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Creative Work

Reflections on insects and decolonization in the Anthropocene

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Abstract

Drawing upon creative writer Billy-Ray Belcourt's (Driftpile Cree Nation) notion of decolonized animal ethics, this creative work argues that the connections between Indigeneity and insects have the capacity to challenge the Anthropocene. Indigenous stories of human and insect collaborations can cultivate cultural narratives outside speciesism. Our future collectively calls for simultaneous insect and human liberation from normalized oppression of settler-colonialism.

Keywords: insects; Indigenous stories; Anthropocene; decolonization; rhetoric; collaboration

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Among the fragmented memories of my childhood, the image of a backyard, deciduous shrub with silvery-grey leaves still remains. Its lavender-honey scented panicles drooped with the weight of insects. Decades later, I often think about how the shrub shimmered with insects — especially during summers when days can turn into weeks without seeing a single butterfly, bumblebee, or ladybug. My solastalgia is grounded in scientific research that affirms the rapid decline of insects during the Anthropocene. Although scientists have "largely neglected" insects in extinction research due to vertebrate bias, the rapid decline of insects is unmistakable (Sánchez-Bayo & Wyckhuys, 2019, p. 8).

The upcoming decades, for example, may experience the "extinction of 40% of the world's insect species" (Schachat & Labandeira, 2020, p. 99; Sánchez-Bayo & Wyckhuys, 2019, p. 8; Parenteau, 2019, p. 57). Such a statistic should make us take pause especially when the Rocky Mountain locust, once known as the "most abundant" insect, has gone extinct (Raven & Wagner, 2021, p. 4). Moreover, the International Union for Conservation of Nature (2023) has classified the monarch butterfly, for whom protections do exist, as endangered. Among the factors that have led to insect decline include habitat destruction,

agriculture intensification, deforestation, urbanization, light pollution, monocropping, pesticides, and climate change (Sánchez-Bayo & Wyckhuys, 2019, p. 8; Wagner, 2020, p. 457; Raven & Wagner, 2021, p. 1).

Figure 1. *Fragments of Memory*

To mitigate the consequences of the Sixth Mass Extinction, some scientists recommend to reduce the growth of human population, engage sustainable consumption, and adopt "agricultural and silvicultural practices more sustainable and biodiversity friendly" (Wagner, 2020, p. 471). Still, others turn to artificial intelligence such as researcher Matěj Karásek who finds his robotic bees as a viable solution (Boffey, 2018). Inspired by the flight of fruit flies, swarms of his DelFly Nimble drones hypothetically might serve as pollinators when insects go extinct (Boffey, 2018). The narrative of technological fundamentalism of a robotic insect, however, does little to interrogate and stop the unsustainable practices that have led us to the Sixth Mass Extinction to begin with.

Rather than perpetuate the same, we must, in the words of Michel Foucault (1988), adopt a vital and critical stance to "re-examine evidence and assumptions, to shake up habitual ways of working and thinking, to dissipate conventional familiarities, and to evaluate rules and institutions" (p. 154). The anti-colonial perspective of creative writer Billy-Ray Belcourt (2015) (Driftpile Cree Nation) challenges habit and agitates familiar ways of thinking. Drawing upon Belcourt's (2015) notion of decolonized animal ethics, I argue that the intimate connections between Indigeneity and insects have the capacity to

challenge the Anthropocene. We must develop the affective capacity to learn from silenced Indigenous stories of human and insect collaborations and cultivate cultural narratives outside speciesism, because in the words of Judith Butler (2020), "there can be no human well-being without the well-being of animals" (p. 690).

Figure 2. *Ladybug and Morning Dew*

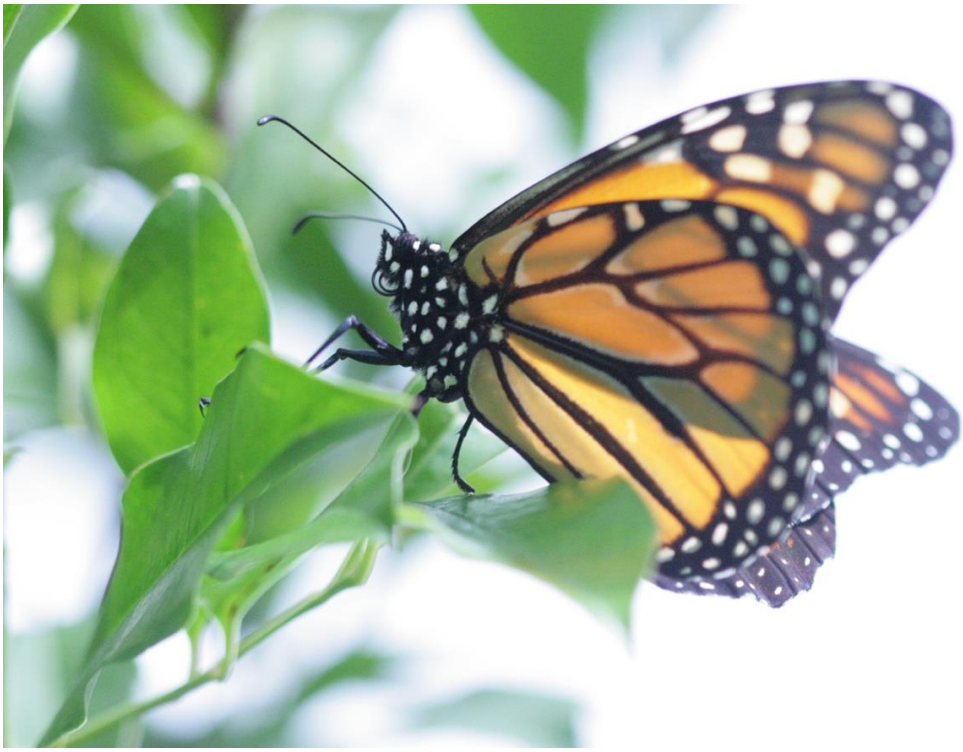

Figure 3. *Newly Born Monarch's First Landing on Osmanthus Bush*

On genre

The photographs in this reflection seek to cultivate curiosity, which derives from the Latin *curare*, "to care for" (Williams et al., 2007, p. 67). The insect collaborators contribute to this text far more than my words could alone. Although my text adheres to compositional expectations of organization, focus, development, coherence, and more, the insects disrupt this textual space of orderliness where text must conform to socially constructed genre expectations. As such, the insect photographs disrupt the expected narrative of my text and appear when they should not. They juxtapose their uncontainable bodies outside limitations of orderly and disciplined rows — a textual space that has ideological consequences extending far beyond the page.

My text might articulate ideas, meaning to arrange intelligibly, but insects, derived from the Latin *insectum*, meaning "with a notched or divided body", or from *insectare*, "to cut into, to cut up", disrupt my coherence, and cut my text into sections (Academic Dictionaries and Encyclopedias, n.d.). As such, I hope you imagine these insects and arachnids dividing my text, crawling off the pages, extending their legs beyond the borders of these white pages, problematizing the parergon, demonstrating their rhetorical sovereignty, and making their unruly bodies heard/seen/felt.

Figure 4. *Ladybugs*

In his text "Animal Bodies, Colonial Subjects: (Re)Locating Animality in Decolonial Thought", Belcourt (2015) argues that animal liberation must be grounded in dismantling settler-colonialism. As such, he argues for a decolonized animal and land ethic that

reimagines animal subjectivity and colonized spaces. The occupied spaces of animal agriculture, for instance, have not only treated animals as colonized subjects, but have erased "Indigenous bodies from the land" (Belcourt, 2015, p. 5). As such, these hegemonic spaces exploit by keeping some bodies in and other bodies out.

Figure 5. *Jumping Spider with Emerald Chelicerae Next to Pumpkin*

To decolonize spaces, Belcourt (2015) calls for repatriating land to Indigenous peoples. When considering non-human animals, granting neoliberal citizenship does little to secure animal sovereignty — it merely reinscribes the same setter-colonialist laws that have erased Indigenous bodies.

Instead of turning to the speciesist framework of settler-colonialism, Belcourt (2015) embraces Indigenous cosmologies to reimagine animal subjectivities and human–animal relations. He points to inclusive Mi'kmaq cosmologies, for example, that conceptualize animals as "siblings", "active agents", and even his Cree community, where animals figure "in the role of 'Creator' or as the figures through which the Creator acts" (Belcourt, 2015, p. 8). These cosmologies consider animals outside the Cartesian narrative of domination.

Belcourt's decolonized animal ethic provides a frame of intelligibility to understand how settler-colonialism contributes to the extinction of insects. Turning to a historical example, for instance, in his book *Locust: The Devastating Rise and Mysterious Disappearance of the Insect that Shaped the American Frontier*, Jeffrey A. Lockwood (2005) critiques numerous theories and advances his own persuasive explanation for the extinction of the Rocky Mountain locust (*Melanoplus spretus*). Although once regarded as the "most abundant" insect, Lockwood (2005) argues that the Rocky Mountain locust became extinct due to the

devastating agricultural practices of settlers in the 1880s and 1890s (Wagner, 2020, p. 470). Settlers transformed the Rocky Mountain river valley homes of the locusts "from cradles into graves" (Lockwood, 2005, p. 244).

Figure 6. *Bee Nestled in Giant Thistle*

Figure 7. *Swallowtail Caterpillar on Fennel*

Combinatory settler-colonialist agricultural practices such as alfalfa irrigation, for instance, saturated the soil and may have killed locust eggs and hinder nymph development. Habitat plowing may have also exposed eggs to not only predators, but fluctuating springtime weather of "alternate freezing and thawing" and the "brutally dry air winter air of the Rockies" (Lockwood, 2005, p. 246). Moreover, grazing cattle aggregated alongside rivers and streams because they needed "ten to fifteen gallons of water daily" from which they were accustomed to in Europe (Lockwood, 2005, p. 247). The cattle "compacted soils and overgrazed vegetation" leading to innumerable changes to the valley ecosystem (Lockwood, 2005, p. 247). Although Lockwood (2005) hypothesizes that the locusts became extinct due to losing their home, professor of biology Dave Goulson (2021) asserts, "we can be quite certain that past habitat loss, of pristine habitats such as tropical rainforests as well as man-made habitats such as hay meadows and lowland heaths, is right up there as one of the biggest drivers of insect declines to date" (p. 83). As such, the loss of habitat is not merely historical, but ongoing at unprecedented rates.

Figure 8. *Hoverfly among Douglas Firs*

The extinction of the Rocky Mountain locust was due to the violence of settler-colonialism. Lockwood explains, for example, "as with the Native Americans, whose cultures eroded with their displacement from sacred lands, the Rocky Mountain locust could not change fast enough to adapt to changes wrought by the settlers" (Lockwood, 2005, p. 259). Both insects and Indigenous peoples suffer(ed) from the occupation of their land. Moreover, the settler-colonialist mindset views both Indigenous and insect bodies in similar ways — an annoyance and subject for extermination. Published on May 15, 1645, for example, the

English newspaper *Mercurius Civicus* reported that Virginia news stated, "Wee are now providing three forts in the middle of the Country being the King's territory, which is not far from us, so that wee may have a power amongst them able to destroy them and deprive them of their livelihood … the most convenient [way] to extirpate and subdue this people that so much annoy us" (McCartney, 2010). Indigenous peoples are more than a trope of insect annoyance, they too are subjects of extermination in the racist, settler-colonialist mindset.

Figure 9. *Damselfly*

The enduring legacy of colonialism continues with the use of deliberate toxic pesticides. Victor A. Lopez-Carmen (Crow Creek Sioux Tribe), for example, documents how US pesticides and pesticide laws harm the health of Indigenous peoples. Lopez-Carmen et al. (2022) point to how the EPA allows the US to manufacture banned pesticides in the US, yet export them to other countries. The Yaqui Nation extends from Arizona to Sonora, Mexico; however, only part of the Nation that lives in Arizona is protected from the exposure of banned pesticides (Lopez-Carmen et al., 2022).

Baskut Tuncak, a former UN Special Rapporteur, points out how in Brazil, pesticides from the US and other countries are "being sprayed intentionally or negligently over Indigenous children and other minority community members, whose lands are desired by agribusiness or just unfortunately near plantations" (Lopez-Carmen, 2020). Still, Marcos A. Orellana, a Special Rapporteur "on toxics and human rights" reported to the United Nations that "the list of toxic exposures on indigenous peoples is long" despite the recognition of protections (United Nations, 2022). They are exposed to toxic substances

due to extractive industries leaving "their lands and waters with cyanide, mercury, lead and cadmium" — such merely compounds the enduring legacy of colonialism (United Nations, 2022).

Figure 10. *Dragonfly*

Figure 11. *Spider Nestled in Pineapple-Apricot Scented Rose*

Even Indigenous artifacts from museums have traces of various pesticides (American Chemical Society, 2003). Through the Native Grave Protection and Repatriation Act of 1990, many Indigenous peoples are requesting their artifacts from museums; however, tribes risk exposure to dangerous contaminants because museums used to use chemicals such as mercury, arsenic and more to maintain their collections. After three years of negotiation, California's Hoopa tribe obtained ceremonial artifacts from the Peabody Museum at Harvard University along with a letter indicating that their artifacts were possibly contaminated with pesticides. The Hoopa tribe collaborated with chemists and anthropologists at San Francisco State University to analyze the toxins of their repatriated ceremonial artifacts of headbands, feathers, baskets, and more. Researchers revealed that their ceremonial objects had mercury, naphthalene, and DDT. San Francisco State Professor of Chemistry Peter Palmer points out the contaminated artifacts are unwearable due to unknown risks and methods of decontamination. Palmer maintains "this problem is only now beginning to receive the attention it deserves" (American Chemical Society, 2003).

Figure 12. *Quiet Cicada*

Turning to Jewish history, the Nazis used pesticides on people during the Holocaust. The Nazis used Zyklon B, "a highly poisonous insecticide originally used to kill rats and insects" to not only kill lice in the clothing of prisoners, but as the main means of killing in extermination camps (United States Holocaust Memorial Museum, n.d.a). Heinrich Himmler asserted, "antisemitism is exactly the same as delousing" and Nazi propaganda referenced Jewish people as lice linking them to typhus (Raffles, 2007, p. 521; United States

Holocaust Memorial Museum, n.d.b). The racist justifies genocide when dehumanized humans become insects necessary for extermination.

The reversal of human–insect goes both ways too; however, insect-becoming-human is grounded in favourable ways such as humour and admiration. Entomologist Vazrick Nazari, for instance, named a new species of moth *Neopalpa donaldtrumpi* because of the yellow-white scales that cascade forward from the moth's head (Burdick, 2017). Even flannel moth caterpillars (*Megalopyge opercularis*) from the Peruvian Amazon have been nicknamed "Trumpapillar" for their tufts that resemble Trump's hair. Moreover, a group of scientists named a Puerto Rican water mite *Litarachna lopezae* after Jennifer Lopez because they enjoyed her music (NCCOS, 2014). In addition, Bono, Angelina Jolie, Steven Colbert, and Cesar Chavez have spiders named after them (CBS News, 2013).

Figure 13. *Orb Weaver Spider*

These reversals of insect and arachnid-becoming-human merely reinforce speciesm insofar as insects are always deemed subordinate to humans, but are viewed favorably even when compared to Trump whose administration had not only delayed protections for the rusty patched bumble bee, but rejected a proposed ban on a toxic pesticide linked to brain damage in children (Bittel, 2017; Levin, 2019). In the mythologies of the Anuhuac of Mexico, after death, "plebeian souls entered into leeches or beetles and other insects" (Cherry, 2015, p. 82). Only when compared to humans are specific species of insects worthy of attention because humans view insects as the stuff of punishment whose subjectivities are worthy only under the legal status of criminal.

Entomologist Ron Cherry (2015) catalogues numerous examples of insects as divine

punishment in his text "Insects and Divine Intervention". Cherry (2015) largely points to locusts and dipterans in varied mythologies; however, other insects torment too. Cherry (2015) also points to legal and religious efforts in the Medieval Ages to control insects — "pest insects were put on trial" as criminals and even excommunicated from church (Cherry, 2015, p. 83). Theologians were divided, however, about the status of insects as "communicants of the church" whereas others upheld speciesism to justify excommunication. Moreover, ambiguity appeared in trials over views of insects as "satellites of Satan" or agents from God meant to punish sinners (Cherry, 2015, p. 83). Similarly, settlers demonized Indigenous peoples, and genocide, alongside colonial assimilation, was done in the name of Christianity.

Figure 14. *Praying Mantis among the Zinnia*
Note: In Khoisan traditions, the praying mantis created humans (Cherry, 2002).

In contrast to these speciesist frameworks of insects, Indigenous cosmologies largely affirm human–insect relations in different ways that view insects as ancestors, helpers, creators, and more. In his text "Insects in Art and Religion: The American Southwest", J. L. Capinera (1993), for example, points out how the Hopi "believe that their ancestors in the first underworld had insect forms" (p. 223). Moreover, for the Hopi, the Spider Grandmother is "important to the origin of the world" (Cherry, 2006, p. 21). Among the Navajo, an origin story tells of "a small island surrounded by oceans and inhabited only by people who were insects" (Capinera, 1993, p. 227).

In addition to origin stories, Navajo figures such as "Big Fly" is an "important instructor-helper" who "can go anywhere, mediates between humans and deities, and often

gets the hero out of difficulty" (Capinera, 1993, p. 255). Another helper is the Navajo mythological figure of a flute player in the "human-form of cicada," who "created warmth by playing his flute, and in his hump he carried seeds of plants and flowers" (Capinera, 1993, p. 226). Among the Cochiti, an "Eleodes beetle" created the milky way, and among the Cherokee, a water beetle formed mountains and valleys from mud (Cherry, 2002, p. 134). These Hopi, Navajo, Cochiti, and Cherokee stories are just a few among the many insect myths amongst many Indigenous peoples that challenge anthropocentric Christian cosmologies in which insects are typically manifestations of divine punishment.

Figure 15. *Ant within a Constellation of Candy Flowers in Portland, Oregon Forest*
Note: Ants aid in forest regeneration (Science Daily, 2023).

In their text "Rhetoric, Environmentalism, and Environmental Ethics", Michael Bruner and Max Oelschlaeger (1994) argue that the ecophilosophical community could use various forms of rhetoric to increase their efficacy for environmental social change. Among their suggested forms of rhetoric include architechtonic rhetoric, which can contribute to "a new cultural order" (Bruner & Oelschlaeger, 1994, p. 392). Rather than adopt the Cartesian cultural narrative of human over non-human animal, for example, Bruner and Oeslschlaeger (1994) call for "new symbols, myths, and metaphors" that foster inclusivity (p. 393). They point to environmental historians and writers such as Susan Griffin and Gary Snyder who cultivate such inclusivity. Their call for architectonic rhetoric draws attention to the necessity of telling new cultural narratives of (dis)order, because as Frantz Fanon (1963) argues, "decolonization, which sets out to change the order of the world, is, obviously, a program of complete disorder" (p. 36). Despite their call for new cultural

narratives, the narratives that foster change are not necessarily new.

Figure 16. *Swallowtail Caterpillar*

Lost, erased, silenced, and marginalized Indigenous cosmologies regarding the intimate connections between humans and insects have the capacity to disrupt and refigure the fixity of normalized settler-colonial narratives rooted in speciesism to forge alternative futures. Based on care and the intimate connections between Indigeneity and insects, we have the capacity to develop ears to hear and celebrate Indigenous stories of human and insect collaborations. Uncertain if I will be haunted by my childhood memory, the fate of insects is nonetheless bound to our future(s). Our future must collectively call for simultaneous insect and human liberation from normalized oppression of settler-colonialism.

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