The Ecopoetics of Survival: The *Transborder Immigrant Tool* and The *Desert Survival Series*\(^1\)

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**Abstract**

*The Desert Survival Series* (2010, 2014) by Amy Sara Carroll, a set of poems that forms part of an activist project called the *Transborder Immigrant Tool*, departs from the methods of both radical political poetry and some avant-gardist forms of aesthetic resistance that rely on a poetics of randomness to challenge the prevailing order. Instead, the *DSS* employs design—the design of the poetic object revealing other designs—as a political resource. It addresses a group endangered and abjected by the United States government: migrants crossing the Sonora desert. In doing so, it recalls traditional forms such as the pastoral and the georgic in order to reimagine earlier attitudes toward poetic making, hierarchical politics, and the environment. Orienting in their address to migrants, disorienting and counterintuitive with reference to their contemporary poetic context, the poems are of interest for debates around ecopoetics, because they make an intervention in the domains of environmental poetry as well as political activism of the border.

*Keywords:* Design, randomness, poetry, poetics, ecology, georgic, pastoral, border, desert, migrants.

**Resumen**

La serie *Desert Survival* (*Supervivencia en el desierto*) (2010, 2014) de Amy Sara Carroll, un grupo de poemas dentro del proyecto artivista llamado *Transborder Immigrant Tool* (La Herramienta del Inmigrante Transfronterizo), se aleja de los métodos de tanto la poesía política más radical como de algunas formas de vanguardistas de resistencia estética dependientes de una poética de lo aleatorio para desafiar el orden predominante. En su lugar, la serie *Desert Survival* utiliza el diseño—el diseño del objeto poético que revela otros posibles diseños—como una herramienta política. Se dirige a un grupo en peligro y vilipendiado por el gobierno de Estados Unidos: los migrantes cruzando el desierto de Sonora. De esta manera, recupera formas tradicionales como el género pastoril y las geórgicas para reimaginar actitudes pasadas hacia el hacer poético, la política jerárquica y el medio ambiente. Los poemas están dirigidos a orientar a los migrantes, aunque su vocación en el contexto poético contemporáneo es desorientadora y contraintuitiva. Son poemas interesantes en los debates de lo ecopoético, pues postulan la intervención de la poesía sobre el medio ambiente al igual que sobre el activismo político en la frontera.

*Palabras clave:* Diseño, aleatoriedad, poesía, poética, ecología, geórgicas, pastoril, frontera, desierto, migrantes.

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ecopoetry is surrounded by questions of ethics. Should the ecopoem do something in the world? But how can a poem be said to accomplish anything? James Engelhardt, "The Language Habitat: an Ecopoetry Manifesto" (n. p.)

Maybe the development of environmental literacy, by which I mean a capacity for reading connections between the environment and its inhabitants, can be promoted by poetic literacy; maybe poetic literacy will be deepened through environmental literacy. Forrest Gander, “The Future of the Past: The Carboniferous & Ecopoetics” (216)

Introduction: Civil Disobedience, Randomness and Design

This paper discusses The Desert Survival Series, a group of poems written by Amy Sara Carroll, a professor at the University of California San Diego (UCSD), and “published” in an unlikely place: on a computer GPS program called the Transborder Immigrant Tool. Designed to be downloaded onto cheap phones, the program was created to lead desert crossers to water caches provided by humanitarian NGOs. The program, which includes Carroll’s twenty-four poems (readable as text or playable as audio files), was created by the Electronic Disturbance Theatre, a civil disobedience and performance art group at UCSD led by Carroll’s colleague Ricardo Dominguez. The EDT’s “artivist” performances (Nadir n. p.) generally use cyber-disruptions to produce political resistance, marshaling chaos and randomness in the service of unsettling the status quo. The poetic series, in a departure from this strategy, deploys design—the design of the poetic object—as a political resource in aid of a group endangered and abjected by the United States government. Addressed mostly to migrants from Latin America, the poems are given in Spanish as well as English, providing advice on how to avoid the specific natural dangers of the Sonoran Desert on both sides of the U.S.-Mexican border. The program and poems also are meant to publicize the humanitarian crisis in which thousands of migrants have died of dehydration on their journeys. They address too, obliquely, what Gilberto Rosas calls the “managed violence” (401) of current border policies that send migrants to the most threatening landscapes for crossing. In her poetical exploration of overlapping environmental and socio-political borders, Amy Sara Carroll has committed herself to the “connection and engagement” by which James Engelhardt defines the ecopoem (216).

Connection and engagement also characterize the political work of the EDT which largely consists of provocations towards the goal of social justice. Their forms of subversion create disruption, such as when they employed tactics of disorientation and

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2 Hereafter abbreviated as DSS in both the text and parenthetical documentation.
3 Hereafter abbreviated as TBT in the text.
4 While the program has never been distributed on phones, the poems are readily available, online and in print. Ricardo Dominguez, one of the group’s members, cites a variety of reasons, including politically motivated investigations of the EDT and the changing narco-politics of the region, for the group’s failure to distribute the GPS program (see Nadir). Perhaps the group never really expected distribution. Alison Reed’s essay on the avant-garde nature of this apparently impossible enterprise sees the “generative failure” of the TBT as deliberate, a “queer provisionality” that highlights the dystopian nature of the United States’ power structures.
5 Hereafter referred to as EDT in the text.
upheaval in their exhibitions of the TBT. At the same time, both the “disturbance” and the sophisticated design of the group’s actions offset a different, malign unpredictability and disorder imposed upon the lives of migrants by the state. As a computer program providing what may be life-saving orientation with the help of (audio) poetry, the TBT balances careful planning with occasional randomness. A mapping aid, it nonetheless proclaims itself as “dislocative”: opposing the governmental GPS systems that track migrants, but also dislocating systems of power and meaning. Whether with the TBT or through other means, the EDT makes different interventions for different occasions, with appropriately specific strategies for disturbing the powerful and for supporting the disenfranchised.

DSS not only intervenes in debates about the nation and its borders, it also participates in the always-ongoing revision of the Euro-American poetic tradition, a revision constantly responding to any moment’s political context. Though not obviously experimental in form, it articulates an avant-garde poetics that breaks new ground in setting, context, purposes, and language(s). Perhaps counterintuitively, DSS also calls on the resources of poetic traditions and counter-traditions that may look at first glance too conservative for Carroll’s revisionist aims. Her avant-gardism and revisionism converge in a noticeable effort to renew and query the modes of poetry about the (post)natural environment. This form of inquiry evokes the postpastoral, a mode not anti-pastoral but thinking beyond the pastoral. Put differently, these poems are not only an intervention in the politics and ecology of the border, but also in the poetic field and in poetics.

A politically charged object, the TBT device has been shown in exhibitions around the country, and has helped improve awareness of the humanitarian crisis, as it was intended to do. It has been the focus of fierce debates about the rights of undocumented migrants, about militarization of the border, about funding by state universities, about the value of higher education, about what professors (in general, and these specifically) think they are doing. What I will focus on, however, is what has not been seriously discussed about these poems: their status as the poetic project of a specific poet (though in consultation with other members of the group) with interesting implications for activism and ecopoetics, for the strategic employment in poetry of principles of randomness and design, and for writing and its allegiances to pleasure and to usefulness. In this article, I shall therefore not mainly examine the relation of Carroll’s poems to computer programming, as that has been covered at length, and much better than I could do. Instead, I shall show that her poems form an integral part of the tool—one that creates a powerful verbal complement to its digital component. Moreover, I shall explain that though raising questions about the nature and uses of poetry in contemporary contexts,

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7 Even its programming incorporates some randomness; the line of code indicates the (non)order in which the audio should deliver the poems: “// this thread to randomly play audio file” (“TBMIDlet.java” 33). In other computer-assisted actions, the EDT has created “virtual sit-ins” in which followers overwhelm official websites with simultaneous log-ins. Their acts of civil disobedience thus depend upon a certain amount of chaos (Schachtman, n. p.).

8 To my mind, Sergio Delgado Moya’s beautiful essay best relates the poetry of the TBT to its computer program.
particularly national and ecological, Carroll’s poems, paradoxically, also go back to much more ancient forms of poetics such as the pastoral and the georgic.

Instruction and Care, or Substituting Legibility for Randomness

According to the EDT, the poems are intended to provide not only important information but also solace in the form of human companionship. They establish a human relationship between the TBT’s creators and the migrants whom the “artivists” mean to address with respect and care. “Of Ecopoetics and Dislocative Media,” Carroll’s foreword to the poems, provides some background about how she envisioned the series. The TBT’s poems needed to “engage or expand upon our collective vision of the tool as sustenance” (“Of Ecopoetics” 4), Carroll notes, and to avoid writing “that functioned best in museum, gallery, and university” (“Of Ecopoetics” 3). The poems had to alert migrants to the many risks in the desert but not subject them to the panic that, so many survival manuals insist, endangers survival. At the same time, the series needed to raise awareness about the extreme dangers of desert crossing for non-migrants. The poems therefore had to attend to a reality far more dynamic and mobile than that of institutional cultural settings.

All the same, Carroll had written an earlier set of poems for the TBT, one that she eventually decided was suited to galleries and universities rather than to the desert. Both that first series and its gallery setting, though highly developed, were much closer in affect to a poetics of randomness than the final series:

It is included on phones in exhibition displays of the work. [In one we] created a sound installation wherein the recordings of approximately 65 poems sounded off in a timed sequence across six phones. The poems included were from both series and were in 14 languages. (The idea was one of disorientation—that few to no museum-goers would understand all of what they heard). (Carroll, Email 1 Nov. 2018, n. p.)

While the migrants required poems furthering an intense focus on surviving the desert, with Carroll’s poetry crucially urging its addressees to walk the desert reading its shifting clues,9 the EDT wanted museumgoers to experience disruption and disorder, that is, the chaos from which they hoped to help the migrants escape. Using fourteen simultaneous languages, the Babel-like linguistic discordance of the museum version of the TBT evoked the global disturbances that have already forced so many migrations in this century.

The DSS sequence is thus very much an ecopoetic product of its time, the poems having at least three audiences—the migrants themselves; the presumably progressive viewer-readers who see them online or in museum exhibitions and may be moved to intervene in the humanitarian crisis they speak to; and the governmental actors responsible for this crisis. How could the poems be meaningful to a group of endangered Mexican citizens, some, at least, illiterate, but all coming from a culture steeped in song and poetry? How could they address the humanity of these migrants who are abjected and depersonalized as illegal aliens? Carroll confronts these many different demands, drawing a poetry from her own political and literary understanding, from Latin American writing.

9 Unlike walking in the great classical, Romantic, and Transcendentalist traditions, this walking is not leisurely, pleasurably introspective, a source for happy and creative after-reflection.
and performance art, from her own experience of the desert, from autobiographies of
desert survivors, and from “texts about desert survival: handbooks, military manuals,
[and] a guide for border-crossers briefly distributed by the Mexican government” (“Of
Ecopoetics” 4). In certain understated allusions, Carroll goes further afield, importing into
her poems the desert fiction of Frank Herbert’s Dune (1965), or cult cinema and its
depiction of the desert as a place of lawlessness and fight for survival.

By invoking different traditions of desert writing, the poet is embedding her advice
in a larger geographical and historic frame, large enough in fact to engage the reader or
hearer in a multi-faceted meditation upon the desert. Her epigraph to the foreword (“Of
Ecopoetics” 1), taken from Raúl Zurita, sets the tone of the series: “Quién hablaría de la
soledad del desierto”: “Who would tell of the desert’s loneliness” (Zurita 50). In poem 8 of
DDS, Carroll associates the desert not merely with loneliness, but with loss and death.

According to Herodotus,” she writes, “King Cambyses, twenty-five hundred years ago,
lost his entire Persian army (fifty thousand men) in an Egyptian sandstorm. Deserts guard
their secrets; no archaeological evidence corroborates Herodotus’s account” (52).

Addressed primarily to US-Americans interested in the TBT, the reference to Herodotus
draws attention to the countless migrants who are losing their lives while trying to reach
the U.S. via the desert. For desert crossers, by contrast, it makes more sense to write not
only about why sandstorms are dangerous but also about how to survive them. This is
why Carroll presents the desert crossing not as a heroic victory over a challenging
environment, but as an attempt to understand it. Deeply concerned with the ecologies and
discourses of the desert, the poems attempt to engage with the natural world without
appropriating, demonizing, or idealizing what they describe. Instead, they crucially
impress upon first the poet and then the desert crosser new depths of focus and
perception. The aesthetic and practical overlap in this regard: both poets and travelers
depend on being able to perceive, to read the world.

More specifically, in the case of DSS, a politics of care motivates the work of
replacing the potential randomness of the desert crossing with aesthetic and practical
design, i.e. illegibility with legibility. Carroll’s poems show their audience how to read in
a way that goes beyond superficial understanding. The DSS’s introductory poem begins
by insisting that the desert is readable and navigable, if one knows how:

[... an ecosystem, with a logic of sustainability: of orientation, unique unto itself. For
example, if the barrel cactus—known otherwise as the compass cactus—stockpiles
moisture, it also affords direction. As clear as an arrow or a constellation, it leans south.
Orient yourself by this mainstay or by flowering plants that, growing toward the sun, face
south in the Northern Hemisphere. (DSS 45)

10 Frank Herbert’s “Fremen” are mentioned in poem 17 (DSS 62). As aquacentric beings whose entire planet
is a desert, the Fremen’s whole culture revolves around conserving their own bodily moisture. They do so
in an “arrhythmic” desert crossing that allows them to avoid the ferocious sandworms that live in tunnels
marked by holes in the sand. Carroll’s allusion is humorous, but it also relays a warning: the walker must
remain as focused on hydration and desert dangers as these science fiction warriors.

11 When Carroll’s speaker counsels the traveler that “[s]and and rock reflect warmth and light as if you were
walking on a metallic liquid or ‘ashes of time’” (poem 21, DSS 66), she playfully names the title of a 1994
Taiwanese film directed by Kar-Wai Wong, in which a hitman operates from the desert in ancient China
(IMDB).
Nonhuman life, the poem reveals, has an orientation of its own that can aid humans if we can learn to decipher its—sometimes elusive—clues. Sophisticated reading skills, Carroll insists, are crucial here: “Proceed from the simple premise: The desert caches water in unlikely places that it resists divulging” (poem 3, DSS 47). The poems are full of injunctions to read signs: in poem 7, the speaker notes that “[t]he flight paths of birds, like pigeons and doves, indicate the proximity of an oasis. They drink in the evenings. If they are flying low and slow, follow their direction. Where they came from may be where you need to go to refill bottles or canteens” (DSS 51). Poem 13 notes: “Found in dead wood and debris, the brown recluse carries a dark, violin-shaped trademark on its back” (DSS 57). Even for the migrant following these directions perfectly, contingency can be fatal: make it to the water barrel, and you may find a hive of killer bees inside the lid (poem 9, DSS 53). The poet knows better than to provide guarantees; sometimes the signs are misleading, or tricky: poisonous saguaro cacti can look like safe-to-drink barrel cacti (poem 4, DSS 48). Nonetheless, the survival manuals Carroll studied and worked into her poetry urge their readers to think of the desert, lethal as it so often proves, not as the enemy but as an entity or system of which one is part. More deeply integrative than the TBT computer program, the poems seek to know the desert, rather than simply give advice on how to survive it.

The instruction in the series, specific though it may be to the particular situation of migrants, also fosters general skills in reading the environment. Most urgently, these skills are in aid of immediate survival for migrants, but in light of escalating environmental crisis and world-wide water shortages, they prove relevant for everyone else as well. Going beyond the immediate socio-political context of the project, Carroll’s poems address a general lack of awareness some scientists call “plant blindness,” that is, “the inability to see or notice the plants in one’s own environment, leading to the inability to recognize the importance of plants in the biosphere and in human affairs” (Wandersee and Schussler 84). Combatting such blindness entails disparate strategies, all pointing to reading as revelation: intense observation of the desert environment, a review of literary and cultural approaches to the natural world, and an appreciation of local environments as part of a larger, dynamic, global politics and ecology. Human survival depends on this learning, and guidance in reading allows the illegible—that which registers as random and chaotic, experientially and epistemologically—to become legible. Ecopoetics as a literary practice investigates these processes of encoding and decoding as well as their consequences, both critiquing and displaying the conflictual ideologies built into language when it is used to “represent” the world. Even when ecopoems use language instrumentally, as in the advice of Carroll’s poems, they unmoor words from univocal meanings. Carroll’s puns, anagrams, and allusions return us, as we shall see, to both the materiality and the unreliability of language. The act of both writing and reading, then, takes place in a cultural-material “mesh” (Morton 29) replete with extra-textual as well as literary references. In the case of poetry, these references often center on the evolution and revision of poetic genres such as pastoral and georgic, a point I shall come back to later.
Contemporary avant-gardist aesthetic discourse about randomness and design frequently privileges the former as the more emancipatory and innovative mode. Randomness as a creative principle has often been seen by both modern and postmodern artists as a refusal of cliché, a way to defamiliarize the everyday, to leap beyond ordinary habits of perception, and often, by extension, to think beyond current social and political structures. It can, of course, work that way. Design in the life-and-death situation of the desert borderlands, however, also forms part of planning and organizing for greater social justice. The TBT brings restorative design, both aesthetic and practical, to bear upon a situation and an environment singularly lacking in design, at least at first glance: the chaotic, risky environment of the Sonoran Desert. Carroll provides design in the deliberateness of her poetic series—an offer of conscious succor to the migrants it addresses—and in the way the poems urge attention, perception, and understanding upon those migrants. The whole program and most particularly the poems represent an attempt to use design as part of an ecopoetic practice—and an ethics—of support, care, and welcome. In this instance, ethics and aesthetics align, and design is emancipatory.

Carroll’s writing is attuned to two perspectives: that of the migrant, for whom the desert is terrifying randomness, and her own, that of a scholar of the desert, who, through study and experience, can detect patterns that help the traveler to master contingency and irregularity. In her poetry, she enjoins herself, her reader, and her listener to observe, to elicit what is patterned and productive in a seemingly unlivable situation. To focus on perception of natural phenomena (including humans) and their interrelatedness makes human survival more possible. For instance, if the sun causes heat stroke, the sun nevertheless also makes plants in the Northern hemisphere point South, offering legible sign-posts for the initiated. Such attention, I would argue, diminishes fantasies of control. Like advice from a loving but very realistic friend, the poems instruct, alert, soothe, and urge survival. In poem 14, for example, Carroll repeats the most important advice: “Drink water, rest in the shade, seek water at twilight. [...] Redux: Drink water, rest in the shade, seek water at twilight” (DSS 58). She praises the most resilient of the desert’s flora and fauna: the creosote bush that comes back unperturbed from a thermonuclear blast (poem 17, DSS 61); the cactus that saves moisture (poem 1, DSS 45); the peccaries that can “divine permanence” (poem 7, DSS 51), another way of reading the landscape, in the water supply; even the tarantulas who have more than one line of defense (poem 11, DSS 55).

The history of other desert crossers can also suggest lifelines for migrants at the U.S.-Mexican border: poem 3 tells how “just before sunrise, Bedouins turned over half-buried stones in the desert to catch the dew that the night’s coolness had condensed on the stones’ surfaces” (DSS 47). Carroll never openly addresses the terrible pressures...
migrants must be under if they are willing to risk their lives to come to the U.S., but her matter-of-fact description of the dangers migrants face in the desert makes these pressures implicit. Every poem in the series acknowledges the direness of the migrants’ circumstances without sensationalizing them, while also expressing the speaker’s wish that the listeners on the move prevail against them. Carroll emphasizes the need for care in deadly surroundings, her own care for the migrants through the poem and theirs for themselves in self-preserving attentiveness. As James Engelhardt suggests in “The Language Habitat: an Ecopoetry Manifesto,” acknowledging responsibility is not enough: you need first to care for, and then to take care of, people and the environment (n. p.). Carroll brings this matrix of concerns together in a self-reflexive environmental poetry that reviews the options for nature poetry in the post-natural—that is to say, ‘Anthropocene’—world. Her poetry demonstrates what Forrest Gander suggests in “The Future of the Past: The Carboniferous & Ecopoetics,” namely that environmental literacy and poetic literacy can promote one another (217).

Aesthetics Aligning with Politics

In a strategy central to the more experimental forms of ecopoetry, which ponder the relationship between the world and the way writing is brought into being, the design Carroll calls attention to is often that of writing itself. Her imagery moves in unexpected formations between the desert, the world surrounding it, and the landscape’s literary potentiality. Said differently, her imagery calls attention to a political consciousness that overlaps with a consciousness of the very act of writing. In poem 2, Carroll urges:

Climb or walk in the morning. Rest midday beneath creosote bush or mesquite, insulating yourself from the superheated ground. Remember—even the sidewinder hovercrafts, the bulk of its body above the scalding sand as it leaves its trademark J-shaped tracks across the desert dunes. (DSS 46)

The tonally anomalous phrase “trademark J-shaped tracks” catches the attention, highlighting both the language of production and advertising and the letter J of written language. Such forms of word-play are unexpected in this pared-down message of instruction, but they will be picked up in later poems, where they hint, as they do here, at the consumption of nature and humans by the economic forces that drive people into the desert, lined with *maquiladoras*, in the first place.14

Poem 4 for example repeats the phrase “J-shaped” as Carroll gives rules for distinguishing between edible and poisonous cacti, the deadly saguaro and the safe barrel cactus: “So don’t just look for squat, rounded cacti,” the poem warns, “differentiate, think fishhook. J-shaped outer ‘fishhook’ spines, literally used by the Seri Indians for fishing, mark and distinguish the true rescue cactus from its peers” (DSS 48). In calling attention to the letter J, the poems suggest a writing consciousness, and even pay a low-key homage

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14 Mark Marino comments helpfully on Carroll’s frequent shifts of diction and register: “Abruptly, the sentence switches its frame [from talking about cacti] with the metaphor of ‘stockpiles,’ an industrial term more often used not in survival but in accumulations of destructive materials. And again, she shifts registers with ‘affords,’ a term with deep resonance in the realm of tool design, programming” (paragraph 18, n. p.).
to writing itself. This strategy evokes what Linda Russo describes as ecopoetic “engagement […] through a poetry that is also aware that it is mediating, is marks on a page” (n. p.). The next-to-last poem of the series, for instance, uses typography to create an X-shape on the page, forming what Carroll describes in the piece as the universally known shape of an emergency flare (DSS 69). In poem 19, she urges the post-floodwaters traveler to “criss-cross [the dunes’] artistry—patterns in the sand, sculpted as a topographic map or an open book in Braille” (DSS 63). In poem 11, in turn, she calls the tarantulas “book-lunged arachnids” who blow “missives,” their silvery hairs, at enemies (DSS 55). “Book-lunged” is a scientific term based on the folded tissue of some arachnids’ lungs, but within the poem, the spiders seem to refer us to the library. Finally, poem 8 ends with what is practically a tribute to reading, though perhaps an equivocal one, as writing can do damage as well as good: “Tuck your eyeglasses into your shirt or jacket pocket (so the wind will not etch its soliloquies into them)” (DSS 52).

Refusing, as they do, to center on the praise of natural beauty, these poems differ from “nature poems” in earlier poetic tradition. At the same time, Carroll accords beauty and pleasure, expression and value to the desert surroundings: “In the summertime, pitahaya dulce, the fruit of the organ pipe cactus, ripens to red and drops its spines. The prickly pear cactus’ tuna reddens to purple, but never loses its needles. Dethorned, dethroned, both are delectably edible. Peel their skins” (poem 5, DSS 49). Naming color and flavor, Carroll creates one of the few sensually appealing moments in the series. “Dethorned, dethroned” generates a pleasure consisting in sight and taste, but also in ear and mind, in a word-play that indicates the transformations of language as well as its own power to transform. The play on syllables, the beauty of the cactus fruit, the revolutionary pleasure of deposing a king, these all act as a flash of relief in a poem that concentrates on warning against death and injury. Effecting a relationship with the materiality of poetry, Carroll’s work performs here what Peter Jaeger sees in the poems of Fred Wah: “simultaneously foregrounding the shared materiality of language, subject, and the ecosystem […] ecopoetical writing does not speak about the environment, it is the environment” (200, 207).

The aesthetic seriousness of Carroll’s work in the TBT has not always been understood, as the poet reveals in an interview with San Diego CityBeat:

When there’s been mention of poetry, it’s been rather derisive in the popular press coverage. […] There’s also a way in which the poems have stunned certain opposition into silence. For instance, we were on MSNBC Live—Ricardo and I, right after Christmas—[with] this person, Bob Dane from the Federation for Immigration Reform. So we got asked by Contessa Brewer, “Is this really poetry?” and I just said, “Yes.” And then there were, like, 20 seconds of silence. (Morlan n. p.)

The bafflement and suspicion about the poems in the MSNBC interview mentioned here was a mild precursor to the furor about DSS occasioned by another unlikely television moment. In the autumn of 2010, Glenn Beck, a famous conservative political commentator and conspiracy theorist, read aloud an excerpt from the series on his then new online program, TheBlaze (Moyers n. p.). In what Maryam Gharavi calls “his own brand of sublime hysterics” (n. p.), Beck created this headline for the TBT program: “UCSD
Professors Dissolve U.S.—Give GPS Phones With Explicit Poetry to Illegals for Border Crossing” (*TheBlaze* n. p.). In his view, the TBT constituted a deliberate attack on the nation as a structure whose cohesion and order supposedly depends on the control of its borders.

Beyond Beck’s outburst very little attention was paid at first to the TBT poems themselves or their relation to the more clearly functional aspects of the program. In fact, very little has been written about the poems as poems, though they are generally mentioned in descriptions of the overall project. The EDT, however, clearly stresses the importance of the program’s poetry for its overall mission: “[i]ts code is executable when and if one adds the coordinates of functional water caches to its poetic program. Its poetry, another executable code [is] included here after our project statement” (Carroll and Dominguez, n. p.). To define the language of poetry this way is witty, but it also creates a productive strangeness: to describe the aesthetic object as an “executable code” produces a jolt, a question about what poetry really is. If “executable,” what does poetry do? And if it is code, in what would the decoding consist? For Carroll, the decoding begins with the poems’ object, the desert. In “Of Ecopoetics and Dislocative Media,” she comments: “At base, I worked from two assumptions. A desert is not just a desert. And, poetry—becoming—code/code—becoming—poetry could transubstantiate, translate into a lifesaving technology, sounding off” (4). “[S]ounding off’ suggests a chance to vent some political anger, or a way to utter that’s “off,” askew from normal discourse. Transubstantiation allows the TBT to become something more than its elements, and translation reveals meaning to both migrant and creator. To transform in this way, binary code needed to cede precedence to words.

Most people would probably not readily associate the term “poetry” Carroll names in these remarks with the kind of prose that forms part of poem 15 of the series:

Cholla, or jumping cactus, attaches. A bud of spines breaks off at the slightest hint of touch. Remove cholla from your skin and clothing in increments, with a rock, a stick, a knife: the bud... large spines left behind... small spines or glochids. Needling needles that remain will work themselves out in the days ahead. (*DSS* 59)

Currently, poetry is not generally thought of as a literary genre whose primary purpose is to provide instructions or information. One can only imagine the unwillingness of a morning news show to take any truly avant-gardist poems seriously; for contemporary innovative poetry and its discussion do not have the pace of “breaking news,” artificial as that pace must be. So, if Carroll’s series is not particularly innovative but, nonetheless, news-breaking poetry that can make things happen, what makes it so and what cultural relevance does it obtain?

The direct purposefulness of Carroll’s poems opposes a popular idea of poetry as emotionally discursive, even aimless, decorative, and primarily sentimental. Lacking, as it does, rhyme and meter, why is the “Cholla” passage above a poem and not a prose fragment or a form of free verse? Syntactically, the works in the series do not announce themselves as “poetic”: they are not particularly hypotactic, nor do they introduce much subordination or complex sentence structure. But if one way of describing a poem is as a creative work that considers its own relationship to language and that has meaning in...
relation to a poetic tradition, these are indeed poems. In fact, DSS mediates between several traditions. For one, Latin American political poetry responding to histories of political oppression makes a clearly appropriate context for the series, and an epigraph from the Chilean dissident poet Raúl Zurita places Carroll’s work in this tradition. Furthermore, like most if not all twentieth-century U.S. poets, Carroll is an heir of modernism. Indeed, the minimalism of some of the poems in the original version of the series recalls pared-down works by writers like W.C. Williams, H.D., and Ezra Pound in his haiku phase.

Desert Poetics as Didactics of Post-Pastoral and Neo-Georgic

Strikingly, however, Carroll’s are also poems of instruction, linking themselves to Anglo-American traditions of pastoral and georgic poetry that can seem unlikely precedents for politically radical contemporary writing. Indeed, the DSS shares the goal of these two traditions to revise received wisdom and situate itself in a larger literary world. Some recent scholars of pastoral and georgic have been at pains to distinguish them. Michael G. Ziser, for instance, refutes Lawrence Buell’s contention that any primarily rurally invested literature is pastoral, seeing a difference in georgic’s refusal to de-realize nature (175, note 1). I would argue, however, that the two modes are frequently coextensive, particularly in modern revisions. Even more crucially, my contention here is that DSS can be seen as employing the instructive, nature-directed aspect of georgic in a non-agrarian, remotely placed landscape closer to that of pastoral. By drawing on the resources of ongoing poetic traditions and counter-traditions such as the pastoral or the georgic, the TBT poems emphasize principles of design that call up older genres, but significantly revise them for our times and its specific purposes. Their shadow-drama portrays poetic inheritance and negotiations with literary tradition in the context of late twentieth and twenty-first century politics and geographies. Carroll reads both poetry and landscape attentively in order to understand the physical environment, but she also reads both of them together to connect the worlds of Virgil and Zurita.

Although the similarities may not immediately be obvious, Carroll’s poems can indeed also be read in the lineage of these two poetic modes that have very little to do with the desert, at least traditionally: the pastoral and georgic, two versions of the idealized classical rural. Both pastoral and georgic are associated with retreat, and thus, on the one hand, with what Victoria Silver refers to as an “instrumental fiction [...] whose efficacy at ordering the world requires that it too stand outside of time and the actual contingency of things” (36), and on the other hand, with what Raymond Williams describes as “a myth functioning as a memory” (43). For both scholars, the pastoral especially evokes a simpler, less existentially fraught set of mind and way of life, a fantasy operating in the vision of a self-sufficient, hierarchically stable nation of appropriately employed citizens. Not all pastoral and georgic idealizes, however. It is important to recognize the additional presence of a more negative and critical strain. In classical pastoral, the shepherds complain not only about love troubles, the weather, the need to feed and water their flocks, and the sheep’s illnesses, but also about death and exile.
Similarly, in classical georgic, farmers may lose their hives or their crops, disasters that reflect larger realities of war, loss, and mortality. It is these more negative and critical strains of the pastoral and georgic tradition that Carroll’s DSS foregrounds.

Recent environmentally focused discussions and poetic practices of pastoral have refused an idealized worldview, especially relative to environmental degradation. Terry Gifford, for example, reflects that “a Greenpeace supporter might use the term [pastoral] as a criticism of [a] tree poem if it ignored the presence of pollution or the threat to urban trees from city developers” (2). Joshua Corey uses the term “post-pastoral, for the sense that the prefix ‘post-’ gives to the object it modifies as that which is conditioned by that object but which also struggles with it, trying to become something new” (n. p.). Carroll’s series is a desert post-pastoral, foregoing the utopian brightness for a darker, death-haunted manner, in which the exigencies of nature require song for solace. In poem 7, Carroll writes: “Cottonwoods spread a welcome shade. Clusters also indicate a desert stream or an underground spring close to the surface” (DSS 51) These lines provide excellent advice for those trying to survive while crossing the desert, but they also recall Virgil’s Eclogue One, in which Meliboeus, about to be exiled, reproaches the friend who can devote himself to beautiful song while his own world is in tormented upheaval:

You, Tityrus, lie under the canopy of a spreading beech, wooing the woodland Muse on slender reed, but we are leaving our country’s bounds and sweet fields. We are outcasts from our country; you, Tityrus, at ease beneath the shade, teach the woods to re-echo “fair Amaryllis.” (Virgil, Eclogues 25)

The woes of Meliboeus are political and historical: by order of Augustus, who rewards his veterans with land wrested from owners, Meliboeus has been forced from his home and sent on the road. Like the Sonoran migrants, Meliboeus and his comrades will suffer painful journeys, longing for the relief of shade and a safe place to live. Carroll may not have these precedents specifically in mind, but they are sufficiently foundational for poetry about nature to have been absorbed and replicated throughout that tradition, a pastoral legacy that current ecopoetry writes after, through, with, and against.

In turn, Carroll’s poems—which give step-by-step instructions for methods of survival, though in a landscape very far from that of the European tradition—can be read as georgics in an altered sense, or even as a kind of subversive georgics. Originally a detailed verse manual of agricultural knowledge, the georgic from Virgil onward has promoted the development of agriculture, of community, and most significantly of a politics of order and status quo. It could not have accounted for the kinds of population flows catalyzed by late capitalism. Unlike the conventional georgic, then, Carroll’s poetry attends to displacement rather than to settled cultivation. It also refuses, or sidesteps, the equation of dedication to labor with moral value. As Margaret Ronda argues, georgic poems are grounded in a “dialectic of pain and gain, dehumanizing burden and humanizing virtue” (864). By contrast, what I would call “resistant georgics” (such as the georgics Ronda considers by Afro-American poet Paul Laurence Dunbar [1872-1906]) “highlight the minimal quality of manual labor, its association with bare survival, material frailty and suffering” (Ronda 873). Carroll’s poems, in revertin to poetry of instruction, think beyond the georgic, refusing the older form’s emphasis on ensuring a productive
labor force and recasting it as a means of providing care and solidarity. This earlier poetic and social design, by its stasis and conservatism, could not answer Carroll’s purposes without significant revision.

Again, a comparison with Virgil clarifies the differences and similarities. One of the main activities in georgic is beekeeping, and Virgil sees it, humorously but also seriously, as a reflection of state preoccupations, since bees offer

A marvellous display of puny powers,
High-hearted chiefs, a nation’s history,
Its traits, its bent, its battles and its clans,
All, each, shall pass before you, while I sing. (Virgil, Book IV, Bucolics 50)

Carroll’s Poem 9 discusses bees too, and she also reads them politically, specifically in relation to the kind of (nation) state that Glenn Beck believed endangered by the migrants that the TBT sought to help:

[...] “killer,” or “assassin bees,” the descendants of migrants (themselves the descendants of twenty-six Tanzanian bees accidentally released in southeast Brazil), are aggressively territorial. Almost identical in appearance to kinder and gentler bee populations, Africanized bees—now the reigning queens and workers of the Sonoran Desert—congregate near water holes and flowering cacti. Killer bees will defend their hives against perceived threats, attacking by the thousands. Do not pass within thirty meters of their colonies (eminent domains), constructed in veritable earthworks (mounds and cavities), cacti trunks, creosote, mesquite, former travelers’ lay-up sites. (Poem 9, DSS 53)

Moreover, almost imperceptibly, sinister suggestions of a disordered and rapacious state are brought together in this passage: echoing the power of the government to take private property, the bees have become “assassins” who defend their “eminent domains” and establish colonies. The purportedly benign social organizations of bees have gone murderous and so, the poem implies, has the U.S., a nation of “descendants of migrants.” too. Although the ancestors of those who live above and control the Mexican-American border—the majority white population—came to North America because of different historical, sometimes random even, events, their descendants have, like the migrant bees, become “aggressively territorial.”

Poem 9 offers perhaps the most complex of the interactions between what one might describe as the mobile ecology of the poems and the border politics of Carroll’s series. At the same time, it also suggests a new range of revision of earlier tropes. The ideas expressed through these older forms reappear as nightmare versions in Carroll’s poems. In pastoral, the shepherds must keep their flocks watered and fed, and generally manage to do so, whereas in DSS, access to water and food is rare. Georgic, meanwhile, focuses on bee keeping and on tending and harvesting crops. In the desert, by contrast, both bees and plants can prove lethal. As Leonie S. Joubert writes, “deserts are only bad news to creatures that have not evolved there. They provide a niche for any plants and animals entrepreneurial enough to adapt and make this place home” (158). Carroll makes clear that humans have not been among the adaptive creatures, but may still survive the desert with the help of poetry that relies on ecopoetics as an adaptative tool and a
mapping device (see Carroll xix-xxii), finding life-saving patterns even in the apparent randomness of shifting sands.

**Conclusion: From Art to Activism**

In Carroll’s poetics, history, language, and literature become part of the landscape, even part of the eco-system. She thus replaces an abstracted or symbolic landscape with a historical and material reality that will have various but specific outcomes, rejecting the romanticized terms in which Euro-American poetry has traditionally represented landscape. To Carroll, the desert is anything but empty, and the perceiver who will read it attentively finds it very full. As she puts it: “Ecology holds trauma and promise simultaneously, is neither beautiful nor sublime per se, but becomes part of a larger built environment that regulates the policing and disciplining of ungrammatical bodies” (“Of Ecopoetics” 2). Her reference here is to Hortense Spillers’ notion of an “American grammar,” that is, a symbolical order predicated on racist violence (Spillers 68). As Carroll’s DSS suggests, the bodies of migrants trying to cross the U.S.-Mexican border, because they are brown and not rooted in any specific soil, do not fit into such a racist North American grammar. In the TBT’s desert poems, no possibility exists for framing the landscape as an idyllic retreat or the lives of workers in idealizing agricultural terms, because the migrants’ sole objective is to move through it. Even the ground moves: in sandstorms, “winds transubstantiate the landscape into unidentified flying objects” (Poem 8, DSS 52). In the EDT group’s essay “The Water Witching Tool,” the authors argue that the way in which “the Mexican/US border, and all borders perhaps” (n. p.) are currently enforced, has interlocking environmental and political effects. “The border participates,” they insist,

in what Rob Nixon has termed the “slow violence” of the neo-liberal dismantling of biocitizenship […] that crosses between multiple forms of life: from black bears to plants to water to global labor as borderized-entities that are blocked from geographic movement, which is the blocking of life itself. (EDT, ”Water Witching” n. p.)

What, then, echoing Engelhardt, might a poem accomplish? Against the background of “[n]ature actually turn[ing] out […] to be one of the most ineluctably transnational realities of all” (Bellarsi 72), DSS engages with that question in several ways. The practical purpose of sharing knowledge with migrants about how to survive in the desert is the most obvious answer. In post-pastoral and neo-georgic meditations upon the desert, employing an ecopoetics of randomness and design, Carroll revises earlier evocations of a transcendent nature and idealized human labor. Yet another purpose of this poetic sequence is related to readers’ pleasure. And finally, centrally, as I have intimated throughout this essay, the poems retrain the physical and mental eye towards perceiving in more profound ways. In a perhaps unexpected re-affirmation of the poetry-environment continuum, these didactic pieces suggest that poetry might be read as the desert is read: finding pattern in randomness; registering minute but significant details of difference; learning to interpret repetitions; seeking guideposts; negotiating technologies; and standing within, rather than outside, its space. If, as Horace maintained
in his *Ars Poetica* (c. 19 BCE), poetry must blend “utile dulci,” the profitable and the pleasurable, the delightful and the instructive.\(^{15}\) *DSS* attends to pleasure but, given the circumstances of its making, leans more towards the *utile* side of the poetic equation.

Such pedagogy has environmental as well as sociopolitical implications. The environmental blindness I referred to earlier comprises, among other things, the inability to see pattern and design in natural systems. In the case of the desert, this blindness, in general a deficit characteristic of the human animal, encompasses natural creatures and processes—from insects and other non-human organisms to plants and the weather. Carroll’s poetry addresses not only migrants on their way to the U.S. who are in desperate need of her advice, but all humans unaware of their ecological dependencies and relationships as a group. Sergio Delgado Moya asks “[h]ow can a cultural practice, an aesthetic intervention, a poem, or a work of art orient our attention, putting into focus people and phenomena previously unseen? How, in short, can art be activism?” (40). *DSS* suggests that it is not only the reader’s or the migrants’ perception that needs retraining; a government, a country, and even a world need to learn to focus on the great, dislocating, transnational changes affecting people as well as the environment. Orienting in their address to migrants, but simultaneously counterintuitive and disorienting with reference to their poetic domain, the poems of the TBT are of great interest in debates surrounding ecopoetics, in that they (re-)cast eco/poetry as a means to counteract a racist/nativist American grammar and as a medium of political activism—of ecology, of the border, of border ecologies.

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\(^{15}\) “Omne tultit punctum qui miscuit utile dulci,/ lectorem delectando pariterque monendo” (l. 343; Horace 478), which H. Rushton Fairclough translates as: “He has won every vote who has blended profit and pleasure, at once delighting and instructing the reader” (Horace 479).


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