

Winter 3-2023

# Extracting Extractivism: Technopessimism, Green Anarchism and (Gestures Toward) Indigeneity

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## Recommended Citation

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<https://doi.org/10.15760/honors.1339>

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Extracting Extractivism:  
Technopessimism, Green Anarchism and (Gestures Toward) Indigeneity

by  
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An undergraduate honors thesis submitted in partial fulfillment of the  
requirements for the degree of  
Bachelor of Science  
in  
University Honors  
and  
Art and Letters

Thesis Advisor  
Dr. Richard Beyler

Portland State University

2023

## An Acknowledgment

The place in which this thesis was written, and where it will be presented and received—i.e., the area now known as Multnomah Country—is unceded Native American land, the traditional homelands of several Chinook-speaking peoples, including many Multnomah, Clackamas, and Watlata/Cascade villages, as well as the Kalapuya and the Molalla people nearby in the Willamette Valley, whose descendants are now largely members of the Grande Ronde and Siletz Confederated Tribes, with Chinook and other tribal relations at Warm Springs, Yakima, and the Chinook Nation. This acknowledgement is intended to express not only gratitude and sorrow, but solidarity and recognition of Indigenous presence and reliance.

This thesis is partly informed by my experiences as an indigenous person of color, a *Diné* born on the piece of rez in so-called Arizona, U.S.A. My grandmother would call it, *Diné Bikéyah*, the sacred lands of the people. The place is better known—if at all—as the Navajo Nation—another product of the same Euro-American project of genocide and land theft that displaced and displaces those peoples noted above. In order to honestly acknowledge the land and its displaced peoples, settler-colonialism must be understood not merely as dislocation, but as “the founding of a state based on the ideology of white supremacy, the widespread practice of African slavery, and a policy of genocide and land theft.”<sup>1</sup> In this was, I recognize, too, the unique relationship to whiteness that BIPOC communities share, and how this intersects other oppressive relationships based on dominant ideas of gender and sexuality, the prevalence of which demands we acknowledge further the disparities and injustices that specifically affect these communities—while also recognizing that such acknowledgements alone do not materially improve the actual conditions of Indigenous communities. Solidarity, rather, is lived.

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<sup>1</sup> Roxanne Dunbar-Ortiz, *An Indigenous People's History of the United States* (Boston, MA: Beacon Press, 2014), 2—a useful introductory read.

## Introduction

A certain ethics of technology has begun appearing in “extractivismo/extractivism” discourses concerning resource extraction in relation to the greater socio-ecological emergency in order to describe a critique of, *inter alia*, prevalent conceptions of, and efforts to promote and expand, “sustainable development” and the “renewable energy transition.” This thesis will review political ecology literature concerning various conceptualizations of *extractivism*, highlighting the critical and comprehensive concept of *total extractivism*—a concept that directs attention towards the centrality of extractivist practices, mentalities and logics both within the broader, existing industrial-capitalist world-system and throughout the history of not only Western capitalism and colonialism, but civilization itself.

Several theoretical sources are broadly common to the field; however, this thesis will focus on the relatively divergent sources of *technopessimism* and *green anarchism* that converge in the late-twentieth century, sources that are more demonstrative of the novel, comprehensive theoretical perspectives undergirding total extractivism, as opposed to other extractivism discourses.

Total extractivism will be expounded, then interpreted as an ethics of technology and historically situated within the historic confluence of twentieth century technopessimism and green anarchism, from which another critical orientation will be revealed to have been influential—namely, Indigenous practices and cultures. The publishing collective, *Fifth Estate*, and one its prominent members, Fredy Perlman, will be taken as representative of this confluence. As such, the focus of this thesis will inevitably orbit closer to the U.S., though much of these intellectual currents span the globe, particularly throughout North America.

Partly in response to a recent call by the philosopher of technology Carl Mitcham—who

opines, “It is time again [for critical ethical reflection on technology] to think in large-scale terms”<sup>2</sup>—this thesis will show that this line of intellectual inheritance, running through the *Fifth Estate* into current total extractivism discourse, is doing, and has done, just that, reflecting critically on technology in ethical, large-scale terms. More than this, this thesis will argue for the expanded incorporation of these critical strands of thought and orientations into not only discourses on extractivism, and not only the fields of philosophy of technology and political ecology, but the greater discussion on the ongoing socio-ecological emergency.

## Extractivism

### Historic Appearances

Scholarship on extractivism has proliferated in recent years, the concept continuing to be refined and newly applied. Current understandings of the term rest atop critical traditions of political ecology and political economy, but they also grow out of the firsthand experiences of communities responding to local extractive projects and policies. The term, in its Spanish form as *extractivismo*, can be traced to 1970s Latin America where it was employed to describe developments in the mining and oil export sectors,<sup>3</sup> with particular attention given to mining expansion in the Andes region.<sup>4</sup> Large transnational corporations, multilateral banks and governments, as well as those within civil society and the popular sector, all variously employed the term within their own spheres.<sup>5</sup> Prior to this period, the label “extractive industries” appears in the publications of economists at least since the 1950s, but it gained popularity through the

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<sup>2</sup> Carl Mitcham, “The Ethics of Technology: From Thinking Big to Small—and Big Again,” *Axiomathes* 30, no. 6 (July 23, 2020): 595.

<sup>3</sup> Eduardo Gudynas, “Extractivisms: Tendencies and Consequences,” in *Reframing Latin American Development*, ed. Ronaldo Munck and Raúl Delgado Wise (New York: Routledge, 2018): 61.

<sup>4</sup> Francesco Durante, Markus Kröger, and William LaFleur, “Extraction and Extractivisms: Definitions and Concepts,” in *Our Extractive Age: Expressions of Violence and Resistance*, ed. Judith Shapiro and John-Andrew Mcneish (Abingdon: Routledge, 2021): 21-22.

<sup>5</sup> Gudynas, “Tendencies,” 61.

promotion, by various core countries, international agencies and banks, of those very industries labeled as such. Note that from this perspective, oil or mineral extraction is conceived as another industry, like that of automobile manufacturing—i.e., the term was noncritical, descriptive. Eduardo Gudynas suggests, though, that this labelling led to the later popularization of the critical term *extractivismo*<sup>6</sup>—a term synonymous with, yet perhaps currently less prevalent than, *extractivism*.

In the mid-2000s, a new, so-called “progressive cycle” colored Latin American politics, bringing with it renewed efforts towards the continued or expanded extraction projects over and against popular calls for alternatives. Following a global boom in commodity prices, these Latin American governments implemented productivist visions of development based on an “extractive export model,” resulting in an increase of large mining operations, mega-dams, and the expansion of oil and agrarian frontiers. This (re)turn to natural resource extraction was initially referred to as *neo-extractivism*,<sup>7</sup> but which has become in recent scholarship somewhat synonymous with the more popular term, *extractivism*.

This (re)turn prompted, in 2008, a discussion amongst activists and academics, and other allies and organizations, involved in local resistance campaigns and movements, seeking a “clear, rigorous, robust” definition and understanding of the processes and dynamics involved and there observed.<sup>8</sup> Mineral extraction in Peru (mainly gold); hydrocarbon exploitation in Bolivia and Ecuador (“whose most infamous instances are the oilfields in the [I]ndigenous

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<sup>6</sup> Eduardo Gudynas, *Extractivismos: Ecología, economía y política de un modo de entender el desarrollo y la naturaleza* (Cochabamba: Centro de Documentación e Información Bolivia, 2015): 10-11.

<sup>7</sup> Alberto Acosta, “Extractivism and Neoextractivism: Two Sides of the Same Curse,” in *Beyond Development: Alternative Visions from Latin America*, ed. Lang, M. and Mokrani, D. (Amsterdam: Transnational Institute, 2013 [2011]); Gudynas, Eduardo, “The New Extractivism of the 21<sup>st</sup> Century: Ten Urgent Theses about Extractivism in Relation to Current South American Progressivism,” *Americas Program Report*. Washington, DC: Center for International Policy, January 21, 2010; Alexander Dunlap and Jostein Jakobsen, *The Violent Technologies of Extraction* (Cham, Switzerland: Springer Nature, 2019): 6.

<sup>8</sup> Gudynas, “Tendencies,” 61.

territories of the Guaranís in Yategrenda and Santa Cruz and of the Yasuni in Ecuador”); coal mining in Venezuela and Colombia (“where the map of extractive activities overlaps with that of militarization”); opencast iron mega-mining projects in Uruguay; the intensification of mining in Chile (“where it goes hand in hand with the hydro crisis”) and Brazil (“the leading country in mining in Latin America, particularly as far as iron and bauxite are concerned”); and the expansion of the soy frontier in Argentina—it is this extracted Latin American landscape that “confronts us with multifarious and impressive instances of ‘extractivism,’” argue Veronica Gago and Sandro Mezzadra.<sup>9</sup>

Within this historical context, Thea Riofrancos identifies,<sup>10</sup> from the Amazonian [I]ndigenous groups struggling for territorial sovereignty and collective rights, the articulation of “discursive elements” that the term *extractivismo* will later unify. It was in Ecuador in 2005-09 that, together with allied intellectuals, environmental and Indigenous activists first explicitly crafted the *critical* discourse of *extractivismo* in conjunction with their movement against President Raphael Correa’s pro-extraction policies, *inter alia*.<sup>11</sup>

There now flourish, in and out of academia and spanning the globe, numerous discourse communities employing the term, engaging new aspects and forms of extractivism, including those for the global analysis of different extractive sectors and key actors and dynamics; for the roles of social movements, states, and corporations; for agrarian or agro-extractivism, including forestry, as well as farming, fishing, and rubber tapping extractivisms; and still others for the financial sector and digital environments concerned with such things as data mining.<sup>12</sup>

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<sup>9</sup> Verónica Gago and Sandro Mezzadra, “A Critique of the Extractive Operations of Capital: Toward an Expanded Concept of Extractivism,” *Rethinking Marxism* 29, no. 4 (October 2, 2017): 567.

<sup>10</sup> Alongside two other critiques of resource extraction—i.e., resource nationalism and proto-anti-extractivism.

<sup>11</sup> Thea Riofrancos, “Extractivismo Unearthed: A Genealogy of a Radical Discourse,” *Cultural Studies* 31, no. 2-3 (March 22, 2017): 279.

<sup>12</sup> Durante, Kröger, and LaFleur, “Definitions and Concepts,” 22.

### Extractivism versus Extraction

The preceding section laid out the historic appearance of extractivism as a *descriptive term*—a misleadingly brief survey. What that term stands for, the term as a *critical concept*, however, is diverse and somewhat complex. Its areas of application listed just above provide only a glimpse into the term’s rich use, which, importantly, has developed alongside the activities and events with which those employing the term engage. The history of the conceptualization of extractivism, therefore, is intimately linked to the history of its subject matter, resource extraction, which itself is commonly and variously referred to as extractivism. And so, a distinction must be made between extractivism as a descriptive term representing extractivist activities, events and histories in the material world and extractivism as a critical concept within a discourse community, or set of such communities. Riofrancos offers a useful description of the distinction, pointing out that in most recent scholarship, extractivism is “a descriptive term [used] to refer to extractive activities, the policies and ideologies that promote them, their socio-environmental effects, and the forms of resistance that they provoke.” Conversely, Riofrancos employs extractivism as the “central term that unifies an emic discourse articulated by situated actors reflecting on and critiquing historically specific regimes of resource governance.”<sup>13</sup>

The diverse history of conceptualizations, for Christopher W. Chagnon et al., suggests the term’s potential as an “organizing concept”—a concept that “arranges and synthesizes a body of knowledge to serve as the basis for progressive interventions,” encourages further exploration, establishes the base upon which other concepts hinge, and applies to an array of “empirical practices,” thus going “beyond the theoretical, and [serving] to organize human activities.” By

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<sup>13</sup> Riofrancos, “Extractivismo Unearthed,” 279.



conceiving of extractivism as such, Chagnon et al. “hope to elicit further critical research, and engagements in the social sphere, *which disrupt extractivist practices*.”<sup>14</sup> This emphasis on “progressive interventions” here is indicative of what Riofrancos calls above the “emic” discourse of extractivism.

The more common usage of extractivism is as a conceptual term, one referring to the general appropriation of natural resources for export.<sup>15</sup> Yet such a definition scarcely connotes anything different than does the word “extraction.” The two terms do share the root verb “extract,” and its definitions are usefully drawn upon here:

- 1) a: to draw forth; 1) b: to pull or take out forcibly; 1) c: to obtain by much effort from someone unwilling.
- 2) a: to withdraw by physical or chemical process; 2) b: to treat with a solvent so as to remove a soluble substance.
- 3) a: to separate (a metal) from an ore.<sup>16</sup>

These definitions, for Durante et al., highlight “the qualities of strength and effort, especially addressed against a non-cooperative counterpart,” conveyed by the verb, from which one can detect the “violent nature” of resource extraction. Moreover, this quality of strength further highlights the need to investigate the issues of power relations and freedom, specifically in regard to those directly affected by extraction projects,<sup>17</sup> and at the same time, it helps characterize the fundamentally forceful or violent nature of extractive activities, which extractivism scholars draw upon and endeavor to illuminate.

While *extraction* refers more to activities of literal material removal, extractivism is employed to capture also those aspects involved beyond this literal level, those that form some

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<sup>14</sup> Christopher W. Chagnon et al., “From Extractivism to Global Extractivism: The Evolution of an Organizing Concept,” *Journal of Peasant Studies* 49, no. 4 (May 9, 2022): 762; my italics.

<sup>15</sup> Gudynas, *Extractivismos: Ecología, economía y política*, 9.

<sup>16</sup> Merriam-Webster’s Dictionary, 2020.

<sup>17</sup> Durante, Kröger, and LaFleur, “Definitions and Concepts,” 22-23.

broader web of dynamics, usually across longer spans of time—i.e., timespans, at least, longer than that of particular extraction jobs. The basic project of crafting and employing extractivism as a critical concept, its history as such, consists of this process of capture, this recognition of, and investigation into, the broader dynamics at play—though not to the elimination of the continued scrutinization of literal extractive practices themselves.

### The Broader Web of Dynamics

This broader web of dynamics includes, at least, what, for Riofrancos, extractivism as a descriptive term refers to: the “extractive activities, the policies and ideologies that promote them, their socio-environmental effects, and the forms of resistance that they provoke.”<sup>18</sup> Extractivism, understood in this way, or similarly, as some broader web of dynamics, is commonly, yet variously, referred to in the literature, usually in abstract terms; it is described as “a mode of accumulation,”<sup>19</sup> a “paradigm,”<sup>20</sup> a “mindset, or ontology,” a “onto-logic,”<sup>21</sup> an “imperative driving the global capitalist economy,”<sup>22</sup> the “defining dynamic and mentality of our era,” a “logic [that] justifies the violence of removal and exploitation that are hallmarks of our hyper-extractive age,”<sup>23</sup> “a particular way of structuring the processes of production and reproduction,” an “economic system” that is “patterned in a particular way,”<sup>24</sup> or “a particular way of thinking and the properties and practices organized towards the goal of maximizing benefit through extraction.”<sup>25</sup>

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<sup>18</sup> Riofrancos, “Extractivismo Unearthed,” 279.

<sup>19</sup> Acosta, “Extractivism and Neoextractivism,” 62.

<sup>20</sup> Chagnon et al., “From Extractivism to Global Extractivism,” 765.

<sup>21</sup> Durante, Kröger, and LaFleur, “Definitions and Concepts,” 21.

<sup>22</sup> Dunlap and Jakobsen, *Violent Technologies*, 6.

<sup>23</sup> Judith Shapiro and John-Andrew Mcneish, *Our Extractive Age: Expressions of Violence and Resistance* (Abingdon: Routledge, 2021): 3.

<sup>24</sup> Jingzhong Ye et al., “The Incursions of Extractivism: Moving from Dispersed Places to Global Capitalism,” *Journal of Peasant Studies* 47, no. 1 (February 21, 2019): 155-156.

<sup>25</sup> Durante, Kröger, and LaFleur, “Definitions and Concepts,” 20.

Though many definitions of extractivism have been proposed, Chagnon et al. and Jingzhong Ye, Jan Douwe van der Ploeg, Sergio Schneider, and Teodor Shanin provide precise lists of the defining features, helping to fill out the somewhat complex concept. Among its various definitions, Chagnon et al. find three common features:

Extractivism (1) “involves appropriation of natural and human resource wealth, producing a drain that damages or depletes its source in a potentially irreversible way”; (2) “is premised on capital accumulation and centralization of power”; and (3) “is a modality of capital accumulation in current global capitalist development that conditions, constrains, and pressures lives of virtually all humans and other than-humans.” Chagnon et al. add a fourth common thread, saying, “Drain, associated with extractivisms, can be analyzed as resource and wealth flows in time and space (at and through different, nested levels, including local, state, regional, and global).”<sup>26</sup>

Ye et al. find ten common features,<sup>27</sup> which Dunlap summarizes succinctly:

Extractivism involves (1) “the creation of a monopoly over the resources” that becomes (2) “intertwinement between state and private capital groups.” This (3) requires infrastructural development, (4) often controlled by an “operational centre” that (5) accumulates the generated wealth. Extractivism then (6) triggers inequalities that (7) sometimes entails various degrees of remediation by the state through redistribution. Extraction, most of all, (8) amounts to “production without reproduction”—that is, destruction—amidst (9) “boom-like” profits that (10) results in socio-ecological “barrenness”: degraded societies and ravaged landscapes.<sup>28</sup>

### Is Extractivism New?

“Extractivism characterizes the modern era,” Durante and colleagues flatly declare.<sup>29</sup>

Because modern extractivist practices began to gather significant momentum around 500 years ago, these practices emerge and evolve alongside European colonialism and the Enlightenment and scientific revolution, contributing to the development of the modern world-system.<sup>30</sup> This demarcation of extractivism to the modern era, as some integral component, is not uncommon in

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<sup>26</sup> Chagnon et al., “From Extractivism to Global Extractivism,” 763.

<sup>27</sup> Ye et al., “The Incursions of Extractivism,” 156-57.

<sup>28</sup> Dunlap and Jakobsen, *Violent Technologies*, 6.

<sup>29</sup> Durante, Kröger, and LaFleur, “Definitions and Concepts,” 20.

<sup>30</sup> *Ibid.*, 24.

the literature. Indeed, many scholars recognize this longer history of extractivist activities: in addition to the so-called “progressive cycle” in mid-2000s Latin American politics noted above, as well as the earlier onset of neoliberalism in the 1970s,<sup>31</sup> the history of the capitalist system, characterized by Euro-American colonialism, is typically held as the wider historical context, the longer timespan, in which to situate extractivism as a broader web of dynamics.<sup>32</sup>

Now, this process of expanding the historical context itself begs at the above demarcations. Have extractive practices and activities not existed prior to fifteen-century European colonialism? Are such practices and activities not, in some significant way, integral to civilization itself?

Durante and colleagues go on to acknowledge the “deeper roots” of extraction and “anthropocentric appropriation,” noting, only in passing, that world-systems analysts recognize a “5,000-year history of imperial capital demolishing environments,” but they do not follow this timescale any further, curiously.<sup>33</sup> The developmental trajectory of extractivist practices has informed an “underlying and overarching extractivist logic,” which is described as an “extractivist mindset, or ontology,” that has “operated through the centuries and [has come to form] the functional core of the modern world-system and world-ecology.”<sup>34</sup> In their exploration of these “ontological underpinnings” that inform the extractivist logic, Durante et al. identify in the ancient Greeks’ notion of “natural law” the first promulgation of the extractivist logic that would later be codified by the Romans as the “law of first taker,” or *ferae bestiae*, “the law of wild beasts.”<sup>35</sup> Such a law is significant because, first, it asserts that property, “and therefore

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<sup>31</sup> Gago and Mezzadra, “A Critique of the Extractive Operations,” 575; Ye et al., “The Incursions of Extractivism,” 167-68.

<sup>32</sup> Acosta, “Extractivism and Neoextractivism,” 62; Chagnon et al., “From Extractivism to Global Extractivism,” 765-66.

<sup>33</sup> Durante, Kröger, and LaFleur, “Definitions and Concepts,” 24.

<sup>34</sup> *Ibid.*, 21, 24.

<sup>35</sup> *Ibid.*, 25.

humanity,” is established through the exploitation of “the potential of things in the physical world,” and second, its interpretation was central to debates in Europe over colonial dispossession, becoming a point of justification for the European expansion.<sup>36</sup>

### Extractivism in the Modern Era

The ancient Greeks’ notion of natural law indeed displays, at least, nascent aspects of the extractivist logic, but does this historical demarcation of extractivism to the modern era itself not also beg to be further expanded? Can extractivist practices and mentalities, in some capacity, not be traced throughout the history of not only Western capitalism and colonialism, but human civilization itself? In other words, is some type of extraction always necessary for human life?

The sentiment underlying such a question, for Dunlap and Jakobsen, both articulates a type of “colonial apologetics” and neglects the scale of modern consumption and its relationship to the product of the entire process: for some, “technological wonder” of yesteryear’s science fiction made real, such as automotive and flying machines, computers, vaccines, processed foods; but for the great majority, widespread social, ecological and climate catastrophe.<sup>37</sup> What differentiates the past 500 years of extractivism from prior resource extraction, for Durante et al., is both the scale and “the greater domination of certain mindsets by the advancement of modern technology alongside political and military power.”<sup>38</sup> Chagnon et al. also emphasize the logics, mindsets, and ideologies that stem from extractivist ontological dispositions, rather than the particular resource or technology, for there exists “less directly visible or tangible extractivist thrusts behind the more tangible and mindset transformations.”<sup>39</sup>

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<sup>36</sup> Ibid., 25-26.

<sup>37</sup> Dunlap and Jakobsen, *Violent Technologies*, 14-15. The authors list as examples widespread diseases, illness, industrial disasters, and uranium babies.

<sup>38</sup> Durante, Kröger, and LaFleur, “Definitions and Concepts,” 24.

<sup>39</sup> Christopher W. Chagnon, Sophia E. Hagolani-Albov, and Saana Hokkanen, “Extractivism at Your Fingertips,” in *Our Extractive Age: Expressions of Violence and Resistance*, ed. Judith Shapiro and John-Andrew Mcneish (Abingdon: Routledge, 2021): 177.

## Total Extractivism

Dunlap and Jakobsen also draw attention to these ontological dispositions and this dominating allure of supposed technological advancement, with its ideological links to modern capitalist dogma and to the security and military industries, both as central components of the extractivist logic. Pressing against the above definition put forth by Ye et al., with its emphasis on capitalism generally, Dunlap and Jakobsen argue for the further probing into “techno-industrial ‘progress’” as the “proper home” of extractivism. In order to better incorporate this critique of notions of progress, the authors introduce the concept of total extractivism, which refers to “the deployment of violent technologies aiming at integrating and reconfiguring the earth and absorbing its inhabitants, meanwhile normalizing its logics, apparatuses and subjectivities, as it violently colonizes and pacifies various natures.” The term is coined by the recognition of the “totalizing tension” of the techno-capitalist system—a system driven by an “imperative” toward total consumption and reconfiguration of the earth that is never complete nor fulfilled. Total extractivism is this imperative, which, in the modern era, drives the global capitalist economy.<sup>40</sup>

This conceptual expansion, for Chagnon et al., pushes the points of scale and ubiquity in relation to technology, dominant ontological dispositions, and organized violence—all of which distinguishes the last 500 years of resource extraction from that of prior times, while simultaneously directing attention towards the fact that such dispositions and violence were not absent from much of prior civilization and empire formation and building.<sup>41</sup> In this way, total extractivism is employed to describe the operative extractivist features—the logics, apparatuses and subjectivities—that underpin the current world-system in ways that are only intensified and

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<sup>40</sup> Dunlap and Jakobsen, *Violent Technologies*, 6-7.

<sup>41</sup> Chagnon, Hagolani-Albov, and Hokkanen, “Extractivism at Your Fingertips,” 177.

expanded compared to prior times. Here, total extractivism explicitly universalizes throughout the history of human civilization those features otherwise ascribed only to modern times by most other extractivism scholarship. At the same time, it highlights exactly that point of intensification and expansion—again, characterized by Euro-American colonialism—in order to underscore the novel features of the current world-system.

### **Monsters and Machines**

Total extractivism is a unique concept within general extractivism scholarship due to its recognition of a longer timespan, finding in the fundamental operations of civilization itself those practices and logics that have come to dominate the operations of the modern world-system. This expanded recognition, or something similar, is not entirely absent from other academic fields, particularly that of the philosophy of technology in the area of work called *technopessimism*—an area from which total extractivism scholars draw heavily. One such scholar is Fredy Perlman.

#### Direct Intellectual Resources of Total Extractivism: Fredy Perlman

The “techno-capitalist industrial system” harbors a “rapacious appetite for all life” a desire for “the total consumption and reconfiguring of the earth centered on bureaucracy, industrial/cybernetic production and market relations that maintain a hyper-destructive growth imperative [producing] a grotesque earthly product,” describe Dunlap and Jakobsen.<sup>42</sup> Much of this metaphorical language is openly drawn from Fredy Perlman, an author of direct influence on the concept of total extractivism. Dunlap and Jakobsen explicitly lay out this influence, providing an in-depth exposition of Perlman’s relevant writings and perspectives, particularly the notion of the “Worldeater/Leviathan,” drawn from the 1983 treatise, *Against His-Story, Against Leviathan*. Dunlap and Jakobsen situate this work, and their own position within political

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<sup>42</sup> Dunlap and Jakobsen, *Violent Technologies*, 6-7.

ecology, in relation to the work of Jacques Ellul, Max Stirner, and Michael Taussig, among other “dissident perspectives” that are “unconventional in academic circles.” In this notion of Worldeater/Leviathan, the authors find a metaphor that best captures the “amalgamation of violent technologies and spirit<sup>43</sup> propelling the global capitalist economy toward total extractivism.”<sup>44</sup>

This particular treatise of Perlman’s is a sweeping analysis of the development of civilization, patriarchy and the State, which contends that the technologies and spirit found to dominate the planet now are much older than capitalism or colonialism and are present in ancient civilizations. From Mediterranean to Mesoamerican civilizations to Chinese dynasties—“they bare [*sic.*] the seeds and the logic of the present colonial/state system.”<sup>45</sup>

Fredy Perlman was an American author and activist associated with the relatively influential publishing collective, *Fifth Estate*, in Detroit, Michigan, which flourished in the period between the mid-1980s and mid-1990s.<sup>46</sup> Treating the *Fifth Estate* as an intellectual whole, Steven Millet describes the group’s central concern as a “critique of the megamachine,” which began in the late 1970s and articulated the argument that technology is not separate from the socio-economic system itself, that modern technology is best conceptualized as constituting a system of domination, one that “interlinks and interacts with the economic processes of capitalism to create a new social form, a ‘megamachine’ which integrates not only capitalism

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<sup>43</sup> An allusion to Max Weber’s *The Protestant Ethic and the Spirit of Capitalism* (1905/1930).

<sup>44</sup> Dunlap and Jakobsen, *Violent Technologies*, 7.

<sup>45</sup> *Ibid.*, 21.

<sup>46</sup> Chamsy el-Ojeili and Dylan Taylor, “‘The Future in the Past’: Anarcho-Primitivism and the Critique of Civilization Today,” *Rethinking Marxism* 32, no. 2 (April 2, 2020): 168; See also Uri Gordon, “Leviathan’s Body: Recovering Fredy Perlman’s Anarchist Social Theory,” *Anarchist Studies* 31, no. 1 (February 15, 2023): section “(De)Alienation as Practice,” (no page numbers in URL).



and technology, but also State, bureaucracy and military.”<sup>47</sup> Technology and capital are taken as more similar than different, though not identical. Technology is not neutral and is not separate from some “evil” capitalism. To understand capitalism, then, the crucial role of technology in the development of new forms of domination, oppression and exploitation must be recognized.<sup>48</sup>

### On the Leviathan Metaphor

Throughout Millet’s description, the two metaphors of megamachine and Worldeater/Leviathan are conflated, with the former only being spoken of—el-Ojeili and Taylor do similarly<sup>49</sup>—with no further comment. Leviathan is a recognizable appellation, strongly associated with Thomas Hobbes’s 1651 treatise, *Leviathan or The Matter, Forme and Power of a Commonwealth Ecclesiasticall and Civil*, but it is also alluded to previously in the Bible,<sup>50</sup> which commentators describe as “the mythological [primeval sea] monster, mentioned frequently in Canaanite literature, [that] plays a prominent role in Israelite poetry as the embodiment of disorder.”<sup>51</sup> It is this “embodiment of disorder” that Hobbes conjures when, on the cover of his treatise, there reads, “*Non est potestas Super Terram quae Comparetur ei*” (“There is no power on earth comparable to him”).<sup>52</sup> Hobbes describes the figure of his ideal commonwealth as the “Leviathan,” a representational mega-person made up of citizens—a metaphor representing the body politic that mirrors the human body, the head of which is the sovereign, surveilling its

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<sup>47</sup> Steve Millett, “Technology is capital: Fifth Estate’s critique of the megamachine,” in *Changing Anarchism : Anarchist Theory and Practice in a Global Age*, ed. Jonathan Purkis and James Bowen (Manchester: University Press, 2004): 73.

<sup>48</sup> *Ibid.*, 74.

<sup>49</sup> el-Ojeili and Taylor, “‘The Future in the Past’,” 169.

<sup>50</sup> See Job 7.12; 9.13; 26.12-13; Psalm 74.13-14; 104.26; Isaiah 27.1.

<sup>51</sup> M. Jack Suggs, Katharine Doob Sakenfeld, and James R Mueller, eds., *The Oxford Study Bible: Revised English Bible with the Apocrypha* (New York: Oxford University Press, 1992): 512, n. 8; 548; (my italics).

<sup>52</sup> Hobbes cites Job 41.24, but in modern translations, the verse given is 41.33, also translated as “He has no equal on earth,” continuing, “a creature utterly fearless.” See *ibid.*, 549.

body-citizens, maintaining peace and order. Such maintenance, argues Hobbes, is necessary in the war-like state of nature in which humankind exists.<sup>53</sup>

Perlman draws on Hobbes's metaphorical image, yet expands it as a conceptual totality, like civilization or megamachine. The Leviathan is conceived of as a Worldeater, a "swallower of worlds and destroyer of the Biosphere," the term being an "apt, functionally descriptive name for the Western Leviathan."<sup>54</sup> The world-eating Leviathan is the villain of Perlman's *Against His-Story, Against Leviathan*, wherein the State, the ruling class, capitalism, and technology are its recent attributes; it is machine-like and is spoken of as such in metaphorical, but sometimes literal, terms; it "converts free communities of individuals into 'zeks,' forced laborers who form the cogs and wheels that make the [Leviathan] operate, [and who] are wrenched out of mythic or cyclical time into the linearity of history, or His (that is, Leviathan's) story"; it is the "monster of power and domination, the megamachine of Western civilization."<sup>55</sup>

#### Additional Intellectual Resources of Total Extractivism

Millet finds direct inspiration for the *Fifth Estate's* critique of the megamachine in the prior writings of Karl Marx, Jacques Ellul and Jacques Camatte, succinctly summarized as follows:

Like Marx, the [*Fifth Estate*] recognises the primacy of social relations in defining a historical epoch, and, like Ellul, it recognises the importance of technology independent of other social factors. From Camatte comes the recognition of the over-arching dominance of the techno-capitalist system and its ability to escape its limitations. However, unlike Marx it does not see technology as being neutral; and unlike Ellul it does not give complete primacy to technology, instead seeing it as integral to a system that is driven by both technology and capital.<sup>56</sup>

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<sup>53</sup> Thomas Hobbes, *Leviathan*, ed. J. C. A. Gaskin (New York: Oxford University Press, 1998): 7-8, 84.

<sup>54</sup> Fredy Perlman, *Against His-Story, Against Leviathan!* (Detroit: Black and Red, 1983): Chapter 18 (no page numbers in URL).

<sup>55</sup> John Moore, "Prophets of the New World: Noam Chomsky, Murray Bookchin, and Fredy Perlman," *Social Anarchism*, no. 20 (February 8, 2006): near superscript 30 (no page numbers in URL).

<sup>56</sup> Millet, "Technology is capital," 82.

In conjunction with these influences, the use of the term megamachine is a direct allusion to the work of the twentieth century American historian, sociologist and philosopher of technology, Lewis Mumford, specifically his *The Myth of the Machine*—the first volume, *Technics and Human Development*, was published in 1967, the second, *The Pentagon of Power*, in 1970. This work undertakes a project similar to that of Perlman’s mentioned above, in that it attempts a sweeping analysis of human history, tracing the links between social organization and the use of technology, introducing this notion of the megamachine to describe not mechanical or technical apparatus, but a form of social organization that functions like a machine, an “archetypal machine composed of human parts”<sup>57</sup>—a description reminiscent of that of Hobbes’s Leviathan. Mumford gleams this from what are seen as hierarchically structured societies throughout human history, including that of the ancient Egyptians and the Roman empire. Megamachines are conceived of as mass organizations, organized by elites of whatever relevant sort, intended to accomplish particular ends beyond the capabilities of individuals or small-scale communities, collectives, or loose territorial groups, bringing on a “radically different condition, in which [humankind] will have not only conquered nature, but detached [itself] as far as possible from the organic habitat.” In order to reinforce power and extend its dominion, such processes of organization categorically ignore the needs and purposes of primeval life.<sup>58</sup>

These terms—megamachine and Worldeater/Leviathan—are here being used as abstract totalities, metaphorically representing civilization and/or capitalist society and culture, with negative connotations of and focus on technology—in its most general sense—through a highly critical lens, as machine or monster. The Worldeater/Leviathan concept, for el-Ojeili and Taylor, evokes the idea that “technology ‘encloses’ all other human activity, promoting rationality and

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<sup>57</sup> Lewis Mumford, *The Myth of the Machine* (New York: Harcourt Brace Jovanovich, 1967): 11.

<sup>58</sup> *Ibid.*, 3.

artificiality”—an evocation they similarly find in Mumford’s concept of the megamachine employed by *Fifth Estate* writers.<sup>59</sup> And it is through these metaphors, and associated theory and concepts, that the *Fifth Estate* and Fredy Perlman build upon not only Marx, Camatte and Ellul, but a long, and complex, history of the philosophy of technology, particularly that of technopessimism, all of which is now drawn upon by total extractivism scholars.

### **Twentieth Century Philosophy of Technology**

The concept of total extractivism is rooted in perspectives drawn from those of the *Fifth Estate* collective, and as seen above, the *Fifth Estate*’s “critique of the megamachine” can be taken as intellectual inheritor of the sort of critical, ethical project with which Mumford was engaged—i.e., his sweeping analysis of the links between social organization and technology throughout human history. This intellectual inheritance has been overlooked by academic philosophy of technology, though the project itself has continued, which is particularly evident in Perlman’s *Against His-Story, Against Leviathan*.

#### Ethics of Technology

Carl Mitcham refers to Mumford’s project as an “ethics of technology” that theorizes in “large-scale terms,” grouping Mumford’s *The Myth of the Machine* with Martin Heidegger’s “The Question Concerning Technology” (1954), Ellul’s *The Technological Society* (1954), and Herbert Marcuse’s *One-Dimensional Man* (1964).<sup>60</sup> Elsewhere, Mitcham excludes Marcuse and situates the three others, adding José Ortega y Gasset, within the Romantic tradition of the philosophy of technology, taking the four philosophers as having made significant contributions to the attempt by philosophy to “bring non- or transtechnological perspectives to bear on interpreting the meaning of technology,” expressing a “Romantic uneasiness” that was first

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<sup>59</sup> el-Ojeili and Taylor, “‘The Future in the Past’,” 176.

<sup>60</sup> Mitcham, “The Ethics,” 595.

exemplified by Jean-Jacques Rousseau's 1750 essay, *Discourse on the Sciences and Arts*.<sup>61</sup>

Mitcham's point here is not only that these philosophers are engaging in a similar sort of analytic project, but that these projects are all *ethical* in nature: they all engage in "critical ethical reflection on technology."<sup>62</sup> Mitcham argues that, in the last quarter of the twentieth century, this sort of ethics of technology "retreated to prioritizing small problems over big ones," abandoning any analysis of "capital 'T'" technology,<sup>63</sup> leaving unaddressed or unacknowledged the "big problems"—particularly of the ecological type—of the late twentieth and early twenty-first centuries.<sup>64</sup>

The contention here is that this retreat Mitcham refers to is a mistaken observation, based on an (understandable) oversight of work coming from outside of both his academic field and academia itself. This sort of critical ethical reflection on technology is exactly what is found in, for instance, Perlman's *Against His-Story, Against Leviathan* and the greater project of the *Fifth Estate* collective, as well as in their wider lines of intellectual engagement and influence running into the twenty-first century,<sup>65</sup> including the specific area of political ecology and extractivism scholarship here under review. To explain Mitcham's oversight, in other words, another critical tradition must be considered, but first it will serve well to understand better what Mitcham's grouping is really based upon—i.e., what this ethics of technology done in large-scale terms is.

### Technopessimism

As does Mitcham, Mumford and these associated philosophers are not unusually situated

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<sup>61</sup> Carl Mitcham, *Thinking through Technology: The Path between Engineering and Philosophy* (Chicago: University of Chicago Press, 1994): 39, 293.

<sup>62</sup> Mitcham, "The Ethics," 598.

<sup>63</sup> *Ibid.*, 593-93. This is because of three factors: (1) "we became increasingly aware of unintended consequences of technological actions," (2) "we became aware that ... there was a non-human environment to consider," and (3) we became aware that the managers of technical agencies—including technology assessment and environmental protection agencies—tended to form a 'new class' that often promoted its own self-interests."

<sup>64</sup> *Ibid.*, 594.

<sup>65</sup> Gordon, "Leviathan's Body," in "Introduction" (no page numbers in URL).

in this Romantic tradition,<sup>66</sup> one characterized as a reaction against the eighteenth-century scientific and industrial revolutions, which forms a “continuously critical, intermittently powerful, adversary culture” of “a dissident minority of writers, artists, and intellectuals who had opposed the technocratic idea of progress for a long time.”<sup>67</sup> This culture may aptly, and usefully, be named *technopessimism*, of which Alexander Chumakov provides further clarification:

Technopessimism is “a frame of reference, according to which scientific and technological ... achievements are regarded as the main reason for the broken balance in the relationship between society and nature and the emergence and abrupt intensification of environmental, resource, social, and many other problems of modern social development.”<sup>68</sup>

Chumakov presents this definition as in contrast to *techno-optimism*, where such scientific and technological achievements are held to instead contribute to a process of social progress and enlightenment. This portrayal is rather limited, depicting a simple opposition between pessimistic and optimistic conceptions of science and technology, excluding other positions and significant levels of nuance found even in specific cases of these two positions, though especially with those of technopessimism.<sup>69</sup> To understand some of these nuances, and the basis of Mitcham’s grouping, it will serve well to consider specific cases, which will be conveniently

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<sup>66</sup> See also Thomas Parke Hughes, *Human-Built World: How to Think about Technology and Culture* (Chicago: University of Chicago Press, 2005): 58-61.

<sup>67</sup> Leo Marx, “The Idea of ‘Technology’ and Postmodernism Pessimism,” in *Technology, Pessimism, and Postmodernism*, ed. Yaron Ezrahi, Everett Mendelsohn, and Howard P. Segal (Amherst: University of Massachusetts Press, 1994): 22.

<sup>68</sup> Alexander N. Chumakov, “Tekhnooptimizm, Tekhnopessimizm [Techno-optimism, Technopessimism],” *Malaya rossijskaya enciklopediya prognostiki* [Minor Russian Encyclopedia of Prognostics], ed. I.V. Bestuzhev-Lada, (Moscow: Institut ekonomicheskikh strategij, 2007 [2016]): no page numbers.

<sup>69</sup> Other writers on the topic tend to categorize at least four attitudes toward or notions of technology. Heikkurinen and Ruuska, for instance, name four attitudes: optimism, pessimism, neutralism, and holism; Wallgren and Toivakainen name four notions: progressive, unstoppable, neutral, and natural. See Pasi Heikkurinen and Toni Ruuska, “Technology and Sustainability: An Introduction,” and Thomas Wallgren and Niklas Toivakainen, “The Question of Technology: From Noise to Reflection,” both in Pasi Heikkurinen and Toni Ruuska, eds., *Sustainability beyond Technology: Philosophy, Critique, and Implications for Human Organization* (New York: Oxford University Press, 2021).

done through an exposition of two of the philosophers of technology included in Mitcham's list, Martin Heidegger and Jacques Ellul—the latter being a noted influence on the *Fifth Estate*, already recognized above.<sup>70</sup>

### *Martin Heidegger*

Heidegger was a major twentieth century German philosopher, who engaged in a wide spectrum of philosophic issues. Sharff and Dusek unflinchingly declare that “[m]ost philosophers of technology would probably agree that ... Heidegger's interpretation of technology ... is still the single most influential position in the field”<sup>71</sup>—a position put forth in his “The Question Concerning Technology” (1954).

Michael Zimmerman usefully places Heidegger in confrontation with modernity, which might be a slight underestimate, for the latter traces the “essence of the modern age” to prior times, those of the ancient Greeks.<sup>72</sup> Jeffery Herf aptly describes Heidegger as having viewed Western history as “a long process of decay set in motion by the Greek initiation of an active, dominating stance toward nature,” a process culminating in modernity, in twentieth century technological nihilism.<sup>73</sup> It is this process of decay that Heidegger attempts to understand and the technological nihilism he attempts to confront through both his philosophical and political efforts.

Through his treatment of technology, and its association with science, Heidegger

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<sup>70</sup> Note 54: Millet, “Technology is capital,” 82.

<sup>71</sup> Robert C Scharff and Val Dusek, “Heidegger on Technology: Introduction,” in *Philosophy of Technology: The Technological Condition: An Anthology* (Malden: Wiley Blackwell, 2014): 299.

<sup>72</sup> Michael E Zimmerman, *Heidegger's Confrontation with Modernity* (Bloomington: Indiana University Press, 1990).

<sup>73</sup> Jeffrey Herf, *Reactionary Modernism: Technology, Culture, and Politics in Weimar and the Third Reich* (Cambridge: Cambridge University Press, 1986): 109-29.

endeavors to illuminate the question of Being,<sup>74</sup> which he sees underlying this process of historical decay. Technology is not a neutrally instrumental human activity, but a mode of “revealing” that “sets up” nature as a “standing-reserve,” a stock of resources for human use. This process, called “enframing,” is the essence of technology, the way in which things “challenge” to be disclosed as standing-reserve. In science too, the world is ordered into an objectified picture. Enframing is experiencing the world only through technological thinking, which functions to conceal both other modes of revealing and the revealing itself already taking place. Through this concealment of revealing, the truth of Being is also concealed. This concealment of the truth of Being is the problem of modern technology, though the problem is not fundamentally modern, having constrained the understanding of Being since that Greek initiation, though increasingly so ever since.<sup>75</sup>

*Jacques Ellul*

Ellul was a twentieth century French philosopher and sociologist. During the period in which Heidegger formulated his question on technology, Ellul was forming his notion of “technique,” which, as he puts it in his *The Technological Society* (1954), is “the *totality of methods rationally arrive at and [aspiring to] absolute efficiency* (for a given stage of development) in *every* field of human activity.”<sup>76</sup> Modern society is dominated by technique to its own detriment. Humankind lives in a technological society, but, as Ellul distinguishes, the operative phenomenon, technique, is not merely technology, machines or procedures used to attain some end, since these “technical operations” are historically and geographically limited.

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<sup>74</sup> Which is the subject-matter of ontology, the branch of philosophy concerned with metaphysics, specifically such issues as the nature of existence and the categorial structure of reality. See Ted Honderich, ed., *The Oxford Companion to Philosophy* (New York: Oxford University Press, 1995): 82, 634.

<sup>75</sup> Martin Heidegger, *The Question Concerning Technology, and Other Essays*, trans. William Lovitt (New York: Harper & Row, 1977).

<sup>76</sup> Jacques Ellul, *The Technological Society* (New York: Vintage Books, 1967), xxv.



Technique is “nothing more than means and the ensemble of means,” which outweighs, in modern life, any consideration of the ends. Technique intervenes in technical operations through human consciousness and judgement. Reasoned judgement “reduces the multiplicity of means to just one, the most efficient,” and consciousness “causes a rapid and far-flung extension of technique.” Technical civilization is produced by the quest for “the one best means,” a quest that has taken over not only production, but the totality of human activities.

This total penetration of technique into every field of human activity confines all responses of humanity to technique with further, more intensive technique. Civilization is, to an overwhelming extent, unknowingly intertwined with technology through technique. Technique characteristic of current civilization is no longer merely a means or an intermediary; it “has taken substance, has become a reality in itself.” Through this, technology has become autonomous, constituting *the* dominate force in modern social life. Ellul argues that humanity deceives itself, assuming it is or can be in control of technology, for all non-technical ways of thinking are incorporated into technique. In science, the economy, politics and ordinary life, everything is interpreted through the lens of technique, through the quest for “the one best means,” blinding people to reality, displacing values and undermining morality. Humanity is now living in a new and unfamiliar universe, one that “evolved autonomously” as to disconnect us from nature and the ancient milieu we are adapted to.<sup>77</sup>

Both Ellul and Heidegger attempt to capture modern technology within a more expansive framework, speaking in terms of fundamental ontology and raising issues concerning what are seen as dire historical eventualities and their consequential impact on human intellectual,

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<sup>77</sup> Ibid. See also Scharff and Dusek, *Philosophy of Technology*, 426-27.

emotional and moral well-being. In no way has technology positively contributed to such well-being—quite the opposite.

Such analyses and conceptualizations of technology contribute much to the orientation of technopessimism generally and to Mitcham's particular grouping of these philosophers. Much is found in common with Mumford's own conceptualization captured by the concept of the megamachine and, somewhat in turn, by Perlman's *World eater/Leviathan*. In Mumford's assessment, "the ultimate religion of our seemingly rational age" is "the myth of the machine," wherein belief in the all-solving ability of technology, and science, leads to a notion of progress indistinguishable from technical achievements.<sup>78</sup>

### **The Confluence of Technopessimism and Anarchism**

Highlighted here is a confluence of intellectual strands that became explicit, theoretically and rhetorically, with the *Fifth Estate* collective in the late-twentieth century. What converged was this strand of technopessimism, including Heidegger, Ellul and Mumford, with strands of anarchism. These intellectual strands, however, had occasionally made contact earlier, especially with those associated with the Romantic tradition.

#### Anarchistic Traces in the Romantic Tradition

What distinguishes the general project of the *Fifth Estate* collective, its critique of the megamachine, within this greater Romantic tradition of philosophy of technology, and what concealed for Mitcham the continuation of ethics of technology in large-scale terms, is the incorporation of an anarchist tradition of political philosophy—an area of intellectual work presumably unobserved by Mitcham and his area of study in the philosophy of technology. This tradition of anarchism is often portrayed as evolving from and alongside many of the thinkers

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<sup>78</sup> Lewis Mumford, *The Myth of the Machine: The Pentagon of Power* (New York: Harcourt Brace Jovanovich, 1970): 197-229, particularly.

and intellectual developments associated with the Romantic tradition. Rousseau, for instance, is regularly featured as influencing, to some degree, both traditions, for reasons concerning his and the tradition's preoccupation with nature and the natural.<sup>79</sup> Henry David Thoreau, too, is often held in a similar light.<sup>80</sup>

Already among those thinkers highlighted by Mitcham, Jacques Ellul, too, was a self-proclaimed Christian anarchist.<sup>81</sup> Another cross-over figure regularly included is Mumford, of whom Peter Marshall groups with “modern libertarians,” such as Bertrand Russell, Aldous Huxley, Martin Buber, Albert Camus and Michel Foucault, for the reason of them all having “taken socialism or liberalism to the borders of anarchism, and occasionally [stepping] over.”<sup>82</sup> For Thorpe and Welsh, Mumford's work critically captures the basic features of the “centralized high-modern state” with his notion of the megamachine, and that of “authoritarian technics,” forming part of his greater project, which is held to demonstrate that “democratic culture [is] being eroded by the development of socio-technological systems embedding authoritarian relations of command and control<sup>83</sup>—a sort of anarchistic approach. Mumford was surely aware of the anarchist tradition, greatly admiring, for instance, the famous anarchist, Peter Kropotkin's 1899 *Fields, Factories and Workshops*,<sup>84</sup> for its originality and practicality, thinking it more relevant to his contemporary moment than that of Kropotkin.<sup>85</sup>

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<sup>79</sup> Peter H. Marshall, *Demanding the Impossible: A History of Anarchism: Be Realistic, Demand the Impossible!* (Oakland: PM Press, 2010): 683.

<sup>80</sup> Alexander Dunlap, “‘I Don't Want Your Progress! It Tries to Kill ... Me!’ Decolonial Encounters and the Anarchist Critique of Civilization,” *Globalizations*, (May 24, 2022): 6.

<sup>81</sup> Jacques Ellul, “Anarchism and Christianity,” *Katallagete*, 7, 3 (1980): 14-24.

<sup>82</sup> Marshall, *Demanding the Impossible*, 566.

<sup>83</sup> Charles Thorpe and Ian Welsh, “Beyond Primitivism: Towards a Twenty-Fist Century Anarchist Theory and Praxis for Science and Technology,” *Anarchist Studies* 16, no. 1 (2008): 51-52.

<sup>84</sup> George Woodcock, *Anarchism* (Harmondsworth: Penguin Books, 1979): 208.

<sup>85</sup> Marshall, *Demanding the Impossible*, 577.

Much of this reveals an intellectual affinity already present in this mid-century period between those engaging in technopessimism and schools of anarchism or anarchistic ideas or approaches—an affinity that will become explicit with the *Fifth Estate* and its associated areas of anarchism.

### Second Wave Anarchism

Anarchist philosophy is highly diverse, covering multiple, sometimes contradictory, positions, having developed through much intellectual and political cross-pollination and engagement over many decades, and even centuries.<sup>86</sup> The relevant strand here may be captured under the label of green anarchism,<sup>87</sup> which emerges within the “second wave” of anarchism beginning in the tumultuous 1960s.<sup>88</sup>

From the 1960s into the 70s, George Woodcock observes, at an “almost” world-wide scale, a “rejuvenated,” “autonomous revival of the anarchist idea,” going on to describe it as an “unstructured cluster of related attitudes.”<sup>89</sup> The anarchist idea, for Woodcock, reemerged and developed during this period for two reasons: one, a new scholarly interest in the political philosophy, evidenced by the appearance, in France, Britain and the U.S., of biographies and histories concerning anarchists and anarchist movements;<sup>90</sup> and two, anarchism itself was rapidly

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<sup>86</sup> In addition to Marshall, *Demanding the Impossible*, and Woodcock, *Anarchism*, see Robert Graham, *Anarchism: A Documentary History of Libertarian Ideas. Vol. 1, from Anarchy to Anarchism (300CE to 1939)* (Montréal: Black Rose, 2005). Graham here locates in the Daoist philosopher, Bao Jingyan’s text from 300 CE, entitled “Neither Lord Nor Subject,” the earliest, identifiably anarchist position, a text whose title is indeed akin to the now famous anarchist catch-phrase, “No Gods, No Masters.” For a brief history of the phrase, see Daniel Guérin, *No Gods, No Masters*, trans. Paul Sharkey, vol. 1 (San Francisco: AK Press, 1998): 1-2.

<sup>87</sup> Though, here again, there are multiple positions associated with this area of anarchism, displaying theoretical differences of nuance, of which various names are variously applied—e.g., eco-anarchism, anti-civilization, anarcho-primitivism, neo-Luddism, indigenist. The clarification of such nuances, though, is beyond the scope of the present work.

<sup>88</sup> Marshall, 671, 683, 688-91.

<sup>89</sup> Woodcock, *Anarchism*, 454, 543.

<sup>90</sup> Woodcock evidences the following: *Histoire de l'Anarchie* by Alain Sergent and Claude Harmel in 1949; Jean Maitron's definitive *Histoire du mouvement anarchiste en France* in 1955, the first edition of Woodcock's *Anarchism* in 1962; James Joll's *The Anarchists* in 1964; and Daniel Guerin's *L'Anarchisme*, in 1965.

growing as an explicit political position among young people—both having been partly influenced by the civil rights and nuclear disarmament movements of the immediately preceding decades.<sup>91</sup> Marshall situates this revival as part of a wider historical movement stemming particularly, but not only, from the 1960s, that of the continuing protests against capitalism, globalization and war—a movement that had come to realize that the “Megamachine, not the human spirit, has triumphed.”<sup>92</sup> This second wave was characterized, and popularized, at least in part, by its opposition to the increasingly technological cultures of Western Europe, North America, Japan and Russia,<sup>93</sup> concerning itself with the degradation of the environment, the effects of technology and the prospect of living sustainably—all of which is explicitly emphasized by those associated with green anarchism.<sup>94</sup>

### **Another Confluence: Indigenous Influence of Thought**

Green anarchism emerges within this historical context, and it is distinguished among the various anarchist strands by not only its critical focus on technology in relation to ecological issues, but also its recognition of Indigenous presence and political engagement globally and an “appreciation for horizontal Indigenous cultures.”<sup>95</sup> This recognition spurred an ongoing, though perhaps intermittent and insubstantial, effort to incorporate what can, for now, be called “Indigenous thought” into anarchist theory and practice. While certain strands of anarchism exalt enlightenment rationalism and materialist atheism, “which reduces issues solely to class while transposing Western conceptions of state, sovereignty, and law onto Indigenous cultures,” green anarchism, instead, attempts to scrutinize these very issues and concepts, having retained, since

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<sup>91</sup> Ibid., 456-57.

<sup>92</sup> Marshall, *Demanding the Impossible*, 670-71.

<sup>93</sup> Woodcock, *Anarchism*, 458. Another reason being its ongoing critique of dated Marxist and Marxian theories.

<sup>94</sup> Marshall, *Demanding the Impossible*, 672.

<sup>95</sup> Alexander Dunlap, “Toward an Anarchist Decolonization: A Few Notes,” *Capitalism Nature Socialism* 32, no. 4 (January 27, 2021): 64.

this late-twentieth century period, some level of global influence through its continued application to and involvement in anti-colonial struggles.<sup>96</sup>

Writers on green anarchism, and the *Fifth Estate* collective, commonly emphasize instances of engagement in and the influence of such Indigenous issues and thought, Fredy Perlman's work being a usual example provided. And so, this is the incorporation, or confluence, of another critical orientation.

### On "Indigenous Thought"

Defining "Indigenous thought" is impossible, if only for the reason that there is no monolithic system of thought covering all Indigenous peoples. There is a risk of overgeneralization.<sup>97</sup> As such, only particular cases of influence can be analyzed. But here, too, are difficulties, one being the lack of the sort of material or evidence typically used in scholarship to communicate systems of thought—i.e., written monographs—since many of those Indigenous systems of thought are simply lived or only spoken of, not systematized like those of the Western philosophical canon. Much of this Indigenous influence, throughout the history of such interactions in fact, is based on direct social relations between anarchist writers and particular Indigenous peoples—as will be seen with Fredy Perlman, for instance. This raises another difficulty, in that access to Indigenous thought in these instances of influence is not only

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<sup>96</sup> Dunlap, "I Don't Want Your Progress!," 3, 13. See also Ángel J Cappelletti, *Anarchism in Latin America*, trans. Gabriel Palmer-Fernández (Oakland: AK Press, 2018); Geoffroy de Laforcade and Steven J. Hirsch, "Introduction: Indigeneity and Latin American Anarchism," *Anarchist Studies* 28, no. 2 (September 1, 2020): 7–18; Gord Hill and Allan Antliff, "Indigeneity, Sovereignty, Anarchy: A Dialog with Many Voices," *Anarchist Developments in Cultural Studies*, no. 1 (2021).

<sup>97</sup> And of "cultural appropriation, Indigenous romanticism and reproducing theology (e.g. the Garden of Eden)," as stated in "I Don't Want Your Progress!," 15, 21, n. 9—especially when considering some of the identifying labels employed—e.g., primitivists. Indeed, certain theorists acknowledge as much, now distancing themselves from this very term, "primitivism," because it "is a racist way to describe indigenous peoples," some preferring, instead, the label of "indigenist" because "indigenous peoples have the only sustainable human social organisations." Quote of Derrick Jensen in el-Ojeili and Taylor, "The Future in the Past," 180. "Indigenist" might suffer similarly, though, with its wide generalization, even if the statement concerning sustainability is true. Dunlap also remarks that, until very recently, in general, "[g]reen anarchism [lacked] acknowledgment of race."

indirect for the observer, but constrained by its particular interpretation by the one being directly influenced, offering no means of confirmation or independent interpretation other than, again, direct engagement with those peoples. This certainly qualifies the notion of influence here, in that it is an author's self-perceived impression of influence that is being written about, not the actual system of Indigenous thought being referred to. These cases of influence, then, must be treated as such, as the articulations of an individual's account of self-perceived inspiration. In other words, real Indigenous systems of thought are *not* under consideration here, only these sorts of articulations. Claims of anything more must be scrutinized along these lines.

Keeping this in mind, the relevant work of Fredy Perlman and the *Fifth Estate* may be examined as representative of this appreciation and incorporation of aspects of Indigenous practices and cultures.

#### Anarchism and Articulations of Indigenous Influence of Thought

By 1986, the *Fifth Estate* had explicitly indicated their intentional development of a critical analysis of the technological structure of Western civilization in conjunction with a reconsideration of the “[I]ndigenous world and the character of ... original communities.”<sup>98</sup> Many of those associated with green anarchism, and particularly Fredy Perlman, clearly attempt to highlight or incorporate into their theoretical approaches and concepts such considerations. And though anarchist ideas have always been influenced by Indigenous practices and cultures,<sup>99</sup> those associated with green anarchism have found common cause in various Indigenous struggles, displaying, particularly across North America, an engagement and solidarity, traceable in the

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<sup>98</sup> el-Ojeili and Taylor, “‘The Future in the Past’,” 168.

<sup>99</sup> Here Dunlap references David Graeber and David Wengrow's tome, *The Dawn of Everything: A New History of Humanity* (2021); there is also scholarship on Indigenous influence on wider American philosophy, some particularly concerning certain figures in the Romantic tradition—e.g., Scott L. Pratt, “Lessons in Place: Thoreau and Indigenous Philosophy,” *Metaphilosophy* 53, no. 4 (April 26, 2022)—which suggests a long history of Indigenous influence, at least in the U.S.

U.S. to the 1970s, with such Indigenous groups as the American Indian Movement (AIM),<sup>100</sup> as well as with those involved in other land struggles against the U.S. and Canadian governments and their affiliates elsewhere.<sup>101</sup> Dunlap is sure to highlight Indigenous and anarchist affinity as also seen in their common history of repression in the U.S. going back to the creation of the Federal Bureau of Investigation (FBI), and such programs as the infamous Counterintelligence Program (COINTELPRO)<sup>102</sup>—a history that runs into this more recent period of second wave anarchism, contributing to theoretical developments of green anarchism.<sup>103</sup> Such cases of common interest help contextualize, on the theoretical side, the efforts to incorporate aspects of Indigenous practices, cultures and experiences into the project of green anarchism, as witnessed in the *Fifth Estate*'s stated intention noted above.

#### Instances of Articulated Indigenous Influence

Fredy Perlman is often portrayed as having been highly influenced by his interactions with Indigenous peoples. A shift in Perlman's intellectual output is attributed to his "encounter with the [I]ndigenous past," coupled with an increased concern over issues of genocide, femicide and ecocide.<sup>104</sup> Dunlap describes this shift as stemming from Perlman's having "[connected] with the histories and cultures of Anishinaabe nations (the Ojibwe, Ottawa, and Potawatomi)," a shift in focus towards socio-ecological thought and oral history, citing Perlman's "Progress and

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<sup>100</sup> "AIM was founded in 1968 to fight for recognition of Indigenous sovereignty and to demand the [U.S.] government adhere to its treaties with Indigenous nations," as stated in Hill and Antliff, "Indigeneity," 113, n. 4.

<sup>101</sup> Dunlap, "I Don't Want Your Progress!," 6; Hill and Antliff, "Indigeneity," 100-01; Cappelletti's *Anarchism in Latin America* is an excellent resource on such struggles, tracing the development of anarchism in the Americas to the mid-nineteenth century.

<sup>102</sup> "I Don't Want Your Progress!," 6. See especially Ward Churchill and Jim Vanderwall, *Agents of Repression: The FBI's Secret Wars against the Black Panther Party and the American Indian Movement* (Boston: South End Press, 1990), 18-27; Indeed, Gord Hill points to the 1977 arrest of Leonard Peltier in British Columbia as a memorable moment of conjoining efforts between local indigenous peoples, AIM and anarchists. See Hill and Antliff, "Indigeneity," 100.

<sup>103</sup> Dunlap, "I Don't Want Your Progress!," 6.

<sup>104</sup> Gordon, "Leviathan's Body," in "Introduction" (no page numbers in URL). Gordon notes this only in passing, focusing on the pre-shift work.



Nuclear Power: The Destruction of the Continent and Its Peoples” (1979) as its marker. Dunlap here also quotes remembrances of Fredy’s wife, Lorraine Perlman, in which Fredy is said to have “tried to absorb the teachings of the North American shamen [*sic.*] and ‘rememberers’ whose insights often originated in an era preceding the arrival of Europeans.”<sup>105</sup> Perlman’s unfinished novel, *The Strait* (1988), is also often held as evidence of Indigenous influence, it being a “panoramic view of Amerindian resistance to invasion and genocide from mythical times to the present day,”<sup>106</sup> which attempts to honor and continue the oral history of these “rememberers.”<sup>107</sup> Furthermore, Dunlap “suspects” that Perlman’s concept of Worldeater, and the general analytic project after his intellectual shift, were heavily influenced by the Anishinaabe legend of Wiindigo,<sup>108</sup> a cannibal monster that “symbolizes the potentially addictive part of the human condition—when certain desires are indulged,” stimulating “more indulgence until all reason and control are lost.”<sup>109</sup>

Perlman’s articulations of honoring and continuing some notion of Indigenous teachings and oral history can be taken as an important contribution to the project of green anarchism generally and the *Fifth Estate* particularly, and as such, they may also be taken to represent a broader influence on or reorientation within anarchist thought and practice, partly constituting the second wave of anarchism beginning in the 1970s and running into the twenty-first century. And though outside of radical politics Perlman’s work is virtually unknown, it should be noted,

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<sup>105</sup> Dunlap, “I Don’t Want Your Progress!,” 14. Quotes from Lorraine Perlman’s *Having Little, Being Much: A Chronicle of Fredy Perlman’s Fifty Years* (1989).

<sup>106</sup> Moore, “Prophets of the New World,” near superscript 28 (no page numbers in URL).

<sup>107</sup> Dunlap, “I Don’t Want Your Progress!,” 14.

<sup>108</sup> *Ibid.*, 21, n. 13. Dunlap references the LaDuke and Cowen article immediately below, n. 109.

<sup>109</sup> Winona LaDuke and Deborah Cowen, “Beyond Wiindigo Infrastructure,” *South Atlantic Quarterly* 119, no. 2 (April 1, 2020): 244. The description is taken from Mississauga Nishnaabeg writer, Leanne Betasamosake Simpson. LaDuke and Cowen, though, speak of the “Wiindigo economy”—“an economic system predicated upon accumulation and dispossession, that denigrates the sacred in all of us”—rather than the legend itself, which is seemingly partly why Dunlap qualifies his suggestion as a “suspicion.”

too, that Perlman himself was, within radical politics, “easily the most influential American anarchist writer of his generation,” alongside Noam Chomsky and Murray Bookchin<sup>110</sup>—both of which figure outside the area of green anarchism now under consideration.<sup>111</sup>

The extent that Perlman’s articulations influenced these areas of anarchism is the extent to which they contributed to the continuation of the kind of ethics of technology that Mitcham laments having ended, as noted above. The sort of project the *Fifth Estate* was engaged in, their technopessimistic critique of the megamachine, constitutes this continuation. And it is this line of intellectual influence—running from Perlman’s apparent “encounter with the Indigenous past,” articulated in his prominent works, like *Against His-story*, *Against Leviathan* and *The Strait*, and leading to the emergence of green anarchism, and its associated areas of anarchism, as recognizable orientations—that is historically traceable through Perlman’s works by way of the concepts and metaphors employed. In considering not only Mitcham’s oversight, but the intellectual resources contributing to the conception of total extractivism within the field of political ecology,<sup>112</sup> this intellectual line of influence shows itself to be highly relevant.

### **Conclusion**

Following this line of influence on the *Fifth Estate* collective has revealed strands of technopessimism and green anarchism to be intellectual resources for the recent discourse of total extractivism. Through this investigation, critical perspectives and approaches were highlighted that are not only resources for extractivism discourses, but potentially also for the

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<sup>110</sup> Gordon, “Leviathan’s Body,” in “Introduction” (no page numbers in URL). Moore writes that Perlman’s “penetrating vision cuts across and reveals the essential orderliness and limitedness of [Chomsky’s and Bookchin’s] conceptions of anarchy. By inscribing individual desire ... and the notion that all is possible at the center of his praxis, he makes other visions of anarchy seem pale by comparison.” See “Prophets of the New World...”, near superscript 30 (no page numbers in URL).

<sup>111</sup> Bookchin’s theory of *social ecology*, though, is often adjacently situated. See Marshall, *Demanding the Impossible*, 691-94.

<sup>112</sup> As well as current, various strands of green anarchism and other radical politics.

wider discussion concerning the ongoing socio-ecological emergency.

Many of these resources and lines of influence are unknown within the academic fields dealing with the very same topics, revealing several gaps in scholarship, particularly in the philosophy of technology and general political ecology, but also in environmental ethics and related fields. These intellectual resources offer critical insights, penetrating deeper into the fundamental aspects of human life, revealing a massive lack within the greater discussion of the socio-ecological emergency to consider and grapple with the possible roots of the overall problem. The consequences of this lack of engagement may currently be observed in the very fact of the emergency continuing apace. Found in such analyses and critiques of technology and civilization are, at least, models of investigation and insight, from which those concerned with the socio-ecological emergency may learn.

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