"You Are Turning into a Hive Mind": Storytelling, Ecological Thought, and the Problem of Form in *Generation A*

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Gregg about *Generation A*, Douglas Coupland recalls the first time he heard of Colony Collapse Disorder (CCD), the term used to describe the unsettlingly widespread death of bees at sites around the globe: "The first time I heard about it," Coupland says, "I just wanted to hurl" ("Interview"). The colloquial frankness of this response is vintage Coupland, but it is also a startlingly visceral reaction from a writer better known for playful irony and arch observations about pop culture than for straightforward ecological earnestness. In the interview, Coupland further expresses his misgivings about humanity's ability to stave off ecological collapse, even if the causes could be definitively identified: "Random Citizen," Coupland asks, "would you give up your cellphone if it meant saving the bees?" adding, "They'd probably say yes, but then secretly continue to use their phones."

These observations speak to several themes of *Generation A*: our addiction to technologies that promise connection at the click of a button, the way these same technologies affect how we construct and share stories, and our struggle to fully appreciate and address environmental problems of planetary scale and potentially devastating impact. Coupland's recent work thus takes the vague sense of eco-anxiety first expressed in 1991's *Generation X* and makes it central, while also returning to some of that earlier book's preoccupations with storytelling as a way of finding personal meaning in the face of fragmented, hyper-commercialized contemporary experience. In *Generation X*, the main characters periodically wonder at humanity's capacity to destroy the earth, but ultimately ecological destruction is rendered as one contemporary problem among many (35), and narratives of slow decline are superseded by more dramatic apocalyptic scenarios (62-64). However, in *Generation A*, the problem of incremental ecological destruction is

assigned a more prominent and troubling role, in part because the novel offers no easy solutions to its alleviation. Yet, although the novel does not offer direct solutions for a problem like CCD, I suggest that what it does provide is an opportunity for readers and writers to consider the formal structures we use to present and think about complex, multiscalar ecological phenomena. In this essay, I explore how Coupland's experimentations with literary form in *Generation A* address contemporary anxieties about ecological problems of global scale, while also developing some new potential strategies for reading and debating such problems. In particular, I argue that the "click-and-flick" structure of the novel, and its strategic use of repetition and pattern, presses readers into tactics of interpretation especially well-suited to creating, interpreting, and teaching stories about environmental events that play out at different scales and that lack singular origins or easily predictable outcomes.

We now live in an era in which the environmental significance of what may seem to be fairly benign individual actions — hopping in the car to go to the grocery store or flushing a bit of household cleaner down the sink, for instance — often only emerge once they are multiplied exponentially. As a number of ecocritics have observed, the role and importance of the resulting "scale effects," ranging from CCD, to ocean acidification, to climate change, present significant challenges to the imagination and to the construction of artistic works and their analysis. For instance, Timothy Clark argues that the power of such scale effects presents real challenges for a liberal humanist tradition shaped by certain presumptions about the sovereignty of states and the defense of individual rights, especially when it comes to practices of consumption (135). Even ecocriticism, a scholarly enterprise that typically prides itself on "making connections" (see, for instance, Estok 220), has historically tended to shy away from confronting how global-scale issues such as CCD or climate change throw into relief a widespread reluctance to reckon with scale effects in ways that move beyond a symbolic politics of appeasement and evasion.1 As Dipesh Chakrabarty notes, part of the challenge here derives from the way that global environmental problems bifurcate our understanding of the human; on one hand, we are a group of individual subjects with varying degrees of agency; on the other, humanity has now become a geophysical force, living out a form of collective existence without a clear ontological dimension (11-13).

The dilemma, then, is how to conceive of agency in ways that speak to this non-ontological force: we know that humanity is causing a global environmental problem, but there is no corresponding humanity that can respond to such a problem as a unified political agent (Chakrabarty 14). Is it possible to imagine a "nonhuman" version of human agency (that is, the agency of the "human" as a species) to think through our potential responses to this problem?

While the shape and character of scale effects present major challenges for thinking about environmental responsibility, they also pose questions about form and representation. In the field of literary studies, critics are increasingly interested in how narrative as it has been traditionally conceived (in the form of novels, epics, poems, plays, and stories about individual times, places, and lives) might respond to the challenge of articulating and responding to a new set of environmental scenarios that radically collapse scales. Several critics, for example, have recently explored the role of genre fiction — especially thrillers, political satire, young adult fiction, and speculative fiction — in responding to global environmental threats (see, for instance, Trexler and Johns-Putra; Yusoff and Gabrys; and Murphy). There is now even a specific term — cli-fi — that some commentators and critics are using to describe literary works dealing with the personal and social effects of climate change, whether via allegory or direct reference.2 Yet some thinkers, such as the Australian author James Bradley, have questioned whether a recognizable literary form like the social realist novel is even capable of adequately addressing contemporary environmental issues of vast scale, complexity, and temporal open-endedness. Meanwhile, critics such as Graham Huggan, Ursula Heise, Frederick Buell, and Molly Wallace suggest that a risk perspective might be most appropriate, given the ongoing "dwelling within crisis" (Buell 190-91) that defines many of the key environmental challenges (including drought, floods, extinction, CCD, ocean acidification, sea-level rise) we are now confronted with.³

Although these scholars differ in their assessments of which genres are most appropriate to conveying contemporary environmental anxieties, the common thread is an interest in literary form. As Adeline Johns-Putra points out in her investigation of what genre theory might contribute to ecocriticism, that there is no impartial relationship between the literary and the environmental necessarily pushes readers to question the forms through which this relationship is mediated. She

insists that "as soon as we communicate, we behave generically," and this includes our communications about nature (747). Quite simply, there is no stepping outside of questions of mediation and form in our imaginings of the environment, whether local, regional, or global. Our imaginations shape our perceptions of environmental issues and, indeed, might even co-fabricate them in ways that shape the very possibilities for acting on them.⁴ Thus, to overlook or minimize the significance of form risks missing out on a whole set of theoretically enabling concepts pertinent to the study of how contemporary environmental problems are represented, circulated, and discussed.⁵

In advocating more widespread ecocritical attention to literary form, I am not seeking to valorize the kind of new formalism that retreats to a narrow defense of "the literary" in response to a perceived onslaught of critical interest in history and politics. Rather, I suggest the potential value of exploring linkages between ecocriticism and what Marjorie Levinson terms "activist" new formalism (559). Whereas what Levinson terms "normative" new formalism emerged mainly as a backlash against new historicism and sought to restore a sharp demarcation between history and art, activist new formalism arises out of a desire to revise and re-animate form (and our discussions of it) in the age of interdisciplinarity.6 The aim here is not to equate form with "literariness" in the strict senses articulated by the Russian Formalists or the New Critics, as though form were a quality that could be scientifically determined via a systematic cataloguing of devices or that could serve as a distillation of the abstract notion of "Life." Instead, it adheres to the premise that attention to the complexity of the literary work, namely that which we can recover only by careful attention to its textual features, is part of what helps us to preserve and explain "the deep challenge that the artwork poses to ideology, or to the flattening, routinizing, absorptive effects associated with ideological regimes" (560). Taking a closer look at issues of form, I suggest, might lead to new ways of approaching literary texts dealing with contemporary environmental anxieties that operate at a range of geographical scales. This type of engagement should be seen not as a rejection of historical means of knowing but rather as something that develops in dialogue with history. Indeed, when it comes to getting a handle on unwieldy environmental problems whose origins and outcomes are the focus of much speculation and debate, we might heed Cleanth Brooks's suggestion that "the results of formalist analysis

may themselves be data for historical understanding" (Strier 210).⁷ Far from standing apart from historical or political questions, then, the formal features of a text can help to shed light on large intellectual and cultural matters at stake in the historical moment of its production. Thus, critics might ask what about contemporary environmental problems propels writers toward certain literary genres and not others, or how older literary structures are being adapted and combined with newer practices of reading and writing in an age where environmental concerns are increasingly being shared through digital means.

I want to suggest that Coupland responds to these concerns in Generation A, but that his response emerges less as an overt environmental message than as a method that challenges humanists to be both creative and flexible in their selection and interpretation of texts. This method, I argue, is practised in two main ways. First, Coupland reworks the old literary form of group storytelling, modelled on Boccaccio's fourteenth-century work The Decameron, and uses it to show how an epistemological approach widely practised in the humanities, namely focusing on the close reading of particular objects, might be supplemented with approaches that analyze a series of objects with the goal of grasping general laws and patterns. This emphasis on detecting repeating forms and patterns across a large corpus of materials, I argue, might prove especially helpful when it comes to comprehending largescale environmental problems without clear antecedents or outcomes. Second, by formally interweaving different characters' stories to create a shared consciousness, Coupland explores some of the effects that the age of social media and "big data" are having on how we construct and share stories of ecological change. In so doing, he points to the potential cultural, political, and ecological value of stories that stretch the idea of "personhood" beyond the corporeal boundaries of the individual to the macro scale. This speaks directly to Chakrabarty's call to imagine a non-ontological version of human agency that accounts for the species as a geophysical force. Finally, the text's enactment of "interpretive communities" (Fish 2087) highlights the inescapability of political debate in struggling to make sense of scale effects in the Anthropocene. If the harmful impacts of such crises are to be successfully mitigated at all, Coupland's text concludes that this can only be achieved through shared arguments, disagreements, and consensus involving tools used by both the sciences and the arts.

Generation A begins in a speculative near future in which bees are believed to have gone extinct. After five young twenty-somethings affectionately nicknamed "the Wonka kids" after Roald Dahl's characters in Charlie and the Chocolate Factory — are stung by bees in different parts of the world, it is hoped that by bringing them together in one location, the neurochemicals released during their nightly participation in communal storytelling might serve as an attractant that will hasten the bees' return. After being placed in sterile isolation units and subjected to a battery of tests, the stingees are then transported to Haida Gwaii, where they spend each evening telling stories to each other while being supervised by a researcher named Serge. Wonka kid Harj, whose Sri Lankan family was wiped out by the 2004 tsunami in the Indian Ocean, remarks that one of the purposes served by telling stories is "to plaster over the unexplainable cracks of everyday existence" (2). The sudden annihilation of Harj's family is one such crack that seems to defy simple explanation, and one could argue that the extinction of the bees is another, at least in the sense that the latter generates multiple, sometimes conflicting, explanations that can collectively confuse more than they clarify.

In the face of such events, stories often bring a sense of comfort; this comfort, as Aristotle observes, derives in part from their structure, wherein events (even tragic ones) unfold over time as meaningful sequences of causes and effects. However, when it comes to many of the environmental problems that plague the modern risk society, it is possible to either see effects without definitively knowing what their causes are, or identify causes without certain knowledge of what their effects will be. Like the father of Julien, another of the five stingees, we "want to believe that the world is easy to understand" (44), but the complexity and uncertainty of contemporary ecological phenomena often frustrates the desire for surety. CCD, for instance, has been variously attributed to numerous factors, individual and in combination, ranging from neonicotinoid pesticides, to mites, to viruses and funguses, to habitat disruption, to the electromagnetic radiation emitted by mobile phone towers. So far, however, the problem has resisted containment within a linear narrative structure that begins with a single definite cause. Similarly, at the other end of the spectrum, extinction narratives are also often considerably less definitive than we might initially presume; as the historian Mark Barrow, Jr., observes, "It is often impossible to state with certainty exactly when a given species goes extinct" (66). In Coupland's novel, the return of the five bees that have stung each of the Wonka kids inspires the hope that people have not yet damaged the environment beyond repair, but this event also disrupts the comfort derived from a sense of narrative closure, even if such closure is premised on the so-called end of nature. The meaning of the bees' return, then, resists straightforward interpretation, and even by the close of Coupland's novel, their story remains hauntingly open-ended. As Rob Nixon has noted, it is sometimes the very open-endedness of contemporary environmental narratives, wherein impacts are slow, intergenerational, or difficult to determine, that taxes readers' patience and even their belief in the validity of concerns about climate change and species loss (13). This suggests the need for some hard thinking about the kinds of imaginative structures writers might adopt or develop to confront situations that are at best incoherent and unstable, while also taking into account that our forms of attention may be changing with the ubiquity of social media and wireless devices. The task, then, is to cultivate "ceremonies of belief" (Chamberlin 224) that can provide a sense of coherence and consistency for our experiences amid future environmental deterioration in a wired world, without necessarily catering to denial or despair.

Coupland's text confronts this challenge in part by exploring the power of stories and storytelling as sites of paradox. On one hand, stories derive from and speak to reality, being written and read in "real time"; on the other, they exist apart from reality, stretching time out and providing an imaginative space of refuge that defies the clock. The idea of stories and storytelling as a refuge is grasped early on by Coupland's characters; indeed, several of them can only comprehend their newfound celebrity and responsibility in the wake of the bee stings by interpreting their own experience through the lenses of comfortingly familiar narratives. For instance, the Frenchman Julien likens his journey to Haida Gwaii in a military transport plane to that of the characters in a series of Japanese illustrated novels, in which the heroes flee a destroyed planet in search of a new home: "Finally, my life was a story," he remarks (143). Similarly, the American corn farmer Zack interprets the possible return of the bees using a familiar storyline borrowed from the typical Hollywood action movie trailer: "that's what the world did with the bees: we blanked 'em out. And now Big Mama's out for revenge" (34). These kinds of stories, with their deeply familiar plot structures that counterbalance fear with adventure and the possibility of heroism, give a renewed sense of direction and purpose to existences that might otherwise seem futile. Once the stingees arrive at Haida Gwaii, moreover, they soon come to feel their lives to be more purposeful and complete for having a clear role to play as characters, listeners, and tellers of familiar stories.⁸

Yet, while Coupland emphasizes the value of stories as forms of imaginative escape and consolation for the losses that haunt us, Generation A goes on to show that storytelling also involves certain tradeoffs. Although the Wonka kids achieve a renewed sense of childlike wonder, community, and meaning in their lives on Haida Gwaii, the experience of losing themselves in one another's nightly stories may also have unforeseen costs, for the neuroproteins generated by their storytelling are the same as those used to manufacture the drug Solon, a substance to which many of the novel's secondary characters have become addicted. Solon, we learn, is a "chronosuppressant" that causes users to live in an eternal present, making time pass more quickly and causing a sense of the past and future to fall away (95-96). According to Samantha, one of the first Wonka kids to be stung by a bee in New Zealand, the "Solon type" is an individual who is "lonely — obviously - but freaked out and worried about bills and ecosystems and weather" (116). Unable to handle the prospect of a planet in decline, many characters in Coupland's speculative future resort to Solon as a tool for managing anxiety. Readers later find out that the manufacture of Solon is also implicated in the disappearance of the world's bees and that the Haida are determined to keep it from infiltrating their community because its use causes members to "stop caring about the tribe" (146). Complete immersion through reading or listening to a story can be a tremendous gift, but Coupland reminds readers of the potential dangers of thinking about narrative in exclusively presentist terms. After all, to draw upon past wisdom, to imagine possible futures, and to attune oneself to the needs of others are all crucial elements of ecological thinking that foster sound decision making. Without a sense of consequences, we risk finding ourselves in the situation outlined by Albert Schweitzer in the dedication to Rachel Carson's Silent Spring: "Man has lost the capacity to foresee and forestall. He will end by destroying the earth."

It is the character Harj who most acutely perceives the paradoxical qualities of narrative: even as he recognizes the pleasure and value of losing oneself in a story, he also asserts the need to keep in mind where stories come from and where they wind up. Most memorably, he insists, "Unhappy endings are just as important as happy endings. They're an efficient way of transmitting vital Darwinian information. Your brain needs them to make maps of the world, maps that let you know what sorts of people and situations to avoid" (219). Without an awareness of the specific forms their stories take or where they end up, the Wonka kids risk becoming little more than worker bees, manufacturing neuroproteins that will allow Serge to experience the ultimate Solon hit (by eating their brains) without having any awareness of the consequences of their actions. Through Harj, Coupland invites readers to consider both the formal and thematic relationship of stories to ecological thinking, defending the value of the cautionary tale even at a time when many people seem to have grown weary of such narratives. Unhappy endings might disturb us, and the uncertainty surrounding contemporary ecological problems suggests they might not always prove right, but the ability to imagine them can nonetheless serve as an important motivator when it comes to avoiding worst-case scenarios.

The ability to reflect on and experiment with literary form is also where I suggest that Coupland's work might have the most to offer ecocritics, for it is by looking at form that we can decipher literature's potential to jolt people out of routinized practices and habits of thought that have ecologically destructive outcomes. This proposal might initially seem counter-intuitive, for the individual stories that Generation A's characters invent are, despite their eclecticism, also deeply familiar in their repetitive sampling of generic conventions drawn from pop culture. The experience of reading one story after another littered with superheroes, mass killings, aliens, and talking animals is akin to being let loose in the potato chip aisle: each comes in a slightly different flavour of absurdity, and it is enjoyable to mindlessly crunch them down with little thought to their deeper meaning or consequences. But while the individual content of these tales confounds the hermeneutic urge to see them as explanations or causes that can tell us why the bees disappeared or what can be done to bring them back, there may be a deeper design at work in Coupland's recycling and juxtaposition of highly recognizable story forms. Harj recognizes that the value of the Wonka kids' stories

lies in paying attention to the formal relationships and recurring patterns among them. Read as discrete units, each story runs in its own (often slightly bizarre) direction, but when read together, they develop into something larger, reflecting a shared consciousness that Serge identifies as a form of "hive mind" (286). Eventually, Harj draws upon this larger structure to figure out the researcher's plan to exploit the stingees' collective exercise of creativity for selfish gain. Interestingly, Harj reveals his discovery in the form of a story in which he casts himself as a character with a special skill set: "One of the stung people was a lighthearted character who most people assumed was harmless and clueless. In fact, he was a good observer — good at locating patterns and assembling odd facts to reveal a larger picture" (258).

In Harj's case, it is abstraction, rather than a gift for close reading, that leads to life-saving knowledge, since by exposing Serge's true motivations, he stymies a global conspiracy to secure and expand the market for both the addictive drug Solon and its antidote. Another way of articulating this is to say that, in this case, the narrative hinges on Harj's (and by extension, the reader's) ability to employ what the nineteenth century German philosopher Wilhelm Windelband describes as a nomothetic approach to information — that is, to "understand the general lawfulness" to which a gathering of individual facts submit (12). Windelband argues that whereas an idiographic approach tends to focus on the particular and unique, a nomothetic approach tends to search for pattern and general laws across a set of data. These two approaches do not strictly conform to disciplinary boundaries, since both are employed by scholars across the humanities, social sciences, and natural sciences to lead to new discoveries. (For instance, in the humanities, we can think of the use of mathematical tools to discover when certain texts were written or to trace the great vowel shift from Anglo-Saxon to Middle English). Nonetheless, in his discussion of Windelband's terms, Anthony Appiah persuasively argues that in the sciences, scholars tend to be less interested in the individual objects themselves (whether atoms, or organisms, or E. coli) than in what they instantiate in order to produce and modify testable hypotheses and to generate repeatable results. In contrast, even though a good deal of humanities research is devoted to studying groups of texts in order to discern patterns and general relationships, it is still often the case that humanists invoke the universal in the service of the particular (42). Humanists still choose to assign

this poem in a given class, or to discuss *that* painting in a presentation or article, rather than presuming that texts are wholly interchangeable. They also value the interpretive impulse that is inescapably a part of what it means to be a subject, and recognize that subjectivity affords the possibility of responding to the world in ways not reducible to the natural sciences.⁹

In some respects, Harj's method of interpretation in Generation A seems to work against an interest in the particular in favour of a nomothetic approach, even going so far as to validate the idea of distant reading, a term most notably (and controversially) proposed by Franco Moretti in his 2005 book Graphs, Maps, Trees. Moretti's labbased approach subjects large-scale literary corpora to computer-driven analysis to generate graphs, maps, and other data visualizations from which one might draw conclusions, for example, about the formal features of genre or the changing historical use and frequency of certain adjectives. Yet Coupland also departs from Moretti's dismissal of close reading as an outmoded "theological exercise" (Moretti, "Conjectures" 57), suggesting that while abstraction can help us to answer certain questions about literature, in no way is it an exclusive condition of knowledge. In fact, Harj's first mode of sense making, which follows the annihilation of his family in the 2004 tsunami in the Indian Ocean, is intimately concerned with modes of understanding that no objective analysis of data can really explain. As debris from the tsunami washes ashore below the third-storey window of his father's bank in Sri Lanka, accumulating into a list of "picnic coolers . . . clumps of grass . . . a sunburnt Scandinavian pederast . . . white plastic stacking chairs . . . [and] drowned soldiers tangled in gun straps," Harj's response is not to try to run such data through a model to see what it all means; instead, he tries to make sense of it by taking a decidedly different approach: "And then what do you do — do you pray? What is prayer but a wish for the events in your life to string together to form a story — something that makes some sense of events you know have meaning. And so I pray" (2).

Some readers might see Harj's response to crisis in this moment as sharply contrasting the nomothetic approach to information he adopts later in the text. But to read prayer as mere consolation and pattern recognition as progress is to overlook the ways that idiographic and nomothetic modes of interpretation might work together to develop a deeper understanding of humanity and the world of which it is a part. For

instance, while it is true scientists rely on the experimental method in a way that humanists tend not to, being either a good humanist or a good scientist often depends on successfully bringing together nomothetic and idiographic approaches to one's materials. Further, although some humanists might be loath to designate their materials as "data," out of concern that such a term diminishes works characterized by ambiguity and nuance, scholars within science and technology studies point out that the very idea of "data" as neutral, autonomous, or objective material waiting to be gathered and interpreted is itself something of an illusion. As Lisa Gitelman points out in her recent book "Raw Data" Is an Oxymoron, the construction of data sets is already bound up with acts of interpretation from the very start: "Data need to be imagined as data to exist and function as such, and the imagination of data entails an interpretive base" (3).10 Thus, when it comes to Harj's catalogue of debris washed up by the tsunami, the fact of interpretation rests not only in the will to give meaning to events, but also in the very structure of the data he has chosen to list in the first place.¹¹ Interpretation is thus inescapably a part of the methods and materials of both the sciences and the humanities, but far from being a liability, Harj's different methods of reading show that the modes practised in both disciplines can productively complement one another, meeting the intellectual and emotional needs that arise in different circumstances.

Just as humanists can benefit from considering what nomothetic approaches to their materials might offer, all the while keeping in mind the historical and cultural situatedness of their methods, so scientists, in turn, can benefit from periodically taking an idiographic approach to their subjects. For example, the conservation biologist Reed Noss has vigorously defended field study as an important (and increasingly endangered) complement to the kinds of knowledge ecologists develop by applying lab tools like GIS software to data. Even in the era of what Noss terms "keyboard ecology," wherein scientists spend much of their time in labs and on computers, revising papers and poring over GIS models, he insists that "scientific abstractions and fancy technologies are no substitutes for the wisdom that springs from knowing the world and its creatures in intimate, loving detail" (2). Without such direct experience of, and passion for the particular, Noss maintains that it is more difficult for scientists to develop compelling arguments about how best to foster the conditions that will favour the conservation of biodiversity. Thus, while large-scale, data-driven research is crucial to figuring out how bees and other creatures are affected by environmental change, the tears, prayers, and wonder that greet the bees' return in *Generation A* suggest that other kinds of motivation and attachment also inform ecological research, and are also valid in their claims to our attention. Indeed, even in cases where we arrive at a general law, a certain degree of stubborn particularity and a need for imaginative empathy often remains. As Windelband explains, "All subsumption under those laws does not help us to analyze up to its ultimate grounding the single event given in time. There yet remains for us in all historical and individual experiences something left over that is ungraspable, inexpressible, indefinable" (21).

When we apply these ideas to Coupland's characters, we see that although their collective efforts at storytelling lead to the evolution of a hive mind, this form of consciousness does not necessarily have to come at the expense of the individual. Serge thinks that each Wonka kid's personhood can be captured and farmed as "massively cloning neural tissue" (285); however, their conscious rejection of his plans suggests that there may be another path to collective existence, one wherein "caring about the tribe" and the nurturance of the individual creative mind need not be mutually exclusive. Their thought processes meld into collective patterns of repeating story structures and cultural memes, yet these patterns do not supplant a network of critical thinking that hinges on moral and emotional means of interpreting the world.

If we are to successfully defend the humanities and what they offer to the study of environmental change, then certainly much of this defence hinges on our ability to convince those we teach of the value of slowing down to understand, appreciate, select, and preserve individual creations from the past. It also depends on successfully demonstrating the value of pursuing knowledge via subjective vision and persuasive argument. These tasks still form much of the core of humanities teaching and research, and in a time when the amount of information there is to explicate has become a virtual flood rapidly streaming through our smartphones, computer monitors, radios, and televisions, figuring out what is worth holding on to and passing on becomes increasingly difficult but also more important than ever (Appiah 45). At the same time, however, a character like Coupland's Harj shows ecocritics the usefulness of periodically stepping back to take a nomothetic approach

to their materials, not least because of the kinds of formal questions such approaches can help to answer. For instance, what ecological signs or patterns can we detect in tracing the material transmission of a text from the seventeenth century to the present? What is the significance of comparing the documented geographical distribution of a given species in a nineteenth-century natural history text to representations of those distributions in more contemporary texts? What can we learn from patterns of word usage in a broad corpus of texts about climate change? Although one ought to be wary of bean-counting for its own sake, I suggest that incorporating such questions — and the methods needed to investigate them — into the study of the formal aspects of environmental literature might sometimes be useful. Especially when it comes to environmental problems that figure more as deaths by a thousand cuts than immediate catastrophes, the ability to read from above and to make those patterns meaningful to a broad audience might play an important role in identifying and addressing them.

By employing a formal structure that makes a point of rewarding the nomothetic impulse, Coupland's novel also addresses a larger issue namely, the question of whether those who create, interpret, and teach environmental stories need to adopt some new formal tactics to capture and hold readers' increasingly divided attention in the twenty-first century. One way to read Generation A is as a structural response to the shift toward "browsing and scanning" as increasingly dominant modes of reading in the age of Web 2.0 (Liu 706-07; Carr 138-39). Given that the characters' stories rarely run for more than ten pages before rotating to the next teller, the text seems highly amenable to what some critics describe as "clicking and flicking"; the channel of the novel changes, as it were, before the reader has time to grow bored and turn to checking email or text messages, watching NHL replays, or following the latest twists and turns in the world of celebrity gossip. I would venture that part of what makes Coupland's book appealing to my undergraduate students lies in how it appeals to a divided state of attention most of them are deeply accustomed to. Coupland's work thus raises questions about how our changing modes of reading and writing might be shifting the way we think about and articulate ecological critique. Does a reading practice based on "clicking and flicking" render us routinized, uncreative, flattened thinkers? Or, does it offer new ways of locating and developing points of critical resistance to the status quo by fostering the

ability to detect patterns and discern formal structures across a range of data in which meaning — including *ecological* meaning — is embedded?

It might still be too early to develop conclusive responses to such questions, but it is worth pointing out that despite the appeal Generation A offers to the shortened attention spans and lateral thinking that are also catered to by many forms of social media, the overall form of the novel presents some important checks on the impulse to "power browse" (Carr 138). The novel is not full of hyperlinks, for example, nor is it written specifically for a platform like a smartphone or a laptop (though one can read it as an e-book); rather, it stubbornly retains the linearity of the printed book. Further, although the individual stories that Coupland's characters tell can be read as discrete units, something transformative also happens when they are shared — namely, the creation of a hive-like mind that stretches ideas of personhood, agency, and the act of interpretation beyond the singular subject. As select phrases and images used by one character recur in the stories of others, Coupland's characters, and his readers, are alerted to the ways in which seemingly discrete, individual actions resonate and generate ripple effects well beyond their immediate boundaries. Just as a joint familiarity with globalized brands, memes, logos, and storylines of popular television shows and movies shapes the stories each character tells, so do these media shape the interpretive strategies of other members of the group. Thus, even though each of the stingees is put into an isolation chamber entirely free of labels or logos in the hope of generating "original" storytelling, the viral storylines of popular culture inescapably make their way into the stories they tell on Haida Gwaii, and their stories, in turn, infect one another.12

Yet to view this situation as a corruption of creative storytelling would be to miss the value of the interpretive community that is developed. The value of interpretive communities, argues Stanley Fish, is precisely that they "provide just enough stability for the interpretive battles to go on, and just enough shift and slippage to assure that they will never be settled" (2088). The acts of interpretation that take place among Coupland's Wonka kids suggest that there is a fabric that holds the act of sharing stories together but that it can only hold when the community begins from two joint premises: first, that no one has a monopoly on knowledge and, second, that debate is not only tolerated but also encouraged.¹³ In telling stories, the Wonka kids do not develop

a definitive solution to hasten the return of the bees, but it may be that by giving "hearers and readers the opportunity to make meanings (and texts) by inviting them to put into execution a set of strategies," some ideas about how to address pressing problems like CCD might emerge (Fish 2088). To create a hive mind, as Coupland's characters succeed in doing, means that rather than viewing collective interests as a secondary afterthought, such interests are understood to form the very ground upon which individual action and choice play out. To contemplate such agency is not to occupy a ground free of politics, but rather to participate in a space of conversation where individual agents continually negotiate what it means to be always already connected to others via webs both ecological and technological.

The lingering problem, of course, is that for the bees, such awareness seems to be developing rather belatedly, if at all. Indeed, the way in which youth in Coupland's novel are left holding the bag when the bees disappear is early akin to how beehives suffering from CCD are abandoned by their adult populations, leaving behind the queen, young emerging adults, and the brood as the only remaining dwellers (Kleinman and Suryanarayanan 493). The picture Coupland paints his readers is not overly optimistic since by the end of the novel only one new living beehive has been located. And yet Harj's speculation that other small cells of surviving bees might still be scattered amidst the detritus of modernity also leaves the form of the novel stubbornly open-ended. We are not presented with a widely uplifting possibility of apian recovery at the end of the book, but nor can we say with certainty that the bees are definitely finished. This ambivalence, I suggest, reveals something about the cultural and ecological milieu from which the text emerges and to which it responds, for even as North Americans are told that "nature" has ended, signs of its vibrancy and unpredictability are also regularly experienced, as climate change alters migration, weather, and species distribution patterns such that one might see an abundance of certain ecological phenomena one year and scarcity the next. In a context where readers are easily overwhelmed by the sheer variety of environmental crises and causes, and where localized perceptions of environment do not always seem to line up with global trends, it then becomes very difficult to satisfy the environmentalist impulse to connect the planet's problems into a single overarching story regarding human uses of nature, especially one with a conclusive ending. Coupland's formal refusal to satisfy that impulse does not solve the problem, but it does reveal a key challenge with which contemporary environmentalism must wrestle if it is to construct narratives that will engage the public imagination.

What Coupland's characters do seem to suggest, though, is that any future vision of bee life is incomplete without human participation in the creation and telling of their stories. This may be hubris on Coupland's part, but it also insists upon human responsibility since, having helped to create (or at least exacerbate) the problem of CCD, humans can no longer excuse themselves from involvement in the bees' possible recovery. That Harj imagines any remaining cells of bees to be "nesting under highway overpasses and the dusty eaves of failed shopping malls" (297), rather than in meadows and forests, points to the extent to which human techne and the bees' future are integrated. By telling and sharing stories, the Wonka kids continue to evolve together as a single organism, and it may be that as other stingees come forward, the collective intelligence of their hive mind might come up with some new explanations and remedies for CCD. If there is to be a solution at all to the problem of the bees' decline, it seems more likely that it will arise from a model of thinking that is collective, rather than as a product of single genius.

By employing a database structure built upon the repetition and retrieval of multiple tales told by various tellers who share the same network, Coupland effectively challenges the idea that either contemporary environmental stories or their potential solutions can be the product of solitary endeavour. In so doing, he also returns to some very old ideas about creativity, and about how the individual and the collective relate to one another within spheres of reading and memory. When the Roman rhetorician Seneca describes how best to approach reading and writing, he advises that we follow a specifically apian model of gathering and regurgitation:

We should imitate bees, and keep in separate compartments whatever we have collected from our diverse reading, for things conserved separately keep better. Then, diligently applying all the resources of our native talent, we should mingle all the various nectars we have tasted, and then turn them into a single sweet substance, in such a way that, even if it is apparent where it origin-

ated, it appears quite different from what it was in its original state. (qtd. in Moss 12)

In the Renaissance and well into the seventeenth century, writers would revisit such apian metaphors to suggest that literary invention cannot proceed out of a vacuum; instead, it requires an "inventory" or memory store that slots previous materials one has read and recorded into readily recoverable locations. 14 Drawing on the observations of the late seventeenth-century American writer Francis David Pastorius, Peter Stallybrass proposes that only after reading and note-taking across a wide variety of sources can writers "hiue their hony on [his] tongue" (1582). Invention thus arises not from the void, but from repetitive acts of gathering, inventorying, and digesting previous sources. Coupland's database form of narrative revisits this very old idea, getting on with the job of writing by devoting itself to the imitation of earlier story forms and to inspiration in the sense that thought and expression always occur dialectically. In other words, the novel rejects the notion that one is the origin of one's own thoughts, in favour of the idea that one's thoughts are always inspired by others' words, and respond to those words in turn. The idea is not to wrack our brains trying to come up with something wholly new, but instead to dig into the vault of story forms to discern what patterns of wisdom are already contained there.

At the end of the novel, Harj says that he and his fellow Wonka kids successfully "turned the world back into a book" (297). It is a puzzling statement, but perhaps the very fact that Coupland chooses to tell his story of the bees' endangerment and possible return through the capacious literary form of the novel suggests a continued faith in the arts and their materials to sting us and to feed us, providing spaces within which to wrestle with the unexplainable, to reckon with previously unimaginable loss, and sometimes to reside in moments of grace. That Harj chooses to reveal his knowledge of Serge's true intentions to destroy and devour the hive mind developed by the Wonka kids in the form of a story — rather than using the more abstract forms of a graph, map, or tree — shows the continuing power of narrative to captivate and instruct, especially as a way of wrestling with problems that are global, multi-layered, and defiant of the impulse to determine an individual cause, antagonist, or outcome. The stories the stingees tell and retell are not "original" in the sense hoped for by the researchers who put them in isolation chambers; instead, they are aggregates pulled from sources as diverse as popular culture and medieval literature. However, as Harj recognizes, this does not mean that they are uncreative or useless. In fact, the nectar of creativity that Zack says humans crave may reside precisely in acts of recycling and recombination, taking known stories and arranging them in new ways or setting them in new contexts; participation in this kind of creative exercise nurtures the members of the group and brings them to a better understanding of themselves and their relationships to the world beyond. To read the world as a book, then, is to mindfully attend to both pattern *and* particularity, to the repeating geometries of story forms and honeycombs, and the unique, ever-changing environments of which they are a part.

Notes

- ¹ The reluctance of ecocritics to engage with the difficult questions of climate change is now shifting, as evidenced by the numerous papers and plenaries dealing directly or peripherally with cultural responses to climate change at the most recent biennial gathering of the Association for the Study of Literature and Environment (ASLE) in 2013.
- ² For example, see Evancie, "So Hot Right Now"; Glass, "Global Warning"; and Tuhus-Dubrow, "Cli-Fi: The Birth of a Genre."
 - ³ See Buell 190ff; Heise 119ff; Huggan, "Unlucky Country," n.pag.; and Wallace 15-30.
- ⁴ For more discussion of the way the imagination does not merely reflect but rather helps constitute environmental events, see Yusoff and Gabrys 520.
- ⁵ A number of prominent ecocritics have rightly questioned "early" (i.e., 1990s-2000s) Anglo-American ecocriticism's slant toward thematic questions and purportedly "realist" texts, at the expense of attention to matters of form, structure, and language (see, for example, Heise 54-55; Phillips, *The Truth of Ecology* 168; Morton, *Ecology* 122-25; O'Brien, "Back to the World" 182-84). However, it is also worth drawing some finer national distinctions here, for, in Canada, a broad reaction against thematic criticism from the late 1970s through the 1990s meant that critics in the same period tended to pay more attention to issues of form in their evaluation of "ecological" or nature-oriented works, especially with regard to poetry (for an overview, see Soper and Bradley xxii, xxviii, xxxii; see also O'Brien, "Nature's Nation," and Bentley in the same volume).
 - ⁶ On this point, see also Rooney 25.
- ⁷ I am indebted to Levinson (565) for her mention of Richard Strier's defense of Brooks in the face of the common charge that his New Critical approach had little regard for history.
- ⁸ Here, Coupland is revisiting an idea first presented in *Generation X*, wherein his characters Andy, Dag, and Claire agree with the latter's statement that "[e]ither our lives become stories, or there's just no way to get through them" (8).
- ⁹ For more on how subjectivity involves an interpretive, responsive relationship to the world not reducible to empiricism, see Scruton 37-39.
- 10 For how similar insights apply to the historical "making" of objectivity, see Daston and Galison.
 - 11 The same might be said for the conditions that shape the gathering, dissemination,

and analysis of data about CCD or any number of other contemporary ecological problems whose causes and effects have not been definitively identified. For instance, see Kleinman and Suryanarayanan's work on CCD and the institutionalized production of ignorance.

¹² It is in this mutual "infection" that I see the structure of *Generation A* departing from Coupland's earlier work *Generation X*. In the 1991 novel, the characters share a common pop cultural vocabulary and set of references, and as in *Generation A*, they have exited their previous lives to share stories in an unlikely location (Palm Springs), but the stories they tell do not bleed into one another in the way that they do in Coupland's more recent work.

¹³ This is not to say that the interpretive community is a free-for-all, in which every interpretation of a story or environmental situation is equally valid; as Fish emphasizes, interpretation is inescapable and arises through debate and consensus, but some interpretations will prove more persuasive and enduring than others.

¹⁴ Here, my argument is indebted to Peter Stallybrass's discussion of Mary Carruthers' work on medieval memory in his article "Against Thinking" (1582).

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