

Life in Plastic



ARTISTIC RESPONSES TO PETROMODERNITY

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- Generation Why* (New York: Marvel Comics, 2015). The story was written by G. Willow Wilson, drawn by Adrian Alphone, colored by Ian Herring, and lettered by Joe Caramagna.
35. Sarah Gibbons, "I Don't Exactly Have Quiet, Pretty Powers': Flexibility and Alterity in *Ms. Marvel*," *Journal of Graphic Novels and Comics* 8, no. 5 (2017): 450.
36. Amanda Boetzkes, *Plastic Capitalism*, 214.
37. Brad Meltzer and Rags Morales, *Identity Crisis* (Burbank, Calif.: DC Comics, 2016). This moment originally appeared in *Identity Crisis* 1 (2004). The series was written by Brad Meltzer, penciled by Rags Morales, inked by Michael Bair, colored by Alex Sinclair, and lettered by Ken Lopez.
38. Heather Davis, "Imperceptibility and Accumulation: Political Strategies of Plastic," *Camera Obscura* 92 (2016): 192.
39. Eisenstein, *On Disney*, 104.
40. Eisenstein, *On Disney*, 105.

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Organic Form, Plastic Forms

The Nature of Plastic in Contemporary Eco-poetics

Margaret Ronda

in "The Age of Plastic," a poem published in a recent anthology on the poetry of climate change, Chamorro poet Craig Santos Perez catalogs the innumerable ways plastics are embedded in contemporary life.¹ Like many contemporary poets writing about global ecological crisis and its unevenly distributed effects, Perez—an important writer in the rapidly developing field of eco-poetics—turns to plastic as a key material through which to meditate on these broader socio-ecological transformations. Found in household goods and medical products, technological and transportation networks, bodily interiors and industrial processes, this synthetic material plays an enabling role in virtually all spheres of human activity. In the first half of the poem, Perez highlights these beneficial, life-sustaining applications of plastic, focusing particular attention on the way this material has become vital to bodily health, warmth, and nourishment:

plastic keeps food fresh—
 delivers medication and clean water—
 forms cable and clothes—
 ropes and nets—even
 stops bullets—
 "plastic is the perfect creation
 because it never dies"—²

These lines chronicle how plastic facilitates the healthy function of the human body, serving as a material supplement that extends the

body's natural workings. Perez's long dashes, extending the end of the line and connecting each image to the next, reflect the expansive reach of plastic as it preserves and increases corporeal flourishing. Plastic prolongs and even saves human lives, Perez suggests, imbuing anthropogenic bodily processes with the more "perfect" capacities of the synthetic. As a substance uniquely suited to inhabit, redirect, and expand bodily capacities, plastic exemplifies a sense of care embedded in objects such as food, clothes, and medication, such lines indicate. At the same time, Perez suggests that plastic is a "perfect creation" because unlike the organic bodily processes and capacities it facilitates, this material "never dies"; instead, it extends this "immortal" materiality into the natural forms with which it is imbricated.

Yet alongside its portrayal of the essentially positive dimensions of plastic as an extension of human agency and a material expression of compassion for bodily being, Perez's poem bears a profoundly ambivalent relation to the uncannily animate and deathless capacities of plastic. This aspect emerges in Perez's portrayal of the role plastics play in his own family's reproductive dynamics. Exploring how plastics aid the prenatal development, birth, and newborn care of his infant daughter, Perez evokes several scenes of medical care and domestic intimacy in which plastic plays a formative role:

the doctor presses the plastic probe
onto my wife's belly—ultrasound
waves pulse between fluid, tissue, and
bone, echoing into an embryo
of hope—"plastic makes
this possible"— (164)

Subsequent stanzas describe the birth tub in which the mother-to-be labors, the Ziploc bag holding the placenta, the plastic nipple that feeds the baby milk. Drawing together this personal description of plastic's role in his daughter's birth with portrayals of the larger imbrications of plastic in everyday existence, Perez conveys plastic as an intimate container for and enabler of reproductive futurity.³ We can see here a real fathoming with the forms of "hope"

that plastic provides, a sense of wonder at its powers to shape and even animate human life, even as it itself remains unsusceptible to its ravages. Plastic's seemingly inexhaustible capacities afford new senses of the "possible," as if contained in the material itself are new dimensions of human vitality and bodily being. It is as if the substance bears an internal secret to the workings of life itself—a secret upon which human sustenance now depends.

Yet as he wryly contrasts the unsettling endurance of this synthetic substance against the delicate, vulnerable bodies of new baby and mother, Perez registers the powerful disturbance of such a recognition. What would it mean for plastic to make life itself "possible"? What are the consequences of our shared, seemingly bottomless dependency on this substance? Perez's poem goes on to chart plastic's devastating impacts on ocean ecologies and its negative health effects for various creatures:

in the oceans, there exists three tons
of fish for every ton of plastic—
*leaches estrogenic and toxic
chemicals, disrupts hormonal
and endocrine systems*—eight million
tons of discarded plastic swim
into the sea every year—
causes cancer, infertility, and miscarriage—
multiplies into smaller pieces—
plankton, shrimp, fish, whales, and
birds confuse plastic with food—
absorbs poisons—will plastic make
life impossible? (164–65)

Laden with toxic chemicals and circulating in oceanic and bodily systems, plastic's material presence no longer facilitates nourishment, health, and reproductive capacities but instead produces illness and pollution. Here, plastic's ubiquity, its toxic constitution, and its imperviousness to decay renders it a threat to the very systems it was designed to preserve. Plastic emerges as a *pharmakon* in Perez's poem, at once life giving and poisonous, its vital interconnection

with other beings and processes entailing both sustenance and destruction.⁴

With its short lines and long dashes, its metonymic movement among objects and processes facilitated by plastic, and its figurative emphasis on motion and prosthetic activity, Perez's poem points toward its own acts of *poiesis* and to poetry's broader plasticity as an art form.⁵ Poetry, like plastic, bears an intimate capacity to intuit and reflect dimensions of bodily being, bringing the reader inside the workings of the body—breathing, laboring, being ill, giving birth. And both poetry and plastic not only inhabit but also surpass these natural contexts, *living on* in unexpected ways. As cultural studies scholar Heather Davis writes of plastic's capacity to endure: "This quality of the undead is what plastic is often used for: to package and preserve, to seal off bacteria and other organisms to prevent the decay of fruits, vegetables and other matter."⁶ Poetry, too, often elaborates tropes of survival beyond its immediate contexts. Central to Perez's meditation on plastic as a medium, then, is a metapoetic attention to poetry as itself a dynamic and life-altering form, placed into a complex analogical relation to the durable material of plastic. If the poem explores the reciprocal dynamics between plastic as a material and the embodied forms that it engages, it also meditates on its own affordances, its forms of *poiesis*, its capacity to endure. At the same time, it offers a means of reflecting on what Davis calls the "accidental or incidental aesthetics" and material effects that develop through plastic's transformative capacities.⁷

In this chapter, I consider the way a series of contemporary ecopoetics texts engage with the material of plastic to explore these questions of *poiesis*, aesthetic and petrochemical. As Canadian ecopoet Adam Dickinson writes of plastic in his recent book, *The Polymers*: "Its pervasiveness, as a tool and as physical and chemical pollution, makes it an organizing principle (a poetics) for recurring forms of language, for obsessive conduct, and for the macromolecular arrangements of people and waste in geopolitical space."⁸

Writing in an era of sustained ecological crisis, ecopoets such as Perez, Dickinson, Allison Cobb, Orchid Tierney, and Divya Victor explore plastic as a resource for approaching the broad dynamics of

environmental transformation and the unintended effects of postwar technological ingenuity. These poets all share an experimental orientation in their work, attentive to the ways poetry can be approached as a site of inquiry into the complex relays between language, form, and the material world. They attend to the materiality of plastic itself, the forms it takes, the larger limits and possibilities it enacts, its dynamic interactions with broader ecological systems. Their work explores how, as Jennifer Gabrys, Gay Hawkins, and Mike Michaels write in their collection on the cultural and ecological itineraries of plastic, this entity in its various manifestations "provides particular ways of thinking about and advancing understandings of materiality *as process*."⁹ Drawing on and reformulating midcentury process-based poetics, these writers consider how the properties of plastic might necessitate new conceptions of poetic form, contemplating new dimensions of the organic and inorganic, the generative and the toxic, the transient and the enduring.

Plastics and Ecopoetics

Across a half century, Perez's consideration of the ubiquity and miraculous nature of plastics echoes philosopher Roland Barthes's meditation in his classic study of postwar Western culture, *Mythologies*. This text is notable, not only for its innovative reflections on modern mass media and cultural ideologies, but also for its examination of the particular substances, textures, and somatic experiences of the era's burgeoning consumer capitalism. Writing in 1957, Barthes describes detergents and soap powders, the texture of foam, the tactility of wooden and plastic toys, the streamlined design of the Citroën, luminous images of food and movie star faces in the media. In his chapter on plastic, Barthes highlights the versatile properties of this material, writing of its unique capacity for transformation and its life-bearing ability:

So, more than a substance, plastic is the very idea of its transformation; as its everyday name states, it is ubiquity made visible. And it is this, in fact, which makes it a miraculous

substance: a miracle is always a sudden transformation of nature. Plastic remains impregnated throughout with this wonder: it is less a thing than the trace of a movement.¹⁰

Barthes's language bespeaks a sense of plastic not as a material substance but a medium characterized by its transformative capacities. "Less a thing than the trace of a movement," plastic's metamorphic qualities allow it both to inhabit and to radically alter natural forms. Drawing on images of generation and reproduction, Barthes imbues plastic with a creative and miraculous capacity. "The whole world can be plasticized, and even life itself, since, we are told, they are beginning to make plastic aortas," he declares (99). Even the human heart will become "plasticized," Barthes suggests, demonstrating plastic's capacities to inhabit and animate life itself. For Barthes, plastic's miraculous properties are a mark of anthropogenic power, revealing a newfound ability to recast natural forms according to our desires and needs: "the very itinerary of plastic gives [humans] the euphoria of prestigious freewheeling through Nature" (98).

While plastics were first developed in the early twentieth century, their production expanded rapidly during the 1950s and early 1960s with new technological advances. Chemical firms turned attention to consumer markets, developing plastic products to fulfill myriad needs and functions. As Susan Freinkel details in her history of plastics, *Plastic: A Toxic Love Story*, this wide array of affordable plastic products created a powerful new sense of consumer identity and possibility, particularly for middle-class Americans. Barthes's exuberant portrayal of the miraculous power and seemingly limitless potential of plastic, in turn, is characteristic of general sentiments about this substance during this period. The material itself seemed to promise this flexibility, as Freinkel writes: "Plastics heralded a new era of material freedom, liberation from nature's stinginess. In the plastic age, raw materials would not be in short supply or constrained by their innate properties. . . . Plastic, admirers predicted, would deliver us into a cleaner, brighter world in which all would enjoy a 'universal state of democratic luxury.'"¹¹ These early conceptions of plastic frame this substance as the emblematic material of human potential, embodying and expanding human sentience,

capacities, and freedoms. Such humanist optimism about plastic's capabilities is indelibly linked, here, to the ideological commitments of a consumerist and expansionist Cold War culture.

Emerging alongside this postwar plastics boom were new aesthetic interests in questions of materials, form, and process in American poetry. Reimagining Modernist interests in impersonality, abstraction, and sculptural aesthetics, postwar poets turned to more personal explorations of the somatic and processual nature of poetic making. Black Mountain poets Charles Olson, Robert Duncan, M. C. Richards, Robert Creeley, and Denise Levertov developed a process-based poetics emphasizing the perceptual encounter with materials and the development of poetic form immanent to this encounter, connecting these processes to broader ecological dynamics.¹² Perhaps the two most influential reformulations of these ideas are Levertov's 1965 "Some Notes on Organic Form" and Olson's 1950 "Projective Verse" manifesto.¹³ Both poets develop these ideas about poetry as what Levertov calls a "revelation" of its materials as an extension of their broader beliefs in systemic interconnection. Olson, who came to be powerfully influenced by Alfred North Whitehead's process philosophy and systems-thinking, develops what ecocritic Jonathan Skinner terms a "visceral poetics" that connects body, matter, and system in dynamic interaction.¹⁴ In his essay on "Projective Verse," Olson argues for a process-based model of poetry that graphs the energy and forms of perceptions as they unfold. The poem is an active, experimental enactment of the interweaving of body, breath, and poetic material (syllable, line, syntax, objects) with external perception and experience. Olson envisions the poem as a process of "composition by field," a kinetic experience of shaping and being shaped by the materials at hand. Levertov's poetics is broadly positioned against the destructiveness of nuclear war and environmental imbalance, conceiving of the forms and processes of poetry as a generative space of imagination and wholeness amid an age of "chaos."¹⁵ Her "Some Notes on Organic Form" discusses "exploratory" poetry that involves an "intuitive interaction between all the elements involved" toward the creation of the "rhythm of the whole."

These poetics renovate the Romantic concept of organic form, with its emphasis on living systems and its fundamental analogy

between aesthetic creation and natural processes, for the postwar era. As Greg Ellermann points out in a penetrating essay on the legacies of Coleridge's organicist aesthetics, for Coleridge and other theorists of organic form, the principle shared in common between natural entities and the form of an aesthetic work such as a poem is *plasticity*: "In Coleridge, plasticity is a universal principle of formation that links artworks with natural things, and each moment of artistic creation with the dynamic unfolding of organic life."¹⁶ These postwar experimental poets follow this Coleridgean sense of poetry as a "plastic" form: as Black Mountain poet and potter M. C. Richards writes in her well-known book on aesthetic making, *Centering in Pottery, Poetry, and the Person*, "Poetry is probably the most plastic of all materials," the most receptive to creative imprint.¹⁷

Such techniques of composition by field, breath-based poetics, and attention to material interrelation have been crucially influential to the development of ecopoetics as a contemporary field of poetic practice.¹⁸ Yet while midcentury writers such as Levertov, Olson, Duncan, and Richards consider poetic form in relation to natural materials (plants, cells, and animal life, as well as wood, clay, and stone) and portray systematicity through ideas of unity, wholeness, and balance, practitioners of contemporary ecopoetics enact these portrayals of systems under the sign of toxicity, pollution, and global climate change. CA Conrad, a well-known ecopoetics writer who composes "somatic rituals" to create restorative connections to their sustaining environment, at once draws on and reformulates the ideas of organic form in their "The Right to Manifest Manifesto":

I cannot stress enough how much this mechanistic world . . . has required me to FIND MY BODY to FIND MY PLANET in order to find my poetry. If I am an extension of this world then I am an extension of garbage, shit, pesticides, bombed and smoldering cities, microchips, cyber, astral and biological pollution, BUT ALSO the beauty of an unspoiled patch of sand.¹⁹

As Conrad's catalog conveys, ecopoetics experiments draw connections between body, planet, and poetry and insist on the irreducible relation between the toxic and the natural under industrialized

capitalism. They often highlight the way life-sustaining elements—water, soil, air—often come to contain life-threatening qualities at a variety of scales, a *pharmakon* of the damaged present. And they point to the ways our interfusion with and dependency on these elements necessitates new conceptions of embodied being that reshape organicist aesthetic modes. One key site of such ecopoetic explorations is the material of plastic—its affordances, its relational capacities, its ecological implications—and the broader interpenetration of the organic and the synthetic that plastic entails. As the profound scale of plastic's environmental impacts has become more widely recognized over the past decade, plastic has become a particularly central locus of ecopoetic meditation and an extension, in new directions, of these conceptions of organic form. As Lynn Keller writes in a chapter on plastics and ecopoetic writing in her recent *Recomposing Ecopoetics*, plastics have elicited contemporary poetic explorations of the "imbrication of nature and culture or the natural and the artificial; the permeability between what has conventionally been considered the bounded inside and outside; and the thorough interrelation of living things with one another and with substances in their environments, including human-devised toxins."²⁰ Turning to plastic facilitates particularly nuanced engagements with these broader themes in ecologically oriented poetry.

In her recent book, *Plastic: An Autobiography*, Allison Cobb retells one history of the rise of plastics and explores the nature of its material forms. Cobb is a Portland-based poet who employs documentary techniques, drawing on interviews, photojournalism, personal history, and experimental biography in this hybrid poetic prose text to investigate the nature of plastic. In *Plastic: An Autobiography*, she turns to plastic in its appearances as an intimate, alienated, historically embedded and globally circuitous entity. Offering extended meditations on the author's discovery of a car part, a photo of an albatross body filled with plastic, and the creation of the thermonuclear bomb, Cobb's experimental poetic prose highlights the imbrication of plastic into human and nonhuman forms, material histories, and ecosystemic degradation. If Barthes's essay praises the innocuous and almost wholly mysterious birth of plastic in labs, Cobb reveals the darker origins of plastic in military use,

revealing that polyethylene was a key component of atomic weaponry. She writes of the decision to use plastic in the plutonium bomb by atomic scientists:

They needed some other material to intervene, a material of low atomic weight that would not interfere with the reactions. They chose polyethylene, just carbon and hydrogen, made from the bodies of ancient sea creatures, out of the same molecules that make up every living being. . . .

When the atomic bomb goes off, it heats the plastic to a million degrees in an instant, creating a plasma that expands explosively, squeezing the deuterium and igniting a thermonuclear fire.²¹

For Cobb, charting this itinerary of plastic back to its source is to connect with the deepest initial perceptions of these scientists as they engaged in nuclear and plastic *poiesis*. Of their first fathomings of atomic energy and plastic materiality, she writes: "To see as if // to touch. To see, an inside // sense, a sort // of felt thought" (49–50). Scattering these phrases across the page, Cobb evokes a sense of the imaginative, intuitive energies of making that went into the creation of these materials; such a moment might be termed an instance of what critic Peter Middleton calls "physics envy."²² Cobb portrays these histories and moments of creative inspiration in order to understand her own connections to this material. As Cobb points out, to write a lyric prose poem about plastic is to write "an autobiography." "Anything alive could write this book," she writes. "The autobiography of plastic is the autobiography of everything" (vi).

Across the text, Cobb considers in an extended way a car part she finds on her fence, using it to meditate on the fundamental somatic needs that plastic addresses. The unwieldy car part is unnoticed in its daily function: it is, Cobb writes, "the perfect cover." Brought out of its functional context and into Cobb's living room and then bedroom, it becomes a palpable site for reflecting on plastic's often invisible omnipresence in our lives and on what plastic covers and covers over: "indeterminate, no whiff of industrial blood on it, featureless, flawless, eternal." Through this extended somatic

experiment, Cobb explores the intimacy with plastic central to contemporary life, connecting plastic's broader atomic history with her own daily perceptions and bodily experiences. Made of the same chemical compound, polyethylene, as the material in the bomb, the car part emblemizes the uncanny organic unity of plastic as a substance that dynamically connects past and present, living and inanimate entities, itself made of the "molecules that connect every living being."

Plastic *Poiesis*

While Cobb highlights the history and ubiquity of plastic through her expanded-field meditation on a single exemplary object, Adam Dickinson focuses sustained attention on the broader *poiesis* of polymers and petrochemicals in his recent works of poetry, *The Polymers* and *Anatomic*.²³ Dickinson's work often explores the interplay between poetic and scientific logics and practices, and it might be best characterized as conceptual: guided by procedure or structuring concept.²⁴ For Dickinson, the biosemiotic dimensions of plastic—the way it inscribes itself into the hormones and chemicals in bodies, terrestrial and aquatic ecosystems, and even the fossil record—necessitate expanded ways of conceiving of anthropogenic making, while raising new, unsettling conceptions of the dynamic form and action of these materials. Plastic reads and writes us as we read and write it, Dickinson asserts in *The Polymers*: "Our chains reread us precipitously" (3). As Dickinson examines the interconnected nature of plastic as a material, he takes the polymeric chain—the repetitive structure of polymers and their connective dynamics—as a key formal principle, registering in his compositional methods how the plastic nature of poetic language and design makes palpable these broader biosemiotic expressions. At the same time, his work points attention back to the ways plastic itself facilitates our bodily existences and creative endeavors alike: "This entire book was typed on plastic keys," Dickinson writes (111).

In *The Polymers*, Dickinson develops playful, unexpected techniques from plastic's composition of molecules to develop a poetics shaped from this material: a plastic *poiesis*. Each poem offers a new

formal framework for embodying the properties of plastic, whether in a piece that draws on the "Resin Identification Code" developed by the plastics industry to meditate on the myriad appearances of plastic, or a poem that uses anagrams of one polymer ("Halter Top [Translating Translating a Polyester]"), or a piece called "Cigar? Toss It in a Can. It Is So Tragic." that plays with what Dickinson calls "linguistic isomers," or orthographic neighbors and malapropisms: "For all intensive purposes, the fire distinguishers / are pigments of the imagination" (23). Another poem, "Coca-Cola Dasani," is at once an abecedarian and, according to Dickinson's "Materials and Methods" primer, "a perfect anagram of all constituent elements of section 64 of the Canadian Environmental Protection Act": "a a a alps and applicable at at before best beverages bicarbonates bottle bottled calcium chlorides clean collection commerce composition content cool dissolved . . ." (107, 42). Across these poems, Dickinson develops linguistic and poetic patterns that replicate the structural logics of polymers (repetition, associative chains, anaphora), while highlighting the flexibility and multiple guises of plastic as a material. The language, at once lively and structured, repetitive and defamiliarizing, *enacts* (rather than simply representing) the patterns and dynamics of plastics. Plastic appears here as a profoundly generative and social medium, imbricated in and formally expressive of human desires, behaviors, social systems, hierarchies, forms of freedom, and modes of exploitation. We live in and through plastics, Dickinson writes, constitutive as it is of our most intimate relations and corporeal experiences: "Lunch boxes and lipsticks / are our mothers" (14).

Dickinson's most recent book, *Anatomic*, extends this consideration of the somatic dimensions of plastic further through a fascinating and disturbing corporeal experiment. Dickinson had his blood, sweat, and urine tested for a wide array of substances: "Phthalates, Dioxin-like chemicals, PCBS, PFCS, OCPS, PAHS, HBCDS, Parabens, BPA, Triclosan, additional pesticides, and twenty-eight heavy metals."²⁵ He writes, "I am a spectacular and horrifying crowd. How can I read me? How can I write me?" (9). The book interweaves diaristic entries ("specimen reports") about Dickinson's lengthy biomonitoring regime with poems evoking this petrochemical biosemiosis, as

Dickinson discovers that his body is inscribed by various environmental toxins and synthetic chemicals, some introduced via plastic products (particularly bisphenol A and phthalates). Across *Anatomic*, Dickinson draws on the dynamics of hormones and bodily processes to generate what he calls a "prosody of metabolism," exploring the various ways these chemicals interact with and alter bodies. In a prose poem, "Disruptors," Dickinson meditates on the textures and flexibility of phthalates, exploring how it makes its way into bodily interiors: "The softness of phthalates is the softness of squeeze toys, pacifiers, and laboratory tubes. . . . The softness of phthalates is the softness of transparent packaging crumpled in a fist. When released it springs outward from memory" (77). Through both these eco-poetic meditations on plastic's chemical and material properties, Dickinson creates new forms of composition by field, connecting body, matter, and energy system in and through the plastic forms of poetry. His work develops a dynamic, uncanny language—a plastic biosemiotics—that evokes the imbrication of this material within and across life forms and systems.

Plastic Waste, Toxic Bodies

In his celebratory midcentury portrait of plastics, Barthes did not foresee the devastating ecological implications of this material's natural "itinerary." He lists a series of objects built for long-term use—"suitcase, brush, car-body, toy, fabric, tube, basin"—but increasingly, the petrochemical industry embarked on a more profitable venture in its development of plastics: disposable products and packaging. Today, fully half of all plastics manufactured become trash in under a year, according to a recent study.²⁶ The production of plastics by the petrochemical industry is energy intensive and fossil fuel dependent. For each ounce of polyethylene produced, according to the EPA, an ounce of carbon dioxide is emitted. And if the components of plastic production bear a significant carbon footprint, the ongoing presence of plastic after consumer use bears an even more weighty environmental impact. Only around 9 percent of plastic goods are recycled, and the remainder ends up in landfills, decomposing over about five hundred years and leaching harmful

pollutants into soil and waterways. Vast quantities of plastic can be found in the earth's oceans, accumulating in garbage patches and riverways and threatening aquatic life. As media studies critic Sy Taffel puts it, "One of the materials most commonly associated with a throwaway consumer culture in fact produces environmental effects measured in millions of years."²⁷ BPA and other chemicals in plastics have been linked to various harmful effects on human health as well, as Perez's "Age of Plastic" and Dickinson's *Anatomic* detail. It is to these itineraries and their biotic implications that contemporary ecopoetics often turns, meditating on the novel forms and patterns that this metamorphosing material takes after it is "empty of [humane] awareness."

Cobb's reflections on plastic emerge from a photograph she saw of a dead albatross chick filled with plastic trash, taken by Susan Middleton on Kure Atoll in the Northern Hawaiian Islands in 2004 and published in *National Geographic* in 2005.²⁸ Cobb evokes the beautiful flight patterns of the albatross and its strong, delicate, airborne frame: "*In-spire*. The albatross is filled with air—tiny sacs pack the vault of its ribs, curving around its organs and extending through the narrow bones of its wings that span six feet, eight feet, eleven, the longest of any creature" (24–25). Alongside such portrayals of the kinesthetic motion and lightness of the albatross, Cobb juxtaposes the disturbing contents of the cut-open albatross chick in the photo: "The cut reveals a black cylinder of plastic, a bottle / cap, a toy top. // Plastic erupts from inside the chick" (13). Inside the body of the bird, plastic circulates and accumulates, enmeshed in and obstructing its internal workings, functioning as the opposite of air. In her meditations on this image, Cobb draws a connection to Coleridge's "Rime of the Ancient Mariner" and its figure of the dead albatross that haunts the mariner. After the mariner kills the albatross, Cobb writes, "All / that breathes is monstrous" (17). Here the material of plastic becomes the figure of monstrous ongoingness and dynamism, as the plastic "erupts" from the corpse, strangely vital. In its metamorphic appearances and activity, plastic emerges here as an uncanny kind of organic form, its shape and presence "proceeding" rather than "superinduced," processual rather than imposed.²⁹

Another recent book of ecopoetics that explores the new entanglements of life forms and the "monstrous" processes generated by plastic waste through its inner formal workings is Orchid Tierney's spare, haunting *ocean plastic*. This text's formal plasticity conveys the accumulative presence of plastic in ocean ecosystems as it reshapes these systemic dynamics. In Tierney's work, we glimpse what critic Patricia Yaeger calls the "techno-ocean," which "subtracts sea creatures and adds trash."³⁰ As Yaeger writes, the techno-ocean reminds us that "the ocean as *oikos* or home rolls under, beneath, and inside the edicts of state and free market capitalism"; the plastic debris swirling in ocean gyres demonstrates the fateful presence of these imperatives.³¹ Tierney's *ocean plastic* begins with short fragments that mirror the small bits of plastic that find their way into the ocean: "gritty grains gauge soft oyster flesh | / airy spines spun with sea gull stomachs."³² The repeated sounds call to mind the material encounter between ocean creatures and plastic, the hard *g* sounds against the sibilant *s*, while the vertical bar suggests obstructions and channels through and around which these entities form.³³ Each page accumulates more of these fragments, recombining the words and phrases into new arrangements. Unsettling and recomposing, its accretive form conveys the swirling mass of the marine gyre:

an amputated sea welts | soft | gull stomachs | guppy globsters |
 thicken | moss piglets | airy spines spun with | urchin
 wraith-skins |
 blue sea burrs buried in | polymermaid tears | gritty grains
 gauge |
 gummy squidding hydrophobic cthulhu | on scud currents | red
 gossamer fleece | oyster flesh | tumbling over | transparent fish |
 gill
 filters | partial polyghosts soupify | sympathy | in garbage
 gyres (18)

Tierney's fragments halt and progress, enacting blockages and movement, limit and fluidity. The words themselves register uncanny new forms, an enmeshed array of textures and matter: "polyghosts,"

“guppy globsters,” “gummy squidding,” “a herd of nurdles / grazing.” What is living and nonliving blurs in these fluid combinations, as beings occupy liminal and transforming forms of animacy.³⁴

Through this transforming flow, we glimpse, in motion, the effects of the development of the ocean as arena of capitalist extraction and as dumping ground, as consumer goods and waste from industrial fishing operations reappear in uncanny forms, swirling alongside uncanny sea creatures. The poem renders the processes by which organisms interact, offering a portrait of what marine biologists have called the “plastic soup” of oceanic pollution. As Jennifer Gabrys writes, “this plastic soup is a site of continual metamorphosis and intra-actions, so that new or previously unrecognized corporeal relations emerge in the newly constituted spaces of the oceans.”³⁵ As the text draws attention to these violently unmade and recombinant forms, it also highlights its own capacity to convey such processes through its patterns of repetition, fragmentation, and recombination. Drawing the reader into a scene of transfiguring materials, the poem activates a complex field of perceptions of textures, sound, touch, and friction. The dynamic capacities of field poetics here convey the motions and changing proportions of this transforming oceanic entity, enacting, as Levertov puts it, the “rhythm of the whole” in all its disturbing, animate force.

Plastic Futures in Countertranslation

The end of Perez’s poem, “The Age of Plastic,” returns to an image of the speaker feeding his infant daughter and articulating a poignant, if disconcerting, wish:

i press the plastic nipple of
the warmed bottle to
my daughter’s small lips—for a moment,
i wish she was made of plastic
so that she, too, would survive
our wasteful hands—so that she,
too, will have a “great future.” (166)

With these closing lines, the poem raises difficult questions: What and who will “survive” this “age of plastic”? What will a “great future” consist of—and for whom? Perez’s closing lines immediately follow his evocation of the Great Pacific Garbage Patch and its forms of harm inflicted on Pacific marine life. In this light, these final lines can be read as a response to the particular threats plastic poses to the island habitats and communities that sustain his family. Born in Guam but currently living in Hawai’i, Perez draws attention in his books of poetry to the forms of “survivance” characteristic of Pacific Islander communities, while highlighting the interlocking systems of colonialism and racial capitalism that threaten them.³⁶ Pacific Islander populations and marine ecologies are “frontline communities” in relation to various forms of ecological crisis including global plastic pollution, facing dramatically disproportionate impacts to health and ecosystemic flourishing.³⁷ Perez’s expanded field poetics highlight the lifeways of indigenous ecologies and the ways social forces transform these ecologies. As he writes in a recent lyric essay on colonialism and the toxic history of Pacific plastics, “Our Sea of Plastic”: “The plasticity of colonialism can be felt in how its toxic presence crashes against the shore of these fragments and floats on (and below) the surface of the poem. The plastic ocean is in us. It molds our bodies and stories.”³⁸ Perez underscores how islander communities often emblemize what Macarena Gómez-Barris calls an “extractive zone”—sites of intensified extraction and waste that also unearth “a differently perceivable world, an intangible space of emergence.”³⁹

These dynamics—formal, ecological, intergenerational—are brought into further focus through a recent “countertranslation” of Perez’s “The Age of Plastic” by Indian-American poet Divya Victor, first into Tamil and then back into English. Victor’s countertranslation appears in *The Margins* blog of the Asian American Writers’ Workshop, as part of a larger series of countertranslations that aim to “destabilize notions of mastery” and “open possibilities of exchange beyond the frames of English” by creating new engagements with a poetic text.⁴⁰ Victor’s countertranslation of Perez’s poem calls attention to what is passed down and what is lost, what

is made and what is rendered disposable. As she writes in her author's note, Victor drew on the assistance of her mother, grandmother, and aunt to generate this translation. Drawing on Perez's images of reproductive dynamics, Victor's countertranslation develops by calling forth a maternal linguistic legacy—a "mother tongue"—to collectively create this piece. In this way, Victor's own process of translation as a form of active *poesis* recasts Perez's meditations on reproductive futurity in an age of plastics, highlighting the way poetic language becomes a means of bearing, carrying on, or losing cultural heritage, as well as being a dynamic material to shape and transform.

Plastic—as material and subject—becomes the locus of meditation on these questions of language, making, inheritance, loss, and waste. Victor's translation, borne across languages, cultures, and geographical terrain, subtly alters the figurative landscape of Perez's piece. Victor pares down its catalogs of information about plastic and develops spare, surreal images from his descriptions. She writes:

எங்கள் மகள்
Our daughter

தொட்டிலில் தூங்குகிறாள்
பிளாஸ்டிக் பூக்கள்
sleeps in a crib. She eats
சாப்பிடுகிறாள்
plastic flowers.⁴¹

From Perez's more straightforward descriptions of the infant's nourishment and care comes this eerie, fairy-tale-like image of a small child eating plastic flowers. At poem's end, Victor plays on Perez's images of plastic's emptiness to conjure a meditation on disposability in human and nonhuman forms:

இந்த வறொமை என்ன?
What is this emptiness?

பிறந்தோம், சாரண்டப்பட்டோம், எறியப்பட்டோம்
We were born, were exploited, were thrown away.

In Victor's countertranslation, the "we" refers both to plastic and human lives rendered disposable. The attention to human disposability is particularly underscored by the word "exploited," drawing forth the more subtle implications in Perez's poem about the susceptibility of precarious populations. Victor's version closes, then, by reminding readers of the governing capitalist ethos of exploitation and disposability that governs these dynamics, and highlights the unfathomable "emptiness" that this ethos produces at multiple scales, for humans, creaturely life, and biotic processes.

Shored against this emptiness, there is what Victor calls the "mudbank" of poetic language, gathered to protect, to restore, to hold together. Victor writes in her author's note of her poetic process: "From [Perez's] metaphor of salt water emerges my story of mud, land, muddled, *lang syne*, language made into a mudbank—as archaic and as new as a womb at the bottom of the sea, where plastic blooms and takes us back into the grasp of its collapsing calyx." Across these ecopoetic texts, poetry becomes a means of thinking through this medium, examining plastic's forms of vitality and force, tracing its patterns of interconnection and its toxic "blooms," holding open the emptiness it generates. Laying bare the violence and the power of these seemingly benign materials, these poems portray plastic as a vital planetary form bearing creative and destructive potential, living within and beyond organic lifespans. These works draw attention, as well, to the poem's own medium as a means of imagining with and against plastic's affordances—a form of countertranslation that holds forth other possibilities. As Perez writes in "Our Sea of Plastic": "The poem proves that if you are reading its currents of words, then you have survived, and it is not too late to re-shape our future."

NOTES

1. Portions of this chapter originally appeared on the Stanford University Press blog, March 2018: <https://stanfordpress.typepad.com/blog/2018/04/plastic-pollution-and-poetry.html>.
2. Craig Santos Perez, "The Age of Plastic," in *Big Energy Poets: Poets Think Climate Change*, ed. Amy King and Heidi Lynn Staples (Buffalo, N.Y.: BlazeVOX, 2018), 164–67.

3. For a powerful personal and theoretical meditation on plastics, reproduction, and disability, see Jody Roberts's essay on his daughter's birth and diagnosis with cerebral palsy, "Reflections of an Unrepentant Plastiphobe: An Essay on Plasticity and the STS Life," in *Accumulations: The Material Politics of Plastic*, ed. Jennifer Gabrys, Gay Hawkins, and Mike Michael (London: Routledge, 2013), 121–33.
4. In "Plato's Pharmacy," Jacques Derrida charts the various meanings of *pharmakon* that appear in Plato's dialogues. *Pharmakon*, Derrida suggests, "acts as both remedy and poison" and "can be—alternatively or simultaneously—beneficent or maleficent." *Pharmakon* might be seen as a particularly amenable concept in relation to the materials and cultural meanings of plastic, both in terms of its fundamental ambivalence and duality, and also in the way it emblemizes what Derrida calls "ant substance itself: that which resists any philosopheme, indefinitely exceeding its bounds as nonidentity, nonessence, nonsubstance." Jacques Derrida, "Plato's Pharmacy," in *Dissemination*, trans. Barbara Johnson (Chicago: University of Chicago Press), 70.
5. As Greg Ellermann writes, plasticity can be defined as the "susceptibility of matter to receive beautiful form as well as to the creative power or impulse that gives form. Plastic arts are defined by the process of shaping, by form's simultaneous imposition on and emergence from a given material" (199). Greg Ellermann, "Plasticity, Poetry, and the End of Art: Malabou, Hegel, Keats," in *Romanticism and Speculative Realism*, ed. Chris Washington and Anne McCarthy (London: Bloomsbury, 2019).
6. Heather Davis, "Life and Death in the Anthropocene: A Short History of Plastic," *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments, and Epistemologies*, ed. Heather Davis and Etienne Turpin (London: Open Humanities Press, 2015), 352.
7. Davis, "Life and Death in the Anthropocene," 348.
8. Adam Dickinson, *The Polymers* (Toronto: House of Anansi, 2013), x.
9. Jennifer Gabrys, Gay Hawkins, and Mike Michael, "Introduction: From Materiality to Plasticity," *Accumulation: The Material Politics of Plastic* (London: Routledge, 2013), 3.
10. Roland Barthes, *Mythologies*, trans. Annette Lavers (New York: Noonday, 1972), 97.
11. Susan Freinkel, *Plastic: A Toxic Love Story* (New York: Houghton Mifflin, 2011), 8.
12. See Edward Halsey Foster, *Understanding the Black Mountain Poets* (Columbia: University of South Carolina Press, 1994), Helen Molesworth, *Leap Before You Look: Black Mountain College 1933–1957* (New Haven, Conn.: Yale University Press, 2015), and Mary Emma Harris, *The Arts at Black Mountain College* (Cambridge, Mass.: MIT Press, 1987) for discussions of Black Mountain poetics and the interarts experiments associated with this college.
13. Denise Levertov, "Some Notes on Organic Form," in *New and Collected Es-*

- says* (New York: New Directions, 1973); Charles Olson, "Projective Verse," in *Collected Prose*, ed. Donald Allen and Benjamin Friedlander (Berkeley: University of California Press, 1997).
14. Jonathan Skinner, "Visceral Eco-poetics in Charles Olson and Michael McClure: Proprioception, Biology, and the Writing Body," in *Eco-poetics: Essays in the Field*, ed. Angela Hume and Gillian Osborne (Iowa City: University of Iowa Press, 2018), 65–83.
15. Denise Levertov, "A Note on the Work of Imagination," *The Poet in the World* (New York: New Directions, 1974), 200.
16. Greg Ellermann, "Plasticity, Poetry, and the End of Art," 200.
17. M. C. Richards, *Centering in Pottery, Poetry, and the Person* (Middletown, Conn.: Wesleyan University Press, 1987), 67. Richards draws extensively on Coleridge's ideas of organic form throughout this book.
18. For one key discussion of these legacies, see the "Introduction" to the recent edited volume *Eco-poetics: Essays in the Field* (Iowa City: University of Iowa Press, 2018). Editors Angela Hume and Gillian Osborne point out that their subtitle gestures to the centrality of these midcentury poetic practices to contemporary eco-poetics.
19. CA Conrad, *A Beautiful Marsupian Afternoon: New Soma(tics)* (Seattle: Wave, 2012), 1.
20. Lynn Keller, *Recomposing Eco-poetics: North American Poetry of the Self-Conscious Anthropocene* (Charlottesville: University of Virginia Press, 2017), 61.
21. Allison Cobb, *Plastic: An Autobiography* (New York: Essay, 2016), 69. Susan Freinkel discusses the military history of plastics in her *Plastic: A Toxic Love Story*.
22. Peter Middleton, *Physics Envy: American Poetry and Science in the Cold War and After* (Chicago: University of Chicago Press, 2015).
23. Another key eco-poetics text that engages with plastic as a material and develops a mode of plastic poesis is Evelyn Reilly, *Styrofoam* (New York: Roof, 2009). Two insightful critical considerations of this book and its eco-poetics are Lynn Keller's discussion of Reilly in her chapter on plastics in *Recomposing Eco-poetics* and Heather Milne's chapter on Reilly in *Poetic Mattering: Neoliberalism, Affect, and the Posthuman in Twenty-First Century North American Feminist Poetics* (Iowa City: University of Iowa Press, 2018), 133–51.
24. For a reading of Dickinson's *The Polymers* as a work of conceptual eco-poetics, see Joshua Schuster, "Reading the Environs: Toward a Conceptual Eco-poetics," *Eco-poetics: Essays in the Field*, ed. Angela Hume and Gillian Osborne (Iowa City: University of Iowa Press, 2018), 208–27.
25. Adam Dickinson, *Anatomic* (Toronto: Coach House, 2018), 9.
26. See Sharon Lerner, "Waste Only: The Plastic Industry's Fight to Keep Polluting the World," *The Intercept*, July 20, 2019, <https://theintercept.com/2019/07/20/plastics-industry-plastic-recycling/>.

27. Sy'Taffel, "Technofossils of the Anthropocene: Media, Geology, and Plastics," in *Cultural Politics* 12, no. 3 (November 2016): 355–75.
28. This famous photo was printed in *National Geographic* and then reprinted widely, including in a 2015 online *Audubon Society* article about plastic's effects on seabirds. Purbita Saha, *Audubon*, September 15, 2015. "99 Percent of Seabird Species Could Be Tainted with Plastic by 2050, Science Says," <https://www.audubon.org/news/99-percent-seabird-species-could-be-tainted-plastic-2050-science-says>.
29. Samuel Taylor Coleridge, *Biographia Literaria* (Oxford: Oxford University Press, 1973), 262.
30. Patricia Yaeger, "Sea Trash, Dark Pools, and the Tragedy of the Commons." *PMLA* 125, no. 3 (May 2010): 530.
31. Yaeger, "Sea Trash," 529.
32. Orchid Tierney, *ocean plastic* (Kenmore, N.Y.: BlazeVOX, 2019), 10.
33. In her notes, Tierney suggests that the vertical line represents the pipes through which plastic enters marine ecosystems (24).
34. For an essential intellectual genealogy and innovative theoretical deployment of the term *animacy*, see Mel Y. Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham, N.C.: Duke University Press, 2012).
35. Jennifer Gabrys, "Plastic and the Work of the Biodegradable," in *Accumulation: The Material Politics of Plastic*, ed. Jennifer Gabrys, Gay Hawkins, and Mike Michael (London: Routledge, 2013), 217.
36. The term "survivance" is from Gerald Vizenor, *Survivance: Narratives of Native Presence* (Lincoln: University of Nebraska Press, 2008).
37. Thom Davies, "Toxic Space and Time: Slow Violence, Necropolitics, and Petrochemical Pollution," *Annals of the American Association of Geographers* 108, no. 6 (2018): 1537–53, doi:10.1080/24694452.2018.1470924.
38. Craig Santos Perez, "Our Sea of Plastic," *Kenyon Review Blog*, February 1, 2013, <https://www.kenyonreview.org/2013/02/our-sea-of-plastic/>.
39. Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham, N.C.: Duke University Press, 2017), xx.
40. Santos Perez, "The Age of Plastic," and Divya Victor, "Countertranslation," in *The Margins: Asian American Writers' Workshop*, November 1, 2018, <https://aaww.org/the-age-of-plastic/>.
41. Victor, "Countertranslation."

7

On the Beach

Porous Plasticity, Migration Art, and the
Objet Trouvé of the Wasteocene

Maurizia Boscagli

Since the moment of its invention in the early twentieth century, plastic has been considered the matter of modernity, and as such it has heralded creativity, progress, futurity, and the new. Plastic's utopian qualities have been acknowledged by Roland Barthes,¹ and more recently by Catherine Malabou.² In particular Malabou opposes flexibility, the quality that neoliberalism demands of its subject, to plasticity, the capability to take and give form, and recognizes plasticity as the point of departure for political innovation and dissent. This essay addresses the ways a possible politics of denunciation and resistance to neoliberal capital is carried on today by an aesthetic appropriation of plastic. I study plastic artifacts that appear on beaches around the world as traces of two contemporary epochal events: the planetary climate crisis and global migration. Each of these is profoundly related to the economic and social conditions put in place by late capitalism; millions of war, poverty, and climate refugees move from the South to the North of the world. The artifacts I discuss are, first, the plastiglomerate, a conglomerate of plastic debris and sand or molten rock that geologists Charles Moore and Patricia Corcoran and artist Kelly Jazvac found in 2006 on Kamilo Beach, in Hawai'i, and, second, the plastic life vests and inflatable boats that migrants abandon on the beach upon their arrival in Greece or Italy, and that the Chinese artist Ai Weiwei has in recent years exhibited in various installations throughout Europe. The relocation of these objects in the art gallery or museum offers the critic the opportunity to in-