism has put aside use-value in order to produce commodities needed not by consumers but by exchange-value. . . . The [consumer of the affluent society] is forced to become a machine for preestablished consumption. Eventually, he spontaneously desires what capital wants him to desire, even alienation, on every level of life. (1972: 436–437, emphasis in original)

Given this relationship, the critical questions become how does a person unknowingly become a "commodity which consumes" and why do many people continue to believe they wield the power to address climate change (and other issues) through their consumption choices? In addition, how is that people do not recognize that widespread over-consumption,¹ perpetuated by overproduction, is the root driver of global climate change?

Exploring these questions illustrates the importance of ideology. While ideology is often used in the generic or neutral sense of being related to ideas, beliefs, and worldviews, we draw from Marx's "negative" conception of ideology and focus on ideas and practices that conceal systemic contradictions (Larrain 1979, 1983). Marx and Engels (1977) famously argued that social problems do not result from the wrong ideas, but that a distorted consciousness, or a "false consciousness," results from a contradictory reality, or, more specifically, ideology's center of gravity is in taken-for-granted practices structured by institutions, and this social reality conditions, and gives context to, ideas and beliefs.

The Marxist conception of ideology has been applied primarily to explain why workers willingly accept an alienated existence, involving low wages and demeaning work, rather than revolting to create a system where they can have a liberated and satisfying existence (Langman 2015). Because we live in an "upside-down world" (Marx 1981: 969), our seemingly "immediate" understanding of reality is often based on ideological assumptions (Marcuse [1964] 2013). For example, ideology affirms the existence of a historically contingent and exploitative

organization of labor as natural and normal: "A fair day's wage for a fair day's work" (cf. Marx 1976: 675–676; Larrain 1983: 127–128). The ruling class, benefiting from the labor of others, perpetuates ideas that mystify, elude, and deceive workers into falsely believing that they benefit from the current system, can move up in the system, and have freedom in the system, as well as that no other system is possible. As described by Herbert Marcuse ([1964] 2013: 145), this represents a "false conscious-ness responding to and contributing to the preservation of a false order of facts."

Similar ideologies serve to create the worker-consumer of monopoly capitalism, who has become essential for sustaining high rates of production and economic growth. Raoul Martinez (2017) describes strategic decisions aimed to create worker-consumers. For example, following industrial disputes in 1919 and a surge in socialist and anarchist supporters, US industry leaders decided to reduce the chances of a worker rebellion by giving workers increased wages, bank credit, and more leisure time—all for the purpose of encouraging increased rates of consumption. They believed increased consumption would more than offset increased wages and would serve to pacify workers, distracting them with material pursuits and deterring labor rebellions. In this way, workers are made into "a commodity that consumes"—a key cog keeping the treadmill of production increasing in scale and speed (Schnaiberg 1980). Their unknowing work to keep the treadmill going depends on a lack of consciousness about their role. But how is it that individuals do not recognize how they are being used for this purpose?

Ideology conceals the role of the consumer and the drivers of overconsumption. Producers (capitalists/owners) rely on consumers for increasing economic growth and use ideology, primarily communicated in the form of advertising, to create willing subjects. These subjects keep consuming because they believe increasing consumption results in increased happiness, consumption is part of the "good life," consumption relates to their identity and status, and they "need" certain commodities to address dissatisfaction. In addition, the message that consumers have total freedom and power in their consumption choices supports the notion of "voting with your dollar" and addressing problems through changing consumption patterns. Thus, consumption becomes the answer to many social issues and a convenient answer for those profiting from increased consumption. This relates to environmental issues including climate change, where consumeroriented approaches do little to address the ongoing production driving us toward ecological collapse. These messages continue to conceal

that capital is perpetuating overconsumption for the irrational end of self-accumulation, keeping consumers on the treadmill of consumption to reap increasing profits.

Before outlining the article, we clarify two points to avoid misunderstanding. First, we agree that societies must strive for "sustainable consumption" (Lorek and Fuchs 2013), yet we identify how this goal relates to changes in production. One goal of this project is to *explain* overconsumption so it is not interpreted as an independent problem disconnected from the larger political-economic system. Second, we are primarily interested in the structural drivers underlying overconsumption in overdeveloped countries among skilled, blue-collar, and "middle"-class worker-consumers (e.g, professionals and managers), as well as the corporate and ruling classes. We do not conceive of overconsumption as a blanket problem, seeing as much of the world is in dire need of *more* consumption. Yet it is a problem in overdeveloped countries, where most of the consumption of material and energy resources is to satisfy unnecessary wants.

These relationships demand a deeper examination, especially in terms of climate change. In this article, we illustrate how theorizing overconsumption as an ideological form helps us to understand how contradictions are concealed, who benefits and who loses from contradiction concealment, and why people are not resisting the system driving us toward ecological collapse. Our primary contribution is revisiting, integrating, and updating an old line of thought-Western Marxist analyses of the relation between production and consumption in late capitalist societies-in order to shed new light on a contemporary issue, that is, the problem of overconsumption in the face of climate change. To understand overconsumption as ideology, we first examine the work of midcentury Western Marxist theorists who witnessed the rise of consumer culture. These theorists clearly identified and articulated overconsumption as an ideological form. We then turn to the ideology of overconsumption today and relationships to climate change. Last, we discuss how production and labor could be transformed, along with advertising, to create a society that produces less yet is more rational and liberated. By addressing the drivers of overconsumption, society would have a better chance of keeping global temperatures within the IPCC's 1.5 degrees Celsius limit.

Overconsumption as Ideology

The Western Marxist Thesis

No intellectual tradition has done more to connect consumerism to ideology than "Western" or "critical" Marxism, which, when compared to Soviet or "scientific" Marxism, is usually more attentive to subjectivity, the process of social reproduction, ideology, and culture, more open to "bourgeois" thought (e.g., Nietzsche, Freud, Weber), more pessimistic, more Hegelian, more philosophical, and less deterministic (Anderson 1976; Gouldner 1980; Jay 1984). A common focus in this tradition is how the domination of exchange value over use valueroughly, how the imperative to produce for profit making is antithetical to the qualitative, concrete utility of material things rooted in authentic human needs and wants-has extended into leisure, private life, and the public sphere in monopoly capitalist societies via advertisement and mass media, thereby pacifying workers with cheap enjoyments and even structuring perception and cognition. This transformation of consumption, in relation to larger changes in the structure of capitalism, was a central concern of the Frankfurt School, including Herbert Marcuse, Max Horkheimer, and Theodor W. Adorno (for a review, see Kellner 1983), as well as the French Marxist and Situationist Guy Debord.²

In addition to Horkheimer and Adorno's (2002) notion of "the culture industry," which uses "image and spectacle to manipulate people into social conformity and into behaving in ways functional for the reproduction of capitalism" (Kellner 1983: 67), we principally draw on two concepts from this line of thought that help to illustrate consumerism as a form of ideology in the wider context of social structure: Marcuse's "false needs" and Debord's "spectacle" (for comparisons of Debord's spectacle thesis and the Frankfurt School's critical theory, see Gotham and Krier 2008). Next, we briefly summarize the concepts of "false needs" and the "spectacle" in terms of their role in driving overconsumption and then more broadly to explain how overconsumption as ideology is created and reinforced in society.

Marcuse's "false needs" refers to needs "which are superimposed upon the individual by particular social interests in his repression" (Marcuse [1964] 2013: 5). Although the notion of false needs, because it is contrasted with "true needs," has been criticized for its elitism and universalism (for review, see Fitzgerald 1985), the concept sheds light on the external, manipulative, and structurally necessary *expansion* of desires characteristic of monopoly capitalism, a form of social control that perpetuates growth and the existing social order. Marcuse argues that the vast majority of modern consumption takes place to satisfy manufactured false needs. Critical to this argument is how the expansion of needs "perpetuate a system whose continuation impedes the fulfillment of individual and social needs and potentials" (Kellner 1983: 68).

Debord's "spectacle" refers "to the vast institutional and technical apparatus of contemporary capitalism, to all the methods power employs, outside direct force, to relegate subjects to passivity and to obscure the nature and effects of capitalism's power and deprivations" (Best and Kellner 1999: 132). The two arenas commonly associated with the spectacle are mass consumption and mass media. It is difficult to disentangle the media from "consumer culture," as images are usually commodities and commodities are peddled through images. For example, the distinction between news and entertainment is indistinguishable or, at best, fuzzy in an "infotainment" society (Kellner 2003). Further, the effects of the spectacle in these two arenas are interrelated:

The spectacle is the notion that all human relations are mediated by images from advertising, film and other sections of the mass media, driven towards controlling people's activities and consciousness. The need for the production and consumption of commodities (both material and cultural) is ensured by the reign of the spectacle, which is the enemy of a directly-lived and fully human life. (Barnard 2004: 106–107)

Indeed, Debord (1983) describes the spectacle as "the moment when the commodity has attained the *total occupation* of social life" and a "permanent opium war which aims to make people identify goods with commodities" (§§42, 44, emphasis in the original; see also §§65–69). The spectacle "sings the praises . . . of commodities and their passions" (§66).

Below we outline the ideology of overconsumption as described primarily by Marcuse and Debord, but also draw from Horkheimer and Adorno's (2002) critique of the culture industry. We draw from these authors' work from the 1940s to the 1960s, as they were witnessing changes in production, consumption, and advertising that illuminated how overconsumption ideology was becoming a powerful and dominating force in society. Below we describe key components of this ideology and how it is propagated. We will briefly outline (1) why capitalist production requires increasing consumption and consumers; (2) how media and advertising promote increasing levels of excess consumption to benefit the ruling class; (3) how this strategically manufactures false needs and overconsumption; and (4) how increasing overconsumption

undermines social and ecological well-being while simultaneously deceiving worker-consumers, suppressing consciousness and power.

Articulating the Ideology of Overconsumption

Capitalist production requires and therefore creates increasing rates of excess consumption. While the standard explanation is that production increases to meet the needs of consumers, "in reality, a cycle of manipulation and retroactive need is unifying the system ever more tightly" (Horkheimer and Adorno 2002: 95). Without increasing levels of consumption, "the established mode of production could not be sustained" (Marcuse [1964] 2013: 246). To support capitalist production, the individual must become a consumer who buys more and more, "redefined by the rationality of the given system" (ibid.: 12). As explained by Horkheimer and Adorno (2002: 106),

the consumers are the workers and salaried employees, the farmers and the petty bourgeois. Capitalist production hems them in so tightly, in body and soul, that they unresistingly succumb to whatever is proffered to them.

In this way, the individual is transformed into a consumer who helps to perpetuate the capitalist system and the "[m]odern economic production extends its dictatorship extensively and intensively" (Debord 1983: §42).

To increase rates of consumption, media is harnessed to advertise goods and create false needs. Through advertising, individuals are subjected to the "manipulation of needs by vested interests" and instructed "to behave and consume in accordance with the advertisements, to love and hate what others love and hate" and to fulfill "false needs" (Marcuse [1964] 2013: 3, 5). Similar to Marcuse's description of false needs, Debord (1983: §51) discusses the propagation of "pseudo-needs," which serve to increase wealth for the ruling class: "the satisfaction of primary human needs is replaced by an uninterrupted fabrication of pseudoneeds which are reduced to the single pseudo-need of maintaining the reign of the autonomous economy." Debord (ibid.: §67) describes how advertising creates consumer celebrities, displaying "enthusiasm for a given product, supported and spread by all the media of communication." The line of one-way communication through advertising becomes a force of widespread deception, where "every new lie of advertising is also an avowal of the previous lie" (ibid.: §70). Advertising changes individuals' perceptions of themselves and their status, compelling them to buy products to address their dissatisfaction, and "dissatisfaction itself

becomes a commodity" (ibid.: §59). Even when individuals know they will not be fulfilled, they still consume: "the triumph of advertising in the culture industry is that consumers feel compelled to buy and use its products even though they see through them" (Horkheimer et al. 2002: 167). The widespread propagation of false needs increases wealth for the ruling class, and advertisements serve to "mediate between the masters and their dependents" (Marcuse [1964] 2013: 85). False needs are repressive, and overconsumption has become part of, and reproduces, the "material base of domination" (ibid.: 246).

The deceptions of false needs also relate to false notions of freedom and attaining "the good life" (ibid.: 49). While "the good life" is about freedoms, these are "deceptive liberties [such] as free competition at administered prices, a free press which censors itself, free choice between brands and gadgets" (ibid.: 7). This false liberty hides the repressive domination of the ruling class. Debord (1983: §§47, 48, 56) describes this deceit as the "consumer illusion," living a "counterfeit life," and a "spectacular sham." Freedom is an illusion and "false choice is in spectacular abundance" (ibid.: §62). Buying more or different things also offers "false models of revolution to local revolutionaries" who believe that through their purchasing choices they can change the world. The lie that consumers are free and can attain "the good life" results in false notions of satisfaction and a "pacified existence" (Marcuse [1964] 2013: 242). However, "the good life" always remains out of reach, as "the culture industry endlessly cheats its consumers out of what it endlessly promises" (Horkheimer et al. 2002: 111).

While this deception goes unnoticed by the majority of people, they unknowingly feel its impact. Most people "cling to the myth of success" and "insist unwaveringly on the ideology by which they are enslaved" (ibid.: 106). As Marcuse ([1964] 2013) explains, overconsumption becomes a way of life, a part of personal identity, and a sign of success. It is no longer questioned, and "the result is the atrophy of the mental organs for grasping the contradictions and the alternatives" (ibid.: 79). Unfortunately, Marcuse explains, the nourishment from increasing unnecessary consumption is not the same nourishment required by the human soul. This results in what Debord (1983: §42) calls "alienated consumption." Living for consumption, as opposed to consume in order to live, degrades our lives and produces isolation. The consumer accumulates "alienated products" and ultimately "feels at home nowhere" (ibid.: §§31, 30). In this way, Debord (ibid.) explains, overconsumption creates alienation and misery. The consumer is alone, surrounded by alienating products, and is imprisoned by the spectacle.

The ideology of overconsumption masks the irrationality of the capitalist system of never-ending production, consumption, and destruction. As Marcuse ([1964] 2013: 52) explains, "the insanity of the whole absolves the particular insanities and turns the crimes against humanity into a rational enterprise." He further explains that truly rational responses would be to refuse to cooperate in the cycle that continues to result in negative outcomes. Similarly, in his essay titled A Sick Planet, Debord ([1971] 2004) specifically addresses the environmental impacts of this irrational system. Years before climate change became a prominent environmental issue, Debord (ibid.: 85) claims that capitalist production is now in "its final stage" and "what is now produced, directly, is death." He discusses the helpless role of scientists, studying ecological destruction while powerless to change the system, and concludes by stating that "the slogan 'Revolution or Death' is no longer the lyrical expression of consciousness in revolt: rather, it is the last word of the scientific thought of our century" (ibid.: 93; emphasis in original).

Overconsumption Today

Marcuse and Debord, writing in the middle of the century, clearly articulated the ideology of overconsumption that has now grown to become so ubiquitous and normalized that it is largely invisible in today's society. While there are numerous books and articles documenting the extreme levels of consumption today, here we briefly describe recent trends, focusing on the United States—arguably the global leader in overconsumption and propagating the ideology of overconsumption and then direct our attention to the implications for climate change.

Over the twentieth century, as they increased their disposable income, American families spent a larger share on luxury and what Clair Brown (1995) calls positional goods: those material items purchased as a means to mimic the spending of wealthier families. The US now has more cars than licensed drivers (Worldwatch 2018), and since 1973, US homes have increased in size from 1,660 to 2,740 square feet on average (HUD 2015), despite having fewer people per household. Credit card debt in the US has reached the highest level ever, with the average household owing \$16,883, and total credit card debt in the US is over \$1 trillion (Dickler 2018). Increased spending on unnecessary items and the spread of "conspicuous consumption," as Thorstein Veblen (1912) called it, has been largely driven by advertising. In the US, total expenditures on advertising have risen to over \$240 billion annually, up from \$180 billion in 2015 (Statista 2019). Not only has advertising greatly increased in recent decades, but public policies have shifted, enabling greater advertising reach. For example, in 1984 the Federal Communications Commission removed limitations on advertising to children, and in 1988 President Reagan vetoed a bill that would have reinstated them (Molotsky 1988). Child-directed advertising is ubiquitous (Schor 2014). This advertising furthers the fulfillment of false needs while bringing more US citizens into debt and unhappiness.

Material wealth has raised standards of living, but not necessarily well-being. Studies have shown a negative correlation between consumption and well-being (Lee and Anh 2016). The proportion of house-holds with two incomes has increased in the US, with measurable increases in consumption, but this has also led to decreased leisure time and increased economic insecurity (Schor 1998). People focused on materialism have a lower quality of life (Shaw 2002) and increased levels of envy and a sense of inequity, leading to anger and dissatisfaction (Sirgy 1998).

Overconsumption in the US has direct and indirect impacts on climate change. The US is responsible for less than 5 percent of global population but uses a quarter of global fossil fuels (Worldwatch 2018). It should be noted that not all US citizens use fossil fuels equally: Thomas Piketty and Lucas Chancel (2015) estimate that Americans in the top 1 percent income bracket emit over 300 metric tons of carbon dioxide equivalent per capita, compared to 20 metric tons for the average North American and well above the 6.2 global average. This fossil fuel use, along with the growing levels of energy and materials used to support the "American lifestyle," results in increasing levels of GHG emissions and the intensification of the impacts of climate change. As other countries increasingly attempt to emulate the "American lifestyle," these trends in production, consumption, and GHG emissions continue to spread globally (Worldwatch 2018).

Production, Consumption, and Climate Change

At the 1992 Earth Summit, former US president George H. W. Bush declared, "The American way of life is not negotiable" (quoted in Martinez 2017). This quote exemplifies the US response to climate change, which has included a strong and successful resistance to any policies that might reduce production, consumption, and economic growth.

Economic growth became an overt policy priority for the US starting in the 1950s (Victor 2010). This growth is measured by the gross domestic product (GDP), which adds up the market value of all goods and services produced. GDP in the US has increased on average about 3 percent each year since World War II.

However, GDP has been identified as a highly problematic indicator of progress and well-being (Victor 2010). Several key issues with GDP have been identified: it does not distinguish between costs and benefits; it only includes flows of money, not stocks of resources; it fails to include activities with no market value; and it does not provide information on how wealth is distributed (O'Neill 2011). Alternative indicators have been created that take these issues into account, such as the Index of Sustainable Economic Welfare (ISEW) and the General Progress Indicator (GPI). Applying these indicators illustrates how GDP growth can continue to increase while the ISEW or GPI level off or even decrease (Daly 2013). In other words, increased production does not translate into increased social well-being. Richard Easterlin and colleagues (2010), among others, have shown that economic growth that goes beyond satisfying basic needs does not lead to increased happiness. Daniel O'Neill (2011) argues that GDP is a "quantitative abstraction" that undermines qualitative goals, such as social and ecological well-being.

A critical relationship, in terms of climate change, is that GDP is an index of production and is also our best index of total resource throughput; therefore, increasing GDP translates into an increase in energy and material use (Daly 2013). Data illustrates a positive relationship between GDP and GHG emissions (Dietz and Rosa 1997; Jorgenson and Clark 2012; Stern 2006; York et al. 2003). This makes sense since GDP correlates with material production, including carbon: globally, a GDP growth of 1 percent equals a 0.6 percent growth in material use (Wiedmann et al. 2015, cited in Kallis 2017), and a 1 percent increase in GDP equals a 0.5–0.7 percent increase in carbon emissions (Burke et al. 2015, cited in Kallis 2017). Two climate scientists, Kevin Anderson and Alice Bows (2011, 2012), conclude that reductions in economic growth are necessary to effectively address climate change. In other words, the reductions in GHG emissions necessary are not only incompatible with continued economic growth but demand that we reduce growth below current levels. As described by Samuel Alexander (2014), to stay within the carbon budget wealthy countries must cut carbon emissions by 8-10 percent a year over the next few decades, a task

that will *require reducing production and consumption*. In other words, decarbonization requires shrinking total resource use.

In order to reduce GHG emissions and stave off catastrophic climate change, production and consumption must be reduced below current levels. This makes sense in terms of "ecological overshoot." Our current use of natural resources and energy already surpasses biophysical limits (Daly 2013; Jackson 2009); therefore, overdeveloped and overconsuming societies must contract their economies. Without this contraction, the economy is likely to collapse due to the contradiction of continually increasing production on a finite planet (Schmelzer 2016). Based on the biophysical limitations of Earth, Timothy Jackson (2009) argues it is not a matter of *if* the economy will contract but *when*. It can happen by choice through new priorities and policies that guide a transition, or it can happen due to catastrophic environmental crises. Ted Trainer (2012) similarly states that global society has overappropriated resources and that a transition away from growth is inevitable.

However, as demonstrated through decades of climate change denial campaigns and opposition to environmental regulations, there exists a powerful ruling class resisting anything that might reduce increasing levels of production and profit. In addition, most people (especially in the US) accept and normalize the prioritization of economic growth. As stated by Jackson (2009: 5), "Every society clings to a myth by which it lives. Ours is the myth of economic growth." As ecological economist Herman Daly (2013: 24) explains, it is largely believed that "without economic growth all progress is at an end." He counters this belief by asserting that "on the contrary, without growth ... true progress finally will have a chance."

Given the relationship between material production and GHG emissions, society will not be able to stay within the 1.5 degrees Celsius target without addressing overproduction and consumption. While most scenarios in the IPCC special report (2018) assume industrial production as usual and therefore rely on negative emissions technologies, the report also contained a scenario with reduced material production. As explained by Jason Hickel (2018), this scenario would involve reducing global material production by 20 percent, primarily in wealthy countries, and would require system-level changes in how society uses energy and goods, rather than depending on individual changes in consumption.

Countering the Ideology of Overconsumption

Systemic changes that would reduce production and GHG emissions and increase social well-being have already been identified and are increasingly being promoted. The strategies we discuss here are endorsed by "degrowthers." "Degrowth" refers to a "socially sustainable and equitable reduction of society's throughput" (Videira et al. 2014: 59). The term emerged as a political slogan in France and is now an "academic paradigm" (Weiss and Cattaneo 2017) and "activist-led science" (Martínez-Alier et al. 2011) that makes the following case: perpetual economic growth on a finite planet is impossible and undesirable, and overdeveloped countries need to intentionally pursue strategies that shrink total economic production and consumption to stay within ecological limits and stave off catastrophic climate change (for reviews, see Cosme et al. 2017; Kallis et al. 2018; Weiss and Cattaneo 2017). Although the three strategies discussed in this section historically developed prior to degrowth, they are degrowth pathways because they would address the structural drivers that require increases in production and consumption. Below we briefly examine (1) economic democracy, (2) work time reduction (WTR), and (3) advertising regulations as pathways to counter the ideology of overconsumption and more effectively address climate change.

Economic democracy refers to "a system of governing firms in which direct control is redistributed . . . out of the hands of the capitalists and into the hands of their workers" (Archer 1995: 69). This means that workers have the right to participate in, or have democratically elected representatives participate in, decisions that have consequences for worker livelihood, including hiring and firing, work and leave schedules, work task distribution, the technology and tools used, work speed, profit distribution, product quality and quantity, and investment (Schweickart 1992: 19-20; Stephens 1979: 23-24; Wolff 2012). In this way the capitalist/owner is not using worker-consumers for their own benefit, as the workers have power over the means of production. A prominent contemporary proponent of economic democracy, Richard Wolff (2012), discusses economic democracy as firms in which workers serve as their own board of directors, that is, worker cooperatives, which he calls "Workers Self-Directed Enterprises." Degrowthers support economic democracy because they believe it creates conditions favorable to shrinking throughput in a socially desirable way (e.g., Boillat et al. 2012; Johanisova and Wolf 2012).

Others have made similar arguments (Bayon 2015: 191; Johanisova and Wolf 2012: 565; Wolff 2012: 133–134), including Debord ([1971] 2004: 86–87), who asserted that the environmental crisis required radical democratization: "our environment has become a social issue, and that the management of *everything* has become directly *political*, right down to the herb of the fields and the possibility of drinking water." A central limitation that economic democracy must address moving forward, if it is going to be an effective degrowth strategy, is the fact that worker cooperatives are conditioned and limited by wider capitalist structures and can do little to alter them on their own (Gasper 2014; Gindin 2016; Luxemburg 2008: 80ff.; Marx 1981: chap. 27).

Along with democratizing the workplace, work time reduction (WTR), or reductions in the total amount of time spent in paid work, is another strategy that can reduce total levels of production and consumption in a socially desirable way. If the climatic and environmental benefits of economic democracy are currently speculative, the benefits of WTR are empirically clear: longer working hours are associated with increased carbon emissions (Fitzgerald et al. 2018; Knight et al. 2013), ecological footprints (Knight et al. 2013), and energy use (Fitzgerald et al. 2015). For this reason, WTR is a central degrowth pathway (for overviews, see Pullinger 2014; Schor 2015; for critical yet supportive discussions, see Kallis 2013; Kallis et al. 2013).

WTR is also associated with numerous social benefits (for reviews, see Coote et al. 2010; De Spiegelaere and Piasna 2017: chap. 2). Along with allowing for a better work-life balance (e.g., Albertsen et al. 2008) and making work less unpleasant (LaJeunesse 2009: chap. 5), WTR promotes well-being by addressing the association between longer working hours and health issues, such as sleep shortage and hypertension (e.g., Artazcoz et al. 2009), as well as the association between longer working hours and stress and burnout (European Agency for Safety and Health at Work 2009). Most importantly, WTR can reduce involuntary, structural unemployment through "work sharing" (LaJeunesse 2009; Schor 2015) and increase autonomy by increasing "freedom from the economy" (Marcuse [1964] 2013: 4; e.g., Gorz 1994). With clear implications for climate change, WTR also creates conditions conducive for less consumption: "If well-paid, part-time work (say 20 hours a week) became the norm there would be less scope for the capitalist to engage in exploitative tactics with any one worker. Under the right conditions, namely an equitable distribution of material necessitates, the urgency of consumption in the private market could be diminished" (Laleunesse

2009: 130). Additionally, fewer working hours also gives people more time needed to adopt lifestyles with lower impact as "low-impact activities are often more time-consuming" (e.g., driving vs. biking/walking) (Schor 2015: 196; see also De Spiegelaere and Piasna 2017: 35). WTR would in theory be applied to all citizens and all workers, for example, through standardizing a 20-hour workweek that includes benefits. Adding a universal basic income could also help to alleviate inequality and make a transition to reduced working hours more just.

Although WTR has numerous documented and potential environmental and social benefits, Knight and colleagues (2013: 694) remark that reduced working hours could conceivably increase environmental impacts because increases in leisure time could be spent doing more energy-intensive activities (e.g., shopping, vacations via auto and air, leaving the home more). Therefore, we recommend pairing changes in productive processes via worker cooperatives and WTR with advertising limits and regulations. In a negative assessment of the notion of degrowth, which is criticized for its ambiguity and potential ineffectiveness, Jeroen C. J. M. van den Bergh (2010: 3) is skeptical of the idea that consumers will, in large numbers, voluntarily reduce consumption, arguing that "only looking at shopping malls, television, roads and airports should make one very skeptical about this." With Richard Howarth (1996), he argues that advertising often represents a social cost and recommends regulating the advertisement of "dirty" and status commodities in particular.

Advertising regulations are also supported by degrowthers (Cosme et al. 2017; Hickel 2018). Advertising regulation may also be a vehicle for beginning to undermine the ideology of overconsumption. Serge Latouche (2015: 120) argued that "denouncing the aggression of advertising" is a "starting point" for stepping out of the restricted imaginary of late capitalist societies. Marcuse ([1964] 2013: 245–246) similarly stated that "the mere absence of all advertising and of all indoctrinating media of information and entertainment would plunge the individual into a traumatic void where he would have the chance to wonder and to think, to know himself . . . and his society."

Any impactful and socially desirable changes would require interrelated changes in production, consumption, and consciousness. Thus, worker cooperatives, WTR, and advertising limits, among other degrowth strategies, should be pursued together. For example, one reason Sébastien Boillat and colleagues (2012: 602) support economic democracy on environmental grounds is there would be no structural imperative to advertise to meet manufactured "needs." There are significant political and social barriers to these changes. This includes the decades-long decline of the labor movement, a movement necessary for the success of WTR and economic democracy (Gunderson 2018). An important discussion moving forward is *how* to revive or renew the labor movement (e.g., Bryson et al. 2011; Moody 2017). To revive the labor movement in a way that addresses climate change and fights against the ideology of overconsumption, we recommend continuing attempts to align the labor and environmental movements (Cock 2014; Foster 1993; Gould et al. 2004; Obach 2004; Jakopovich 2009); push for a shorter workweek; and experiment with economic democratic models that pursue strong ties with trade unions (Gindin 2016; Wolff 2012: 173ff.). These strategies and transformations, while not impossible, face many challenges.

Conclusion

In response to climate change projections, scientists and concerned citizens are increasingly calling for changes in personal consumption. However, relying on individuals to change their consumption choices to reduce GHG emissions ignores the true relationship between production and consumption and the ongoing propagation of an "ideology of overconsumption." We applied the work of Western Marxist theorists, primarily Marcuse and Debord, to conceptualize this ideology of overconsumption and its implications for addressing climate change. We illustrated how production drives consumption, how advertising promotes false needs, and how these power relations are concealed while undermining social and ecological well-being. Specific to climate change, continued widespread support for increasing levels of production and economic growth will undermine efforts to reduce GHG emissions and limit catastrophic warming. Given the relationships between production and GHG emissions, effective mitigation efforts will require significant systemic changes in work, production, consumption, advertising, and social norms.

A focus on individual consumption changes as a solution to climate change represents a dangerous distraction from what is truly necessary and diminishes support for more effective mitigation strategies (Hagmann et al. 2019). In light of the IPCC's (2018) call for "rapid, far-reaching and unprecedented changes in all aspects of society," the growing evidence linking material production to GHG emissions, and the articulation of the ideology of overconsumption outlined above, it

becomes clear that "rapid, far-reaching and unprecedented changes" are critically needed in production and consumption. One contribution of this article is revisiting the case, in the context of climate change, that overconsumption in overdeveloped countries is an outcome of the profit-driven expansion of productive mechanisms. Examining the ideology of overconsumption reveals the fallacy in placing the onus of change on individual "consumers" who will force producers to follow their lead. These strategies will not be effective, as those benefiting from increasing levels of production continue to encourage and promote overconsumption. In other words, whenever one rhetorically asks, "Do we really 'need' all of this?" in reference to a megamall or consumerist lifestyles, the answer is yes, so long as capitalism lumbers on. Overconsumption is a necessary and secondary byproduct of capitalist production. Thus, sustainable consumption requires structural changes in the political-economic system as a whole, a point forcefully made by Schnaiberg (1980) decades ago.

While Western Marxists were generally pessimistic about the possibilities for social transformation to liberate the "advanced" capitalist countries from useless toil on the one hand, and overconsumption during "free time" on the other, Marcuse offers some affirmative guidance for moving forward, prescriptions that are in line with degrowth and economic democracy. In addition to radically expanding leisure time (see Marcuse 1955), Marcuse calls for transforming work and production, leaving behind forms of oppressive and stupefied labor that simply create "profitable waste" (Marcuse [1964] 2013: 242). He argues that we need new institutions that let "individuals work for themselves and speak for themselves" and that society requires a "redefinition of needs" to identify and put aside false needs as well as freedom from repressive advertising (ibid.: 206, 245). Marcuse states that "the unrealistic sound of these propositions is indicative, not of their utopian character, but the strength of the forces that prevent their realization" (ibid.: 4). However, he also explains that, while challenging, social transformation in these terms is not impossible:

All the material and intellectual forces which could be put to work for the realization of a free society are at hand. That they are not used for that purpose is to be attributed to the total mobilization of existing society against its own potential for liberation. But this situation in no way makes the idea of radical transformation itself a utopia. (Marcuse 1970: 64)

The critical task entails revealing the irrationality of the system to those who remain transfixed by ideology.

Diana Stuart, PhD, is Associate Professor in the Sustainable Communities Program in the School of Earth Sciences and Environmental Sustainability at Northern Arizona University. Her research examines environmental and social issues in industrial agriculture and how to transition to a more sustainable food system. Her work has explored ways to increase wild biodiversity, reduce fertilizer pollution and greenhouse gas emissions, and support animal welfare. E-mail: diana.stuart@nau.edu.

Ryan Gunderson, PhD, is Assistant Professor of Sociology and Social Justice Studies in the Department of Sociology and Gerontology at Miami University. His current research projects concern the potential effectiveness of proposed solutions to environmental problems; the social dimensions and environmental impacts of technology; and the renewal of classical and mid-twentieth century sociological theory. E-mail: gunderrm@miamioh.edu.

Brian Petersen, PhD, is Assistant Professor in the Department of Geography, Planning and Recreation at Northern Arizona University. His research and published work focuses on climate change adaptation and landscape level conservation. His work draws on both social and natural science perspectives to interrogate contemporary natural resource and environmental challenges. E-mail: brian.petersen@nau.edu.

Notes

1. Overconsumption refers to the use of resources beyond what is sustainable. This can be in the terms of withdrawals or additions (Schnaiberg 1980). For withdrawals it means extracting more resources than can be replenished, and for additions it means adding more than can be absorbed. While there is likely a critical threshold or carrying capacity at which the human population is seriously impacted, this is difficult to determine.

2. There are other figures associated with the Frankfurt School and the Situationist International who theorize overconsumption as a form of ideology. For example, a brief passage from *The Revolution of Everyday Life*, written by Situationist Raoul Vaneigem and Donald Nicholson-Smith (1994: 70), embodies the general contempt for consumer society: "Work to survive, survive by consuming, survive to consume: the hellish cycle is complete." An early member of the Frankfurt School, Erich Fromm (1955: 122) also investigated the ideology of overconsumption in numerous works, arguing that monopoly capitalism has transformed consumption from a meaningful, concrete act necessary for survival to "the satisfaction of artificially stimulated phantasies, a phantasy performance alienated from our concrete, real selves." These and related figures, like Thorstein Veblen (1912) and Marcuse's student William Leiss (1988), are excluded only to limit the length of the article.

References

- Albertsen, Karen, Guðbjörg Linda Rafnsdóttir, Asbjörn Grimsmo, Kristinn Tómasson, and Kaisa Kauppinen. 2008. "Workhours and Worklife Balance." *Scandinavian Journal of Work, Environment & Health* 34 (5): 14.
- Alexander, Samuel. 2014. Degrowth and the Carbon Budget: Powerdown Strategies for Climate Stability. Simplicity Institute Report 14. http://simplicityinstitute.org/wp -content/uploads/2011/04/DegrowthandtheCarbonBudgetSamuelAlexander1.pdf.
- Anderson, Kevin, and Alice Bows. 2011. Beyond 'Dangerous' Climate Change: Emission Scenarios for a New World. *Philosophical Transactions of the Royal Society A – Mathematical Physical and Engineering Sciences* 369 (1934): 20–44.
- Anderson, Kevin, and Alice Bows. 2012. A New Paradigm for Climate Change. *Nature Climate Change* 2 (9): 639–640. doi: 10.1038/nclimate1646.
- Anderson, Perry. 1976. Considerations on Western Marxism. London: Verso.
- Archer, Robin. 1995. *Economic Democracy: The Politics of Feasible Socialism*. Oxford: Oxford University Press.
- Artazcoz, Lucía, Imma Cortès, Vicenta Escribà-Agüir, Lorena Cascant, and Roman Villegas. 2009. "Understanding the Relationship of Long Working Hours with Health Status and Health-Related Behaviours." *Journal of Epidemiology & Community Health* 63 (7): 521–527.
- Barnard, Adam. 2004. "The Legacy of the Situationist International: The Production of Situations of Creative Resistance." Capital & Class 28 (3): 103–124.
- Bayon, Denis. 2015. "Unions." In *Degrowth: A Vocabulary for a New Era*, ed. Giacomo D'Alisa, Federico Demaria, and Giorgos Kallis, 189–191. New York: Routledge.
- Best, Steven, and Douglas Kellner. 1999. "Debord, Cybersituations, and the Interactive Spectacle." *Substance* 28 (3): 129–156.
- Boillat, Sébastien, Julien-François Gerber, and Fernando R. Funes-Monzote. 2012.
 "What Economic Democracy for Degrowth? Some Comments on the Contribution of Socialist Models and Cuban Agroecology." *Futures* 44 (6): 600–607.
- Brown, Clair. 1995. American Standards of Living: 1918–1988. Hoboken, NJ: Wiley-Blackwell.
- Bryson, Alex, Bernhard Ebbinghaus, and Jelle Visser. 2011. "Introduction: Causes, Consequences and Cures of Union Decline." *European Journal of Industrial Relations* 17 (2): 97–105.
- Burke, Paul J., Md Shahiduzzaman, and David I. Stern. 2015. "Carbon Dioxide Emissions in the Short Run: The Rate and Sources of Economic Growth Matter." Global Environmental Change 33: 109–121.
- Cock, Jacklyn. 2014. "The 'Green Economy': A Just Sustainable Development Path or 'Wolf in Sheep's Clothing'?" *Global Labour Journal* 51 (1): 23–44.
- Coote, Anna, Jane Franklin, and Andrew Simms. 2010. *21 Hours: Why a Shorter Working Week Can Help Us All to Flourish in the 21st Century.* London: New Economics Foundation.
- Cosme, Inês, Rui Santos, and Daniel W. O'Neill. 2017. "Assessing the Degrowth Discourse: A Review and Analysis of Academic Degrowth Policy Proposals." *Journal of Cleaner Production* 149: 321–334. doi: 10.1016/j.jclepro.2017.02.016.
- Daly, Herman. 2013. "A Further Critique of Growth Economics." *Ecological Economics* 88: 20–24.

Debord, Guy. (1971) 2004. "A Sick Planet." In A Sick Planet, 75–94. London: Seagull Books.

- Debord, Guy. 1983. The Society of the Spectacle. Detroit: Black & Red.
- De Spiegelaere, Stan, and Agnieszka Piasna. 2017. "The Why and How of Working Time Reduction. European Trade Union Institute." https://www.etui.org/content/ download/32642/303199/file/Guide_Working+time-web-version.pdf.
- Dickler, Jessica. 2018. "Credit Card Debt Hits a Record High. It's Time to Make a Payoff Plan." CNBC News, 23 January. https://www.cnbc.com/2018/01/23/credit-card -debt-hits-record-high.html.
- Dietz, Thomas, and Eugene Rosa. 1997. "Effects of Population and Affluence on CO₂ Emissions." Proceedings of the National Academy of Sciences 94 (1): 175–179.
- Easterlin, Richard A., Laura Angelescu McVey, Malgorzata Switek, Onnicha Sawangfa, and Jacqueline Smith Zweig. 2010. "The Happiness-Income Paradox Revisited." *Proceedings of the National Academy of Sciences* 107 (52): 22463–22468.
- European Agency for Safety and Health at Work. 2009. "OSH in Figures: Stress at Work—Facts and Figures." Luxembourg, Office for Official Publications of the European Communities. https://osha.europa.eu/en/tools-and-publications/publications/reports/TE-81-08-478-EN-C_OSH_in_figures_stress_at_work.
- Fitzgerald, Jared, Andrew K. Jorgenson, and Brett Clark. 2015. "Energy Consumption and Working Hours: A Longitudinal Study of Developed and Developing Nations, 1990–2008." *Environmental Sociology* 3 (1): 213–223. doi: 10.1080/ 23251042.2015.1046584.
- Fitzgerald, Jared, B., Juliet Schor, and Andrew K. Jorgenson. 2018. "Working Hours and Carbon Dioxide Emissions in the United States, 2007–2013." Social Forces 96 (4): 1851–1874. doi: 10.1093/sf/soy014.
- Fitzgerald, Ross. 1985. "Human Needs and Politics: The Ideas of Christian Bay and Herbert Marcuse." *Political Psychology* 6 (1): 87–108.
- Foster, John Bellamy. 1993. "The Limits of Environmentalism Without Class: Lessons from the Ancient Forest Struggle of the Pacific Northwest." *Capitalism Nature Socialism* 4 (1): 11–41.
- Fromm, Eric. 1955. The Sane Society. Greenwich, CT: Fawcett Publications.
- Galbraith, John Kenneth. 1958. The Affluent Society. Boston: Houghton Mifflin.
- Gasper, Phil. 2014. "Are Workers' Cooperatives the Alternative to Capitalism?" International Socialist Review 93. https://isreview.org/issue/93/are-workers -cooperatives-alternative-capitalism.
- Gindin, Sam. 2016. "Chasing Utopia." *Jacobin*, 10 March. https://www.jacobinmag. com/2016/03/workers-control-coops-wright-wolff-alperovitz/.
- Gorz, André. 1994. Capitalism, Socialism, Ecology. Verso. New York.
- Gotham, Kevin Fox, and Daniel A. Krier. 2008. "From the Culture Industry to the Society of the Spectacle: Critical Theory and the Situationist International." *Current Perspectives in Social Theory* 25: 155–192.
- Gould, Kenneth A., Tammy L. Lewis, and J. Timmins Roberts. 2004. "Blue-Green Coalitions: Constraints and Possibilities in the Post 9-11 Political Environment." *Journal of World-Systems Research* 10 (1): 91–116.
- Gouldner, Alvin Ward. 1980. The Two Marxisms. New York: Oxford University Press.
- Gunderson, Ryan. 2018. "Work Time Reduction and Economic Democracy as Climate Change Mitigation Strategies: Or Why the Climate Needs a Renewed Labor Movement." *Journal of Environmental Studies and Sciences* 9(1): 35–44. doi: 10.1007/ s13412-018-0507-4.

- Hagmann, David, Emily H. Ho, and George Loewenstein. 2019. "Nudging Out Support for a Carbon Tax." *Nature Climate Change* 9: 484–489.
- Hickel, Jason. 2018. "The Hope at the Heart of the Apocalyptic Climate Change Report." *Foreign Policy*, 18 October. https://foreignpolicy.com/2018/10/18/ the-hope-at-the-heart-of-the-apocalyptic-climate-change-report/.
- Horkheimer, Max, and Theodor W. Adorno. 2002. *Dialectic of Enlightenment*. Stanford, CA: Stanford University Press.
- Howarth, Richard B. 1996. "Status Effects and Environmental Externalities." *Ecological Economics* 16: 25–34.
- HUD (US Department of Housing and Urban Development). 2015. 2015 Characteristics of New Housing. https://www.census.gov/construction/chars/pdf/c25ann2015.pdf.
- IPCC (Intergovernmental Panel on Climate Change). 2018. "Summary for Policymakers." In Global Warming of 1.5°C. World Meteorological Organization, Geneva, Switzerland. https://www.ipcc.ch/sr15/.
- Jackson, Timothy. 2009. *Prosperity Without Growth: Economics for a Finite Planet*. London: Earthscan.
- Jakopovich, Dan. 2009. "Uniting to Win: Labour Environmental Alliances." *Capitalism Nature Socialism* 20 (2): 74–96.
- Jay, Martin. 1984. Marxism and Totality. Berkeley: University of California Press.
- Johanisova, Nadia, and Stephan Wolf. 2012. "Economic Democracy: A Path for the Future?" *Futures* 44 (6): 562–570.
- Jorgenson, Andrew K., and Brett Clark. 2012. "Are the Economy and the Environment Decoupling? A Comparative International Study, 1960–2005." *American Journal* of Sociology 118 (1): 1–44.
- Kallis, Giorgos. 2013. "Societal Metabolism, Working Hours and Degrowth: A Comment on Sorman and Giampietro." *Journal of Cleaner Production* 38: 94–98. doi: 10.1016/j.jclepro.2012.06.015.
- Kallis, Giorgos. 2017. "Radical Dematerialization and Degrowth." *Philosophical Transactions of the Royal Society A: Mathematical Physical and Engineering Sciences* 375: 2095.
- Kallis, Giorgos, Michael Kalush, Hugh O'Flynn, Jack Rossiter, and Nicholas Ashford. 2013. "'Friday Off': Reducing Working Hours in Europe." Sustainability 5: 1545– 1567. doi: 10.3390/su5041545.
- Kallis, Giorgos, Vasilis Kostakis, Steffen Lange, Barbara Muraca, Susan Paulson, and Matthias Schmelzer. 2018. "Research on Degrowth." *Annual Review of Environment and Resources* 43: 291-316. doi: 10.1146/annurev-environ-102017-025941.
- Kellner, Douglas. 1983. "Critical Theory, Commodities and the Consumer Society." Theory, Culture & Society 1 (3): 66–83.
- Kellner, Douglas. 2003. Media Spectacle. London: Routledge.
- Knight, Kyle W., Eugene A. Rosa, and Juliet B. Schor. 2013. "Could Working Less Reduce Pressures on the Environment? A Cross-National Panel Analysis of OECD Countries, 1970–2007." *Global Environmental Change* 23 (4): 691–700. doi: 10.1016/ j.gloenvcha.2013.02.017.
- LaJeunesse, Robert. 2009. Work Time Regulation as Sustainable Full Employment Strategy: The Social Effort Bargain. London: Routledge.
- Langman, Lauren. 2015. "An Overview: Hegemony, Ideology and the Reproduction of Domination." *Critical Sociology* 41 (3): 425–432.
- Larrain, Jorge. 1979. The Concept of Ideology. London: Hutchinson & Co.

220

Larrain, Jorge. 1983. Marxism and Ideology. London: Macmillan.

- Latouche, Serge. 2015. "Imaginary, Decolonization of." In D'Alisa et al., *Degrowth*, 117–120.
- Leahy, Stephen. 2018. "Climate Change Impacts Worse than Expected, Global Report Warns." National Geographic, 7 October. https://www.nationalgeographic.com/ environment/2018/10/ipcc-report-climate-change-impacts-forests-emissions/.
- Lee, Michael S. W., and Christie Seo Youn Ahn. 2016. "Anti-Consumption, Materialism, and Consumer Well-Being." *Journal of Consumer Affairs* 50 (1): 18–47.
- Leiss, William. 1988. *Limits to Satisfaction: An Essay on the Problem of Needs and Commodities*. Montreal: McGill-Queen's Press.
- Lorek, Sylvia, and Doris Fuchs. 2013. "Strong Sustainable Consumption Governance Precondition for a Degrowth Path?" *Journal of Cleaner Production* 38: 36–43. doi: 10.1016/j.jclepro.2011.08.008.
- Luxemburg, Rosa. 2008. "Reform or Revolution." In *The Essential Rosa Luxemburg*, 41–104. Chicago: Haymarket Books.
- Mackintosh, Eliza. 2018. "What the New Report on Climate Change Expects from You." CNN News, 8 October. https://www.cnn.com/2018/10/08/world/ipcc-climate -change-consumer-actions-intl/index.html.
- Marcuse, Herbert. 1955. Eros and Civilization. New York: Vintage.
- Marcuse, Herbert. (1964) 2013. One Dimensional Man. London: Routledge.
- Marcuse, Herbert. 1970. Five Lectures. Boston: Beacon Press.
- Martinez, Raoul. 2017. Creating Freedom: The Lottery of Birth, the Illusion of Consent, and the Fight for Our Future. London: Penguin.
- Martínez-Alier, Joan, Hali Healy, Leah Temper, Mariana Walter, Beatriz Rodriguez-Labajos, Julien-François Gerber, and Marta Conde. 2011. "Between Science and Activism: Learning and Teaching Ecological Economics with Environmental Justice Organizations." *Local Environment* 16 (1): 17–36. doi: 10.1080/ 13549839.2010.544297.
- Marx, Karl. 1976. Capital, Vol. 1. New York: Vintage.
- Marx, Karl. 1981. Capital, Vol. 3. New York: Vintage.
- Marx, Karl, and Friedrich Engels. 1977. *The German Ideology*. New York: International Publishers.
- Molosky, Irvin. 1988. Reagan vetos bill putting limits on TV programming for children. New York Times. November 7, 1988. https://www.nytimes.com/1988/11/07/us/ reagan-vetoes-bill-putting-limits-on-tv-programming-for-children.html
- Moody, Kim. 2017. On New Terrain: How Capital is Reshaping the Battleground of Class War. Chicago: Haymarket Books.
- Obach, Brian K. 2004. Labor and the Environmental Movement: The Quest for Common Ground. Cambridge, MA: MIT Press.
- O'Neill, Daniel W. 2011. "Measuring Progress in the Degrowth Transition to a Steady State Economy." *Ecological Economics* 84: 221–231.
- Paci, Enzo. 1972. *The Function of the Sciences and the Meaning of Man*. Evanston, IL: Northwestern University Press.
- Piketty, Thomas, and Lucas Chancel. 2015. Carbon and Inequality: From Kyoto to Paris. Paris: Paris School of Economics. http://piketty.pse.ens.fr/files/ChancelPiketty2015.pdf.
- Pullinger, Martin. 2014. "Working Time Reduction Policy in a Sustainable Economy: Criteria and Options for its Design." *Ecological Economics* 103: 11–19. doi: 10.1016/j.ecolecon.2014.04.009.

- Schmelzer, Mattias. 2016. The Hegemony of Growth. The Making and Remaking of the Economic Growth Paradigm and the OECD, 1948–2010. Cambridge: Cambridge University Press.
- Schnaiberg, Allan. 1980. *The Environment: From Surplus to Scarcity*. Oxford: Oxford University Press.
- Schor, Juliet, 1998. "Time, Labour and Consumption: Guest Editor's Introduction." *Time & Society* 7 (1): 119–127.
- Schor, Juliet. 2014. Born to Buy: The Commercialized Child and the New Consumer Cult. New York: Simon and Schuster.
- Schor, Juliet. 2015. "Work Sharing." In D'Alisa et al., Degrowth, 195–197.
- Schweickart, David. 1992. "Economic Democracy: A Worthy Socialism that Would Really Work." Science & Society 56 (1): 9–38.
- Shaikh, Anwar. 2020. "'The Fundamental Questions About Capitlaism Seem to be Coming Back.'" *Jacobin*. https://www.jacobinmag.com/2020/04/ anwar-shaikh-interview-capitalism-competition-conflict-crises.
- Shaw, James W. 2002. "Materialism, Psychological Well-Being, and Overall Quality of Life." *Quality of Life Research* 11 (7): 661.
- Sirgy, M. Joseph. 1998. "Materialism and Quality of Life." *Social Indicators Research* 43: 227–260.
- Statista. 2019. "US Advertising Spending 2015–2019." https://www.statista.com/ statistics/272314/advertising-spending-in-the-us/.
- Stephens, John D. 1979. The Transition from Capitalism to Socialism. London: Macmillan.
- Stern, Nicholas. 2006. Stern Review on the Economics of Climate Change. Her Majesty's Treasury. Cambridge: Cambridge University Press.
- Trainer, Ted. 2012. "De-growth: Do you realise what it means?" Futures 44 (6): 590–599.
- Weber, Max. 1978. *Economy and Society, Vol 1*. Berkeley: University of California Press.
- Weiss, Martin, and Claudio Cattaneo. 2017. "Degrowth—Taking Stock and Reviewing an Emerging Academic Paradigm." *Ecological Economics* 137: 220–230. doi: 10.1016/ j.ecolecon.2017.01.014.
- Wiedmann, Thomas O., Heinz Schandl, Manfred Lenzen, Daniel Moran, Sangwon Suh, James West, and Keiichiro Kanemoto. 2015. "The Material Footprint of Nations." *Proceedings of the National Academy of Sciences of the United States of America* 112 (20): 6271–6276.
- Wolff, Richard. 2012. *Democracy at Work: A Cure for Capitalism*. Chicago: Haymarket Books.
- Worldwatch. 2018. The State of Consumption Today. http://www.worldwatch.org/ node/810.
- Van den Bergh, Jeroen CJM. 2010. "Environment Versus Growth—A Criticism of 'Degrowth' and a Plea for 'A-growth.'" *Ecological Economics* 70 (5): 881–890. Available online 4 November 2010. doi: 10.1016/j.ecolecon.2010.09.035.
- Vaneigem, Raoul, and Donald Nicholson-Smith. 1994. *The Revolution of Everyday Life*. London: Left Bank Books.

Veblen, Thorstein. 1912. The Theory of the Leisure Class. New York: Mentor.

Victor, Peter. 2010. "Questioning Economic Growth." Nature 468 (7322): 370-371.

- Videira, Nuno, François Schneider, Filka Sekulova, and Giorgos Kallis. 2014. "Improving Understanding on Degrowth Pathways: An Exploratory Study Using Collaborative Causal Models." *Futures* 55: 58–77. doi: 10.1016/j.futures.2013.11.001.
- York, Richard, Christina Ergas, Eugene A. Rosa, and Thomas Dietz. 2011. "It's a Material World: Trends in Material Extraction in China, India, Indonesia, and Japan." Nature and Culture 6 (2): 103–122.
- York, Richard, and Julius Alexander McGee. 2016. "Understanding the Jevons Paradox." *Environmental Sociology* 2 (1): 77–87.
- York, Richard, Eugene A. Rosa, and Thomas Dietz. 2003. "Footprints on the Earth: The Environmental Consequences of Modernity." *American Sociological Review* 68 (2): 279–300.

© 2020. This work is published under (the "License"). Notwithstanding the ProQuest Terms and Conditions, you may use this content in accordance with the terms of the License. http://creativecommons.or g/licenses/by-nc-nd/4.0/