A Darwinism of the Muck and Mire: Decomposing the Eco- and Zoopoetics of Stephen Collis' and Jordan Scott's *decomp*

It is interesting to contemplate a tangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner, have all been produced by laws acting around us.... There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone circling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved. (Darwin, *Origin* 489-90)

Embedded in the coastal Western hemlock zone of British Columbia, Canada, a sodden copy of Charles Darwin's *On the Origin of Species* molders in its mound of worm castings and pine-needled mulch. Its pages are swollen, rotted, and voluptuously wet with the morning's rain; a mass of pulp the consistency of *papier mâché*. The text beads with a resinous surge of sap. By mid-day, browsing pill bugs stride across the manuscript's wind-ravaged edges. An arachnid stationed across the page temperately sews the striated patterns of its delicate filigree upon the faded print, capturing its prey beneath the casted shadows of the salal's leathery leaves. Months pass. The scaled pages chap and curl, transforming Darwin's open book into what begins to resemble a tract of cross-sectioned earth. In this petrichor plot of soil, the book has itself become Darwin's *entangled bank*: a furrow of damp earth clothed in vegetation and crawling with worms.

This intersection of text, worm, and dirt is the basis of Stephen Collis and Jordan Scott's *decomp* (2013), a photographic-poetic project created from the fragments of five weathered copies of Charles Darwin's *On the Origin of Species*. The worm-eaten and waterlogged pages of the *Origin*, which Collis and Scott have lodged in between granite boulders on mountaintops and buried beneath fermenting layers of vegetation for the duration of a calendar year, secure a vital partnership between living and dead organisms, past and

present temporalities, and organic and inorganic elements. In turn, Collis and Scott's poetry collection presents an innovative re-modeling of Darwin's divergence diagram from the *Origin*, which exemplifies the "muck and mire" of evolutionary progress that I argue is characteristic not only of Darwin's natural scientific practice but of his theory of life itself. In the rich humus of diverse ecological habitats, Collis and Scott creatively experiment with what Darwin famously observed as the "grandeur" (Darwin, *Origin* 489) of life in the "entangled bank" (490).



Fig. 1. A copy of the *Origin* in Tofino, British Columbia, Canada (*decomp* 109).

As a creative experiment that harnesses its power in and through natural systems (ecologies) and across a wide range of organisms (zoologies), Collis and Scott's collection is best described as a jointly ecopoetic and zoopoetic project. Furthermore, the synergy between text, worm, and dirt in Collis and Scott's poetic practice ought to be understood as reflective of an evolutionary process that is constituted by the continuous and creative composition and decomposition of the codes of organic life in their situated environments. Collis and Scott's reconstituted poetry responds to the biological and geological aspects of the *Origin* by re-reading and re-writing Darwin's theory of evolution as an expression of life that flows both between bodies and across milieus. By creatively de-composing the *Origin* according to the principles of natural selection and adaptation (inspired by the material-discursive encounters between hominid and annelid), Collis and Scott's decomp broadens

the scope of our understanding of Darwin's evolutionary theory and offers a new way of thinking about the intersection of species and ecologies in poetic and scientific texts.

Into the Muck and Mire

The internment and exhumation of Darwin's textual body (corpus) on the part of Collis and Scott invites a consideration of the more soiled and sedimentary facets of Darwinism. This interpretation of what I am calling a "Darwinism of the muck and mire" may seem peculiar, but its grittiness arguably imparts a more nuanced understanding of Darwin as a grounded thinker who drew insight from the organisms he observed (both still and stirring) at his fingertips. To be sure, Darwin's own "mucky" natural scientific practice and his equally sedimentary divergence diagram (commonly referred to as the "Tree of Life" model) from the *Origin* are central to Collis and Scott's eco-zoopoetics of decomposition.

We know that Darwin, due in part to his rigorous studies in geology (mainly in his correspondence with and readership of noted geologist Charles Lyell), had a keen interest in earth sciences in addition to zoological sciences. Both aboard the HMS Beagle and abroad, across the mountainous ridges of Patagonia and upon the shores of the Galapagos Islands, Darwin routinely conducted his research in the dirt. On the islands of Mauritius, Darwin trudged through the sludge that had subsided to the bottom of coral atolls. Upon the ledges of rock that overlooked the crashing waves of the Atlantic in the Cape Verde Archipelago, he pocketed rough-hewn fossils and other ancient bone fragments for his collections. Back at home (in his more venerable years), he groveled in the tellurian excavations of earthworms that labored beneath his famous "wormstone" at Down House and strode through the chalky grasslands and flowering orchids of Orchis Bank. 1 It was in the soil-the same terrestrial substance that encased fossils, rooted botanicals, and fed the intestinal canals of humble worms—that Darwin developed a revolutionary perspective of the "Tree of Life."

In his time, and even now, nearly 160 years later, Darwin's "Tree of Life" starkly counters the Aristotelian order of nature that had for centuries dictated the praxis of natural science. While Aristotle's exegesis of nature

Charles Darwin's great great-grandson Randal Keynes famously asserts that Orchis Bank, a hillock covered in foliage near Down House (within range of Darwin's daily walks), seems to encapsulate Darwin's thoughts on the descent of species (Costa 133).

in *De Anima* presents life as a graduated and hierarchical ladder of celestial, human, and animal forms, Darwin's comprehensive evolutionary model of decay and rebirth in the "Tree of Life" accounts for the diverse proliferations of organic and inorganic matter in the natural historical record. As in the entangled bank passage of the *Origin*, bodies and milieus meld together seamlessly in the continuous and interminable circuit of evolution that is figured in the divergence diagram.

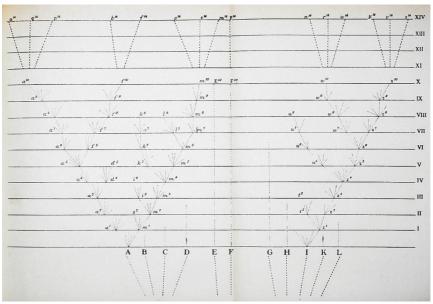


Fig. 2. "Darwin Divergence." 1859. Wikimedia Commons. Web. 23 Apr. 2018.

In addition to accounting for the muck and mire of Darwin's natural scientific practice, the "Tree of Life" model concretizes Darwin's biological and geological insights. The diagram (which is the only diagram to appear in the *Origin*; see fig. 2) charts the emergence and extinction of species lines alongside spatial and temporal coordinates that detail the specifics of classificatory divisions, along with the creative outspreading of species variation in geological time. Much like a cross-sectioned illustration of a tract of land that unearths layers of strata, the divergence diagram plots the evolution of species upon a horizontal map and in a kind of panoramic scope. Moreover, unlike the vertically-oriented *scala naturae* of Aristotelian philosophy, the diagram is distinctly underground, subterranean, and embedded in a post-

mortem past that is continuously (de)composing itself. In Darwin's visual model of life, all living and dead species and ecologies are imaginatively entwined and structurally unified: bodies merge, bio-historical processes spiral and unfurl, and environments inhabited by proliferating forms concomitantly cohere and dissemble.

As a figurative representation of Darwin's evolutionary theory, the divergence diagram is a visual schema that orders the scientific principles that guide the Origin. Such a diagram can be thought in relation to what Michel Foucault proposes in his analysis of the natural sciences as a fundamental aspect of "the order of things"; a gridded image that, as W. J. T. Mitchell argues, "holds the world together with 'figures of knowledge'" (11). The "Tree of Life" from the Origin is a representational model of Darwin's evolutionary theory that illustrates the junctions at which species lines converge within the geological record. Breaking from more traditional taxonomic models, the diagram's striated lines indicate that there is no "surface" that evolutionary progress breaks through; in short, that there are no completely perfected forms (e.g., the human) and no discernible teleological horizons. Unlike the majority of natural scientists of his time, who believed that a higher power had endowed all of life with a pre-determined trajectory and a concrete, singular origin—as per the Biblical story of creation—Darwin's theory of natural selection moves life outward, expansively, maneuvering farther and farther away from essential entities and categories. Similar to paleontological and geological models that detail layers of strata depicting millennia of earth history, Darwin's divergence diagram resiliently and yet indeterminately produces the very formations and structures that sustain life, while also recording, like the rings of a tree trunk, the ancestral and archival chapters of life's earliest expressions.

This representational model of Darwin's evolutionary theory, in addition to what we already know of Darwin's natural scientific practice, helps us to understand its "mucky" underpinnings, but also reveals the antecedent threads of vitalism that would later inspire Darwin's philosophical successors, Henri Bergson and Gilles Deleuze. While space does not allow for a full examination of a "Darwinism of the muck and mire" in Henri Bergson's *Creative Evolution* and Gilles Deleuze's and Félix Guattari's *A Thousand Plateaus* in this essay, I contend that the rhizomatic and vitalistic impulses of these thinkers can be correlated with Darwin's thinking on the interdependence of beings and milieus. As philosopher of science Georges Canguilhem asserts in his essay on the intellectual history of vitalism and the concept of milieu from the eighteenth to the twentieth century, Darwin's biological theory is

grounded in the idea that organisms are indissoluble from their relationships with other species and environments (105). "Darwin is more closely related to the geographers," Canguilhem writes, "and we know how much he owed to his voyages and explorations. The milieu in which Darwin depicts the life of the living is a bio-geographical milieu" (106). I qualify Canguilhem's claim further in contending that Darwin includes the dead in this bio-geographical milieu. For Darwin, all of life is holistically integrated into an ensemble of living and long-dead species, as his later work on earthworms reveals.

The Turn of the Worm

If this analysis of a "Darwinism of the muck and mire" still seems like a stretch, consider that seasoned historian of science Stephen Jay Gould once wrote that the enduring importance of Darwin's sustained treatise on dirt and worms in The Formation of Vegetable Mould Through the Action of Worms, with Observations on Their Habits (1881) is due not only to its meticulous attention to detail but to Darwin's overarching interest in reconstructing evolutionary history as a slow process of accumulated development. Such a treatise should be recognized as the culmination of Darwin's thinking on the intersection of species and environments in his theory of life. Indeed, along with Darwin's other evolutionary research, which would argue for continued change over vast periods of time, Darwin's book on worms, according to Gould, "illustrate[s] the general method that had validated evolution as well. Nature's mills, like God's, grind both slowly and exceedingly small" (125). It is the final irony of Darwin's death one year after the publication of his treatise on worms, in fact, that "[Darwin] wished to be buried in the soil of his adopted village, where he would have made a final and corporeal gift to his beloved worms," but was given a State Funeral and laid within the "wellmortared floor of Westminster Abbey" (Gould 133). But the worm finds its way, Gould relates: "it will not be cheated, for there is no permanence in history, even for cathedrals" (133).

It is perhaps in part due to the irony of Darwin's death that Collis and Scott were motivated to bury the *Origin*. The dank and moldy book(s) that are the basis for *decomp* play on the remains of Darwin's own physical body in addition to his textual body, ruminating on the lasting legacy and post-humous (or post*humus*) impact of Darwin's thought on nature, and particularly on the trope of writing that lies embedded within the *Origin* itself. The clever correspondence between the idea of corpse and corpus is evident in the chapter created from the remains of a copy retrieved from Gabriola

Island's Coastal Douglas Fir Zone. At the heart of this chapter is a passage that dictates a dialogue between the poets and Roger, one of their colleagues. Roger inquires: "When are you picking up Darwin's rotting corpse from my yard? ... That fucking book you left here all year?" (89). In response, Collis and Scott write in scattered fragments drawn from lines of the book:

Really, private but abandoned land. Vacant. Islanded. For rain shadow. A resistance to dissaforestation, in common. The book somewhere in the underbrush; salal and Oregon grape; bodies somewhere in a vanishing and so the social goes the way botany demands; the way the nature of language draws us into its desiccated signs to portmanteau our designs (89).

In addition to the poets' examination of the textual body that decomposes in "the way botany demands," the passage is accompanied by a footnoted quotation from Darwin's book on worms, in which Darwin states that "all the vegetable mould over the whole country has passed many times through, and will again pass many times through, the intestinal canals of worms" (Formation 2). Deeming the worm responsible for the breakdown of textual bodies, Collis and Scott further proclaim that "we will be as worms" (89-90). As worms, the authors ingest and digest the word in the same way that the codes of DNA are modified and adapted into new formations. By the end of the chapter, the corpse/corpus of Darwin has become a site for an intensive reformation of matter and meaning.

By taking on the vermiform as a mode of writing that follows the principle of adaptation, Collis and Scott utilize the text as a way to establish a partnership between hominid and annelid. In so doing, decomp advances a distinctive commentary on 'nature writing' more broadly. As Collis and Scott explain in their interview with Jillian Harkness for The Puritan, their critique of ecopoetics is founded upon "decomposition-that very messy, broken, dissolute aspect of natural cycles" which was for them a "perfect 'trope to trope us out of tropes,' a method to take on writing about nature as a messy writing in/through nature" (n. pag.). Their invocation, we will be as worms, is critical to their ecopoetic practice: in taking on language again and again-much like a worm drawing in material through its intestinal canal-they endeavor to bring about a shift in poetic perspective. But as with Darwin's natural scientific practice, the project of decomp originates in the soil. As Collis and Scott describe later in the interview, writing poetry from the fragments of the Origin necessitates "a lowering of our own position/perspective ... (just like worms, we simply passed Darwin's decayed text again and again through our writing)." The fermenting understory of *decomp* is made possible by the

horizontal re-orientation of the authors, who literally lay the book down in the dirt as an act of submission.

Along with the poets' adaptation of the corpse/corpus of Darwin that begins with abandoning the book to the weather and the worms, the commingling of text, worm, and dirt culminates in the natural selection of text to create new meaning. However, unlike other works of environmental literature that might demonstrate a limited encounter between the poet, the organism, and the environment (owed in large part to the predominance of the human observer and composer), the poetic project asks: What about nature's own iterations, resonances, and self-disclosures? Collis and Scott's attempt to moderately recuse themselves from the process of textual composition makes the compositions of the weather and the worms a central feature of the text's (un)making.

The process of the book's (de)composition is exemplified throughout the collection in a series of juxtaposed sections entitled "THE READABLE" and "THE GLOSS," in which the poets practice the principle of natural selection. In these sections, Collis and Scott enact a performative play on the shredded textual remnants of Origin that merge together to create new text. The problem of unreadable and precluded sequences is for the poets one of the characteristics of the story of natural selection and evolution. Following from this, the sections on "THE READABLE" and "THE GLOSS" toy with the idea of "species tracking sequences" (74). In the copy of the *Origin* from the Bunchgrass Zone (Nicola Lake), for example, the fragment "species" lays "amid long ponderosa pine needles" (17; see fig. 3). The poets write: "[A] species laying its body down on this bed to observe the decomposing limits of its semantic and genetic expression. Darwin is an eye amid graphed genera, seeing the web it is woven thereof. A matted scrap of printed material, shit, soil and leaf rot-all dried, bleached, and curled up at the small edges" (17). The act of reading, tracing sequences, and seeing the word itself in the photograph is of course complicated by the fray of rot, yet life's continued iterations are a part of the vitalist impulse of the poetry itself, which "partake[s] in selection and variation, wending toward the matter of th[e] book" (19). The matter of the poem, rife as it is with errant particles and remnants of text and sequence, is naturally selected by the poets. In this mode, the authors inquire: "What is readable, monstrous and unreadable? Everything is code, with which and within which we decompose" (19). A further case in point is Collis and Scott's meditation on the word, "Natural," which they refer to in "THE GLOSS" as the nomenclature of errancy (21). A natural history, according to *decomp*, is a matter of decomposing and recomposing genetic traces.



Fig. 3. "Species" fragment. Excerpt from decomp (14).

While acknowledging their own intervention in attempting to weave together the disintegrated pieces of the *Origin*, Collis and Scott's chapter on the Bunchgrass Zone nevertheless credits life with the power to galvanize new meaning through the intermingling of text, pine needles, the dried dung of cows, and the rough tufts of sage that make up Nicola Lake's scrubland. Yet what is notable about this section in particular is the interplay between materiality and discursivity. The "storied matter" that is forged between annelid and hominid in the collection can be understood as an articulation of what Serpil Opperman and Serenella Iovino describe as the "intra-action [as per Karen Barad's theory of agential matter] of human creativity and the narrative agency of matter" (8). Reading *decomp* as a material-discursive encounter between annelid and hominid, it becomes possible to understand how narrative is produced even outside the purview of the withdrawn poets. The annelid that disperses its trail of castings upon the text (as evidenced by the numerous photographs in the collection) both reads and re-writes the Origin. In this way, the eco-zoopoetics of decomposition in decomp is the product of an encounter between the vitality of dirt, the castings of worms, and the textual intervention of the vertebrate hominid.

Curiously, though, the natural decomposition of the copies of Darwin's text reaches a certain threshold where it becomes self-creative and autopoetic in its own right. At this point, the poets proclaim that there is "no poetry after decomposition, but a minute ecological process in which we have no

part but intrusion" (92). With humor, and even some facetiousness, Collis and Scott write: "This is what we do. Not a whole lot" (74). Increasingly enveloped in organic matter and humus, the poets furthermore assert that "the book is buried and we cannot read a thing" (116), "the forest buries us" (119). It is at this juncture that the book acts like a kind of fossil, embedding its impressions in the ground (41) and becoming more integrated into the landscape, and further away from the intervention of the poets.

While this juncture might seem to mark the entropic collapse of human poiesis, what is intriguing about the *decomp* collection is that it reminds us of the continuity and contingency of evolutionary progress. Like Darwin's text, all organic things are susceptible to the fixed and fluid processes that break down the formations of language and being. The five weathered copies of the *Origin* that made up Collis and Scott's poetic project now sit in a cardboard banker's box in Stephen Collis' office, but their decomposition does not end with the publication of *decomp*. The book, in other words, is no less a fossil now that it sits in a box in Collis' office, and the calendar year imposed on the project is no match for the generativity of matter in deep time. The re-writing and re-reading, similarly, do not end with the book's printing, distribution, collection, or publication. Likewise, the death of Darwin, the resuscitation of his textual remains, and the remnants of Collis and Scott's five moldering copies are validation of the ongoing creativity of matter and language, which wilt and sprout in equal measure in the soil of evolutionary development.

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