

Environmental Parataxis. Writing Hyperobject Patterns of Death in the Web of Life in Rachel Carson's *Silent Spring*

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Abstract

Rachel Carson's *Silent Spring* is often credited with starting the modern environmental movement. This article turns to a specific stylistic element employed throughout this book: parataxis. This figure can usefully foreground the hyperobject—contemporary infrastructures of waste—as it weaves together the sprawl of nature and the spread of toxic chemicals. The article presents parataxis as a useful tool for environmental communicators and how Carson used it in the struggle against pesticides. The article also cautions authors employing environmental parataxis against overlooking the inequalities of toxic contamination in paratactical compositions where words and phrases are ordered non-hierarchically.

Keywords: Environmental parataxis, Rachel Carson, the hyperobject, toxic waste.

Resumen

El inicio del movimiento ecologista moderno es a menudo atribuido a *Primavera Silenciosa* de Rachel Carson. Este artículo se centra en un elemento estilístico específico empleado a lo largo de ese libro: la parataxis. Esta figura puede servir para poner en primer plano el hiperobjeto—las infraestructuras contemporáneas de residuos—, ya que entrelaza la extensión de la naturaleza y la propagación de sustancias químicas tóxicas. El artículo presenta la parataxis como una herramienta útil para los comunicadores medioambientales, y explica cómo Carson la utilizó en la lucha contra los pesticidas. El artículo también advierte a los autores que emplean la parataxis medioambiental sobre el peligro de pasar por alto las desigualdades de la contaminación tóxica en composiciones paratácticas en las que las palabras y frases se ordenan de forma no jerárquica.

Palabras clave: Parataxis medioambiental, Rachel Carson, el hiperobjeto, residuos tóxicos.

Consider the following passage about “the sagebrush lands of the West, where a vast campaign is on to destroy the sage and to substitute grasslands”:

The land of the sage is the land of the high western plains and the lower slopes of the mountains that rise above them, a land born of the great uplift of the Rocky Mountain system many millions of years ago. It is a place of harsh extremes of climate: of long winters when blizzards drive down from the mountains and snow lies deep on the plains, of summers whose heat is relieved by only scanty rains, with drought biting deep into the soil, and drying winds stealing moisture from leaf and stem. (Carson 53)

An attentive reader well versed in literature, rhetoric, and composition studies might localize many figures here such as repetition (“of” appearing seven times in the short phrase, often as anaphor at the start of a *cola*) and anthropomorphization (“drying winds stealing moisture”). However, what I wish to highlight is the superb use of *parataxis*: a figure in which words, sentences, or phrases are placed side by side so that each element is conveyed with equal weight and emphasis.

The above use of parataxis is relatively subtle. Now, consider how such superbly narrated naturescapes are tarnished: “Azaleas, mountain laurel, blueberries, huckleberries, viburnums, dogwood, bayberry, sweet fern, low shadbush, winterberry, chokeberry, and wild plum are dying before the chemical barrage. So are the daisies, black-eyed Susans, Queen Anne’s lace, goldenrods, and fall asters which lend grace and beauty to the landscape” (58).

Toxins enter the textual scenery and start to circulate and accumulate: “Chlorides, chlorades, salts of phosphonic acid, fluorides, and arsenic” (36-37) flow from mountains and into waterways, causing birds to exhibit “typical symptoms of insecticide poisoning – trembling, loss of ability to fly, paralysis, convulsions,” (74) causing “sickness and death among horses, cows, goats, pigs, deer, fishes, and bees,” (15) and, eventually, exposing humans to “nausea, vomiting, chills, fever, extreme fatigue, and coughing” (75). The consequences of the careless use of pesticides and other poisons motivated by short-term profits are devastating; written with parataxis as the guiding figure, a “pattern of death” is woven: “Always, the pattern of death assumed a characteristic shape: the smell of DDT over the forest, an oil film on the water surface, dead trout along the shoreline” (112).

These quotes are all to be found in environmentalist and scientist Rachel Carson’s classic piece of environmental writing *Silent Spring* from 1962, a bestselling book that “both confirmed American anxieties about the impact of chemical war in agriculture and triggered the rise of modern environmentalism” (Hamilton 5). In *Recurring Silent Spring*, Carson scholar H. Patricia Hynes cements the significance of the book: “*Silent Spring* altered the balance in the world. No one since would be able to sell pollution as the necessary underside of progress so easily and uncritically” (3). There are many reasons for the book’s astonishing effectiveness in raising environmental awareness ultimately leading to vital regulation of the use of pesticides (although, as is evident from the ecological crisis that we face today, one could have wished for so much more responsible political action to protect the environment, in Carson’s time and place and beyond). In this article, I zoom in on a specific stylistic characteristic of *Silent Spring* that I believe to be one reason among many for this effectiveness: Carson’s pervasive and expert employment of parataxis, a nonhierarchical way of arranging elements in a text. I argue that Carson’s use of parataxis effectively and productively foregrounds the hyperobject—“a planetary infrastructure of waste” characterized not by its agentic qualities but by its intertness (Frantzen and Bjering 89)—of pesticides to a public audience by stringing together toxins, species, places, and people. Fully acknowledging that parataxis is but one stylistic strategy that will have to work in concert with many others in diverging ways

in diverging situations, I suggest that communicators aiming to cultivate awareness of environmental crises can learn from Carson's paratactical writing. The environmental parataxis, I propose, is a rhetorical figure geared toward drawing the audience's attention to the overwhelming yet usually invisible dispersion of toxic material in both specific ecosystems and in the biosphere as a whole. The effect is thus amplificatory: it makes toxic relations noticeable and overwhelming, eventually contributing to preparing the ground for political action to face and deal more substantially with the problem of the hyperobject.

I first discuss a range of conceptualizations of waste relations in the Anthropocene. It is important to discuss these theories and concepts of waste because it helps us see the need for strategies communicating the urgent issues of toxic waste in order for communicators and critics to address the crisis effectively and with care for Earthly life (Entres; Pezzullo, "Environment;" "On Environmental Communication"). That is, writing forth waste is important precisely because the deepening, non-benign relations of toxic chemicals and life in the Earth's biosphere causes exceptionally global, although unequally distributed, harm and thus imply the urgency of environmental political action. For this purpose, I find Mikkel Krause Frantzen and Jens Bjerling's concept of the hyperobject useful. Second, I turn to Carson's use of the environmental parataxis in *Silent Spring*. Although some scholars have engaged with parataxis in an ecological framework (Dowd; Morton, *Ecology*), these tend to focus on ontological significations within literary texts. I take a different approach, looking at Carson's critical essayism as a rhetorical text first and foremost, persuading the audience about the problem of environmental devastation in order to act before it is too late. I show how Carson achieved this by paratactically writing the lively sprawl of nature alongside the deadly spraying of toxic chemicals and suggest that the environmental parataxis is an effective figure in Carson's strategy that today's environmental communicators can learn from and use in their practice. Thus, this article follows studies on how various stakeholders might improve their environmental and climate communicative/rhetorical practices by employing specific strategies (Anderson and Maffey; Besley and Dudo; Bloomfield; Bloomfield and Manktelow; Cox and Hansen; Hoewe and Ahern; Mehlenbacher). Lastly, I caution that the environmental parataxis not be used as a device to show how everything is connected and affected in the hyperobject thus leaving out important environmental injustices and inequalities. Although synthetic chemicals can be found in almost all humans and animals today, some are earlier and more serious victims of the hyperobject than others. Writers employing the environmental parataxis in their rhetorical compositions should therefore always be weary of the danger of losing sight of this unjust politics of waste in the paratactic chains of words and phrases.

The contribution of this article is thus somewhat modest in that it zooms in on one particular figure that should obviously be used in concert with many others for a piece of environmental writing to gain any sort of impact. Nevertheless, I argue that such practice-oriented investigation of rhetorical figures is one way that environmental communicators can engage in the struggle for environmental justice.

To emphasize the contemporary relevance of this perspective, throughout the article I use current research on the spread of per- and polyfluoroalkyl substances, or PFAS, chemicals as example of an environmental issue that communicators working in textual media can engage by employing the environmental parataxis inspired by Carson's work.

Foregrounding the Toxic Hyperobject in the Anthropocene

In February 2023, an Oxford University-led team of researchers published a study documenting “alarming levels” of PFAS in the Arctic ice on the Norwegian island group Svalbard (Hartz et al.). 26 variants of PFAS out of the 45 tested for were detected, and the scientists warn that the synthetical chemicals are damaging to wildlife in the region (Perkins). As the ice melts faster due to rising temperatures, the chemicals will spread to other parts of the ecosystem affecting life on a large scale. Most likely stemming from precipitation, the PFAS chemicals' origin is industry and agriculture in Europe and Asia. Carried within clouds to remote areas like Svalbard where they have then been stored in the ice for decades, the PFAS chemicals have made their toxic mark many thousands of kilometers from their production and emission. This global distribution of toxic chemicals—from factory production on one continent, then to the clouds, then to the Arctic circle, then into wider circulation in the biosphere—is not only deeply concerning; it makes evident the fact that a central characteristic and problematic of the Anthropocene, the geological epoch defined by human influence on climate and ecological earth systems (Angus; Merchant; Moore), is *waste*. As toxic matter spreads so far and wide beyond the centers of industrial production, it becomes staggeringly clear that toxic waste does not simply disappear after production; it keeps on circulating, and dangerously so, since it does not partake in the ecological circuit of decay and regeneration that the Earth system has refined since the dawn of life, but simply piles up in all kinds of bodies. Hence PFAS' ominous nickname: forever chemicals. Human societies and their production of all kinds of goods in the supply chains of global capitalism systematically fail to take sufficient political action to deal with the production, disposal, and circulation of toxic materials, to the well-documented detriment for humans and non-humans alike (Guagliardi; Konrad; Kryder-Reid and May; Müller and Nielsen; Pezzullo, *Toxic Tourism*; Rodricks). We now find ourselves in a situation where toxic byproducts and waste is such an ingrained part of our lives, and even our bodies, that ethically ‘pure’ ways of living in, with, and *as* nature has become wholly untenable (Barnett; Shotwell).

Other studies of the spread of these chemicals focus on the inequality of the spread of PFAS. Rosie Mueller, Derrick Salvatore, Phil Brown, and Alissa Cordner looked at the concentrations in New Jersey's drinking water. They show that while 84% of the population getting their water from public sources were drinking water containing PFAS, they also found “that a larger proportion of people of color lived in CWS service areas with PFAS detections compared to the non-Hispanic white

population" (1). Writing about the pervasiveness and injustice of PFAS chemicals must find a way to incorporate both perspectives. This shows an increasing awareness of the spread of chemicals as well as their unequal effects (Lerner).

The circulation and piling up of toxic chemicals are increasingly coming to the attention of humanities scholars working with the Anthropocene. For instance, philosopher Michael Marder's essay "This Dump that is the Anthropocene" from 2019 characterizes our planetary moment as one defined by the waste resulting from our very existence in industrialized civilization: "Our planet is at an advanced stage of being converted into a dump for industrial output and its by-products, not to mention for consumerism and its excesses" (164). This dumping comes *from* us but also happens *to* us, as "The dump penetrates the very fibres of our being," making the Anthropocene "a global dump" (165). Marder plays on the double meaning of the word "dump" as both a location for the disposal of waste and in the even less charming sense of having or taking a dump (to defecate, that is). Here, Marder is writing in the tradition of Marxist ecology's concept of the metabolic rift: the decisive mismatch between consumption and regeneration of natural resources, akin to a skewed metabolism in a human body and accelerating with industrial capitalism in the nineteenth century (Foster and Clark). Marder's essay brings this allegory back to the body from which it came: the metaphysics of Anthropocene destruction stems from our collective desire for suppressing excrement, getting rid of our waste as fast as possible, flushing it down deep underground. Another philosopher of ecologies, Timothy Morton ("Hyperobjects"), describes a similar reaction in the meeting between human consciousness and the viscous "hyperobject" of global warming: "Knowledge of the hyperobject Earth, and of the hyperobject biosphere, presents us with viscous surfaces from which nothing can be forcibly peeled. There is no Away on this surface, no here and no there" (31). Marder's and Morton's descriptions of existential waste relations in the Anthropocene joins a range of contemporary theorizations of the Anthropocene as defined first and foremost by human waste. According to Marco Armiero, who coins a waste-focused "-cene," "The Wasteocene assumes that waste can be considered the planetary mark of our new epoch" (2). Importantly, Armiero rejects accounts of the Anthropocene that do not consider the social and political dimensions putting some humans and non-humans in a more precarious situation. The Wasteocene, then, "is not about the material stuff but the socio-ecological relationships making someone/something disposable," (11) in its foundational "othering project which simultaneously produces the global dump for the most and the paradise for the few" (14).

Thus, we can identify existential as well as political implications in humanities accounts of a world of waste. Tying several of these theoretizations together, Mikkel Krause Frantzen and Jens Bjerling move from Morton's notion of the hyperobject to what they call the *hyperabject*, a word borrowed from Danish poet Theis Ørntoft. Ørntoft's term is informed by Julia Kristeva's theory of the abject—the unsettling border-dissolving experience of something being 'me and not me,' human and not human, the emblematic example being a corpse—making the hyperabject "a

planetary infrastructure of waste. What defines the hyperobject is not only extension but *inertness* and the clogging of economic and ecological circulations produced by this inertness" (89). Thus, in 'business as usual' climate politics, we not only deemphasize politics (Berglez and Olausson); in post-political technocrat attitudes valorizing progression from within the status quo, we gloss over the ubiquitousness of waste so central to the slow violence of the Anthropocene directing more or less visible streams of toxic material from the few to the many (De La Torre; Nixon; Zimring). Rather than subscribing to Morton's idea of global warming and the deteriorating biosphere as hyperobject—a totalizing theoretical gesture risking the analytically unhelpful evisceration of history and politics in the name of total and fundamentally inscrutable connectedness—Frantzen and Bjerling suggest that the hyperobject draws acute attention to the consequences and injustices of piling waste upon the many under capitalist production: "[T]he hyperobject has a desublimating effect on the hyperobject, literally bringing it down to earth and reinserting it in history and into a proper political realm" (90).

Whereas cultural studies scholars and ecological philosophers have grappled with the establishment of analytical frameworks for understanding waste in relation to the climate and ecological crisis, rhetoricians and communication scholars have also dealt with toxicity and waste extensively (Endres; Kelly; Peeples, "Toxic Sublime;" "Imaging Toxics;" Riddick). For instance, Casey R. Kelly's work on the "toxic screen" in the TV drama *True Detective* shows how "the use of toxic visual and narrative tropes in contemporary dramatic television can expand our capacity to critique the effects of industrial pollution" (41), which is a challenge in visual media since "Contaminated places can appear relatively clean, leaving spectators unaffected by their visual encounter" (42, see also Pezzullo, *Toxic Tourism*). Another rhetorician engaging with toxicity onscreen is Joshua Trey Barnett who puts forward the notion of "atmospheric rhetoric" as exemplified in the toxic thriller *Safe* from 1995. These studies in visual rhetoric share this article's project of examining how toxic pervasiveness can be conveyed to audiences as part of a rhetorical process of dealing with contamination, impureness, and toxic waste in late-capitalist society. As Phaedra Pezzullo (*Toxic Tourism*) notes, "the *toxification* of our culture, or the processes through which people are persuaded (and sometimes compelled) to accept the ongoing pollution of our bodies with toxic chemicals," (11) is a rhetorical struggle not just over waste production but crucially also over *onto whom* toxic waste should be dumped. In this sense, detecting and employing communicative strategies to position waste—socially and ecologically—as a central problem in the time of ecological crisis is a vital component of anti-toxification rhetoric.

As a rhetorical modality, writing shares television's challenge of making urgent issues of toxicity tangible to audiences but from a different representational perspective. How to convey the 'everywhereness' of, for instance, 'forever chemicals' through words alone? This article seeks to contribute to the above research with an account of the rhetorical potential of writing forth the hyperobject using a particular stylistic move, parataxis. Texts about environmental justice are as relevant and

pervasive as ever; environmental writing “may affect one’s caring for the physical world: make it feel more or less precious or endangered or disposable” (Buell 2) even as it today competes with many other modes of representation and persuasive influence. In its most effective instantiations, environmental writing takes “a form of readily recognizable spatialized experience, so recognizable as to be taken for granted, and to achieve a certain bringing to awareness by exposure of chronic unawareness” (Buell 26). Thus, as televised or cinematic toxicity is important to grasp from a rhetorical and ecocritical perspective, scholars ought not to neglect treatments of toxic waste in written modalities—especially as the ways in which it exudes its influence will be different in its representation on the toxic page than on the toxic screen. Carson’s book, as Alexa Weik von Mossner points out, joins other canonized works of environmental non-fiction that “belong to a repertoire of rhetorical and narrative techniques that aim to engage readers sensually and emotionally and thereby move them to action” (8).

Although this article’s scope is limited to investigating a specific rhetorical figure and its potential to foreground waste streams in the Anthropocene, I argue that Carson’s use of environmental parataxis encourages its audience to think critically about, and ultimately to inspire political action toward, toxic waste from human activity and its catastrophic entanglements with human and non-human life and ecologies broadly. In the following section, I aim to show how using parataxis can be an effective strategy in environmental communication because it brings attention to waste relations that would otherwise be less present to audiences.

Introducing the Environmental Parataxis

Parataxis is, generally speaking, the practice in formulation of language where several syntactically equal parts or phrases are placed alongside one another. That is, “In *paratactic* prose, clauses are loosely connected, creating a looping discourse of *here’s another thing and another thing and another thing*” (Fahnestock 382), or, in Angus Fletcher’s definition, “a structuring of sentences such that they do not convey any distinctions of higher or lower order. ‘Order’ here means intensity of interest, since what is more important usually gets the greater share of attention” (162). The opposite twin of parataxis is *hypotaxis*, an ordering of clauses in a syntactical hierarchy. To use a simple example, the difference between these basic modes of passage construction is the difference between saying ‘the bee and the flower and the nectar’ (parataxis) or ‘the bee flew to the flower because it wanted nectar’ (hypotaxis). All prose texts, at least of any considerable length, contain both structures to varying degrees and in combination (‘the bee flew to the sunflowers, tulips, roses, and poppies to get the nectar’). Parataxis can be polysyndetic (where many conjunctions connect the elements of the text, as in Fahnestock’s example of “*here’s another thing and another thing and another thing*” above) or asyndetic (as in, say, “*Here’s a thing. Here’s another thing. Here is yet another thing.*”). That is, parataxis may occur with or without conjunctions. While in its most striking instantiations

parataxis tends to provide a staccato feel with many elements closely strung together within a single period, it can also be taken to encompass entire passages where different sentences are hierarchically leveled, such as in my opening example in this article. I employ a broad definition of parataxis here encompassing staccato as well as more subtle and 'spread out' paratactic writing, although with an inclination toward the former. As will become evident below, Carson excels in parataxis in *Silent Spring*, so much so that this text might be used for emulation for writing toxicity more than half a century later.

Other scholars have commented on parataxis in relation to environmental and ecological themes. However, these contributions tend to focus on literary texts. In Morton's rethinking of the environmental aesthetics of nature writing in *Ecology without Nature*, paratactic lists in Romantic poetry is an important device in "Ecorhapsody," where it adds "tempo or *phase*" evoking "a force from 'elsewhere' within the text itself" (61). Writing on the use of parataxis, analepsis, and geophysics in Cormac McCarthy's novel *The Road*, Ciorán Dowd argues that McCarthy's use of "parataxis [...]" undermines the conceptual categories of causality and hierarchical importance, thus allegorically inscribing in the novel's syntax a profoundly non-anthropocentric ontological framework" (23). Dowd notes further that the paratactic "elimination of distinctions between sentences or clauses with regard to their importance is naturally suited to the inscription of an ecocentric, or at the very least non-anthropocentric, ontology" (24). I agree with Dowd in observing that paratactic style is especially suited to environmental writing. However, in turning not to literary texts but to the politically engaged essayism of *Silent Spring*, I focus on the way in which environmental parataxis is used to persuade the reader to notice and oppose environmental wrongs by amplifying toxic relations. Again, I am not so much concerned with the ontological implications of environmental parataxis in the sense that human and non-human matter and agents are placed on a par but rather in its rhetorical effect to shape political ideas about toxicity and natural environments. In this historically specific planetary infrastructure of waste that is the hyperobject, it is not so much the agential properties of toxic chemical that should be our focus, but its inertness: the way they pile up and circulate as a result of careless industrial production.

However, while Frantzen and Bjering criticize object-oriented ontologists like Morton or new materialists like Jane Bennett for their many "lists" and accuse them of thinking "that there is no ontological difference between human and non-humans, that everything has agency, and that everything is hopelessly entangled with everything else," (95) my rhetorical orientation in this article points me toward a different perspective on the language of 'and another and another and another.' When considered not in relation to the domains of ontology and aesthetics, but as a way of appealing to an audience to inspire political consciousness or collective action in publics, the many objects placed beside one another in a text potentially take up another function, making the acute political dimensions of toxic waste in the Anthropocene overwhelmingly present. Carson's parataxis not only shows how life

forms are enmeshed but is also a strategy of amplification of both waste and life that seeks to move the reader toward political action on environmental issues. According to Laurent Pernot “amplification does not mean ‘development,’ even less ‘padding out.’ It involves not lengthening a speech but increasing the size of its subject, by emphasizing its beauty, its nobleness, etc.” (87). Debra Hawhee has elaborated on this effect in a climate and ecological crisis context. She notes that amplification “presents images before the eyes of the listeners, the public, and it magnifies their importance, thereby shaping attention’s quality and turning into magnitude” (27). For instance, Hawhee notes, when glaciers melt, it is necessary to amplify the very process of this disappearance, exactly because of the large scales of climate change that can be difficult to grasp. Likewise, the sheer ubiquity of toxic waste is difficult to comprehend and forces us to grapple with the task of dealing with this radically de-localized environmental phenomenon (Heise) generating a range of unequally distributed local effects. Paratactic writing, then, provides one stylistic tool to amplify the hyperobject of toxic waste to make it present in the reader’s consciousness.

The Pattern of Death in the Web of Life: *Silent Spring*’s Paratactic Style

Scientist and writer Rachel Carson’s *Silent Spring* from 1962 is often lauded as one of the single most important pieces of environmental writing in the twentieth century. If one is not familiar with the book and its history and influence, this may sound like hyperbole. However, some very specific and important effects followed this book’s publication, namely the nationwide ban on the agricultural use of the pesticide DDT in the United States in the early 1970s. Also published as a series of essays in *The New Yorker*, the book’s seventeen chapters make up a masterly composed warning about the dangerous effects of using pesticides in agricultural practices primarily, but also of the use of toxic chemistry in other areas of production and everyday life in the 1950s and early 1960s as chemistry manufacturers sought to accommodate and keep up their production in a post-war economy. Carson communicates the science behind the poisonous influence of various pesticides as well as accuses chemical corporations of disregarding the general health of nature systems for profit. Many regard Carson’s work as a main precursor to the environmental movement in the United States and beyond in the decades following *Silent Spring*’s publication (Burby; Dunlap; Hynes; Kroll; Lytle; Musil; Van Noy).

There are of course many brilliant scholarly accounts of Carson’s writing and of what made it so effective (Beudel; P.C. Murphy). For instance, scholars of ecocritical literature have written about Carson’s use of irony and sarcasm (Corbett; Secreast), her writing’s temporal orientations (Kaza), and more (see also Savory; Wadell; Walsh and Walker). This article joins these scholarly treatments of *Silent Spring* but emphasizes a hereto forth unexamined but pervasive figure in the book, parataxis. In this way, it consciously deviates from recent Carson scholarship concerned with the communicative strategies in *Silent Spring* more broadly (Corbett; M. K. Murphy; Savory) to hone in on a specific rhetorical figure instructive for ecocriticism today.

As shown in this article's introduction, Carson excels in paratactic style. She does so on a rich variety of themes, ranging from lists of poison chemicals or animals to the various plants and crops affected by agricultural pesticides. This can take the form of explicit list-making: "To the list of about a dozen agricultural insects showing resistance to the inorganic chemicals of an earlier era there is now added a host of others resistant to DDT, BHC, lindane, toxaphene, dieldrin, aldrin, and even to the phosphates from which so much was hoped" (222). Often, these lists contain chemicals, as in the latter example, but more often species of plants and animals: "Brown thrashers, starlings, meadow larks, grackles, and pheasants were virtually wiped out" (77); "The fresh and dried fish; the fat, oil, or meat from beaver, beluga caribou, moose, oogruck, polar bear, and walrus; cranberries, salmonberries and wild rhubarb all had so far escaped contamination" (148). On a basic level, these paratactical phrases often serve as examples, which is of course a mainstay of popular scientific texts. However, when Carson writes that "The dormant sprays applied to the elms in the autumn, sending the poison into every little crevice in the bark, are probably responsible for the severe reduction observed in the number of chickadees, nuthatches, titmice, woodpeckers, and brown creepers" (92), she could have replaced the chickadees, nuthatches, titmice, woodpeckers, and brown creepers with a non-paratactic phrasing such as 'severe reductions in several species,' or named just one of such species as example. It is undeniably a strategic component of the book to present nature paratactically: "There were channel cats, the chief game fish of the river. There were blue and flathead catfish, bullheads, four species of sunfish, shiners, dace, stone rollers, largemouth bass, carp, mullet, suckers. There were eels, gar, carp, river carpsuckers, gizzard shad, and buffalo" (120). Thus, Carson's environmental parataxis goes beyond using examples as clarifying devices. Sometimes the environmental parataxis functions as an insertion, proving Carson's urge to write forth nature's sprawl and diversity even as it is not strictly needed for the information conveyed in the passage: "[I]t concerns the many different kinds of fishes—bass, sunfish, crappies, suckers, and others—that inhabit many kinds of waters, still or flowing, in many parts of the country" (114); "The inshore waters—the bays, the sounds, the river estuaries, the tidal marshes—form an ecological unit of the utmost importance" (123).

Carson uses parataxis to pile on the many species of life comprising the US-American naturescape. And then, when the audience is presented with the sprawl of life in nature, comes the poison:

These sprays, dusts, and aerosols are now applied almost universally to farms, gardens, forests, and homes – nonselective chemicals that have the power to kill every insect, the "good" and the "bad," to still the song of birds and the leaping of fish in the streams, to coat the leaves with a deadly film, and to linger on in soil – all this though the intended target may be only a few weeds or insects. (7)

Carson's core argument centers on the self-imposed deceit of humanity's control over nature, the idea that we should stand above it, leading to our spreading toxic chemicals for profit:

We have seen that they now contaminate soil, water, and food, that they have the power to make our streams fishless and our gardens and woodlands silent and birdless. Man, however much he may like to pretend the contrary, is part of nature. Can he escape a pollution that is now so thoroughly distributed throughout our world? (153-4)

Indeed, there is no escape. The hyperobject is an infrastructure travelling in and through our bodies, just like it travels through other life. We are only unique in the sense that we have orchestrated this infrastructure of inert waste piling up everywhere, whether pesticides or forever chemicals. In weaving a pattern of death across the web of life, Carson's environmental parataxis effectually juxtaposes the wondrous sprawl of biological life and the dreadful ubiquity of toxic waste such that we are overwhelmed by the experience of the hyperobject:

They [residues of chemicals] have entered and lodged in the bodies of fish, birds, reptiles, and domestic and wild animals so universally that scientists carrying on animal experiments find it almost impossible to locate subjects free from such contamination. They have been found in fish in remote mountain lakes, in earthworms burrowing in soil, in the eggs of birds – and in man himself. (13)

The environmental parataxis as Carson uses it throws toxic waste back at the audience: As Marder and Morton (*The Ecological Thought*) reminds us, there is no land of Away, and Carson strings together toxins and species and human societies to remind the audience of what we are, in fact, doing: clogging the biosphere with chemical byproducts. Just like the biologist's deep understanding of the interconnections of ecosystems necessarily challenges the two-dimensional anthropocentric logic of humans as front and center and "nature" as exploitable and dead background (Merchant), drawing attention to the hyperobject shows how "underground movements circulate as secret and secreting bowel movements of that which cannot be digested by the surface" (Frantzen and Bjering 103). Using the environmental parataxis to write the toxic hyperobject, communicators can reintroduce responsibility in a world that pretends that synthetic chemicals are no longer "our" problem as soon as they are produced and discarded. In chapter four of *Silent Spring*, "Surface Waters and Underground Seas," Carson—whose work prior to this book focused on the sea (*The Sea Around Us*)—paratactically reminds us of the depth of waters, and, by extension, of biological life:

Water must also be thought of in terms of the chains of life it supports – from the small-as-dust green cells of the drifting plant plankton, through the minute water fleas to the fishes that strain plankton from the water and are in turn eaten by other fishes or by birds, mink, raccoons – in an endless cyclic transfer of materials from life to life. (*Silent Spring* 39)

Endless as this cyclic transfer is, it will also be subject to the hyperobject: "Rains then carry pan of the arsenic into streams, rivers, and reservoirs, as well as into the vast subterranean seas of groundwater. [...] Here again we are reminded that in nature nothing exists alone" (43).

Concluding Perspective: Political Pitfalls of the Environmental Parataxis

In his article “Pesticide, Politics and a Paradise Lost: Toxicity, Slow Violence and Survival Environmentalism in Ambikasutan Mangad’s *Swarga*,” Sk Tarik Ali shows how Ambikasutan Mangad’s novel “ends up bringing the pesticide disaster into the popular imagination and engaging readers with the seriousness of the issue” (159). Although I argue that *Silent Spring* had similar effects on a similar issue, there are important nuances to consider in terms of environmental justice issues that Ali points out as central in Magad’s prose. Although Carson’s work was highly influential on many parameters in its immediate context, and although *Silent Spring* takes swings at authorities and corporations disregarding ecosystems for profit, social and political issues of inequity and discrimination in terms of toxic waste is not part of Carson’s argument against pesticide use. However, as Amiero, Frantzen and Bjering, and others point out, while we may all live in the hyperabject dumping ground of the Wasteocene, we live here very differently across economic, social, ethnic, class, and species status. Communication scholarship dealing with toxicity has often taken this unequal distribution of toxic waste as its vantage point (Pezzullo, *Toxic Tourism*). Environmental writers and activists using the environmental parataxis as I have described it thus need to be conscious about avoiding implications of equality in toxic waste relations in the non-hierarchical paratactic prose.

Although Frantzen and Bjering criticize the ‘list writing’ of some new materialist and posthumanist scholars for being oblivious to political difference, parataxis can, like any rhetorical figure, be used in the service of hegemony as well as struggles for justice. The challenge in strategically employing the environmental parataxis is how to balance the fact that toxic chemicals are literally everywhere and, in this sense, affect every living being on the one hand, and, on the other hand, the fact that these chemicals are also wildly unequally distributed in dispersal and effects. How to be mindful about this balance between toxic pervasiveness and toxic inequality and how to concretely meet this challenge in writing and other communication practices will always depend on the specific circumstances to which one responds. The political message of *Silent Spring*—that the dumping of pesticides in rivers and soils and oceans, in gardens and forests, in the eggs of birds and insects is perpetuated by greedy and short-sighted corporate actors and that this must be put to an end—is silent about, for instance, racial injustices in toxic waste practices in the United States. As these injustices have only deepened as time has passed and generational health issues due to toxic dumping in neighborhoods with large proportions of colored and poor inhabitants become evident (Bullard; Swyngedouw and Heynen), the task of a more “contemporary *Silent Spring*” would be to include these abhorrent politics of waste in its ecocritical advocacy. In terms of the environmental parataxis, this task includes making present to the audience the overwhelming number of toxic chemicals affecting disadvantaged peoples in a range of ways.

In *Slow Violence and the Environmentalism of the Poor*, Rob Nixon spells out the need for the kind of awareness of the slow violence of ecocide to which the environmental parataxis can contribute:

To confront slow violence requires, then, that we plot and give figurative shape to formless threats whose vital repercussions are dispersed across space and time. The representational challenges are acute, requiring creative ways of drawing public attention to catastrophic acts that are low in instant spectacle but high in long-term effects. To intervene representationally entails devising iconic symbols that embody amorphous calamities as well as narrative forms that infuse those symbols with dramatic urgency. (10)

Carson's paratactic style—combined with the many other compositional aspects of *Silent Spring*—draws public attention to catastrophic acts of pesticide dumping in nature and bodies; to the hyperobject. To represent and confront the slow violence of the hyperobject in the twenty-first century demands that the environmental parataxis is employed alongside narratives highlighting the political struggles inherent to toxic waste streams in the Anthropocene where everyone is affected by waste, but staggeringly unequally so. That is, Carson uses paratactic style to note how the web of death encroaches on flocks of birds as well as American families but did not, as for instance environmental activist Victor Lewis points out in an otherwise laudatory essay on Carson's legacy from 1991, have an eye for the inequality and injustice of this distribution of toxic waste in *Silent Spring* (see also Buell 44-45). However, writing—technical, literary, and everything in between—engaging the hyperobject must reject linear narratives of waste and disaster (Enríquez-Loya and León).

Returning to the example of PFAS pollution, it is a fitting case for highlighting the political dilemmas of the environmental parataxis today. On the one hand, PFAS is everywhere and in everyone as the team from Oxford University (Hartz et al.) has documented. On the other hand, it often affects the poor and racialized to a much greater extent as the study of New Jersey drinking water shows (Mueller et al.). The task of the writer employing the environmental parataxis to write about the PFAS crisis, then, is to compose and amplify a pattern of death in the web of life to overwhelm the reader and inspire action, while avoiding representing this web as encompassing everyone equally.

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