


# Language epistemology and more than human ethics: narratives on *chthulucenic* meaningful encounters

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## Abstract

In contemporary linguistics, there exists a notable emphasis on extractive knowledge paradigms, often relegating non-human forms of communication to peripheral status. This article seeks to challenge such anthropocentric perspectives by delving into an *intimate cosmology*, a space shared closely with plants and insects. Drawing from situated ethnographic data, this study explores philosophically the complicity of scientific discourse with an extractivist planetary ethics as the author examines the significance of joint attention, performative mutuality, and symbolic communion in interspecies meaning-affect experiences. Exploring the possibilities of a *sympoiethics*, which foregrounds the interconnectedness of all life forms, the study reveals how insects offer profound insights into the unexplored dimensions of language, performativity, and mutual attention. By interrogating conventional notions of linguistic privilege and human exceptionalism, the article advocates for a more inclusive understanding of communication ethics—one that acknowledges the agency and significance of non-human communicators. Ultimately, this research underscores the political relevance of recognizing and honoring diverse forms of linguistic existence in fostering a more equitable coexistence on our shared planet.

## Keywords

Multi-species ethnography, Language epistemology, Human exceptionalism, Chthulucenic narratives, Multi-species ethics.

## Resumo

Na linguística contemporânea, existe uma ênfase notável nos paradigmas de conhecimento extrativo, relegando frequentemente as formas de comunicação não-humanas a um estatuto periférico. Este artigo procura desafiar essas perspectivas antropocêntricas, mergulhando numa cosmologia íntima, um espaço partilhado intimamente com plantas e insectos. Partindo de dados etnográficos situados, este estudo explora filosoficamente a cumplicidade do discurso científico com uma ética planetária extractivista, à medida que o autor examina o significado da atenção conjunta, da mutualidade performativa e da comunhão simbólica nas experiências interespecies de sentido-afeto. Explorando as possibilidades de uma simpoiética, ética que coloca em primeiro plano a interconexão de todas as formas de vida, o estudo revela como os insectos oferecem uma entrada inusitada em dimensões inexploradas da linguagem, da performatividade e da atenção conjunta. Ao questionar as noções convencionais de privilégio linguístico e de excepcionalismo humano, o artigo defende uma compreensão mais inclusiva da ética da comunicação – uma compreensão que reconheça a agência e o significado dos comunicadores não-humanos. Em última análise, esta investigação sublinha a relevância política de reconhecer e honrar diversas formas de existência linguística na promoção de uma coexistência mais equitativa no nosso planeta partilhado.

## Palavras-chave

Etnografia multiespécie; Epistemologia da linguagem; Excepcionalismo humano; Narrativas chthulucênicas; Ética multiespécie.

## Introduction

Texts are intricately woven manifestations of meaning and life creation; some texts embody living stories. They possess voice, spirit, syntax, and form—a distinctly human form. Our narratives, the threads of existence, are deeply intertwined within us. They exalt human exceptionalism and bounded individualism, which stand for "old saws of Western philosophy and political economics" (Haraway, 2016, p. 30). Yet, the upheavals of the Anthropocene beckon us to craft alternative narratives that celebrate our diversity not as a hierarchy, but as a potential for mutual care and human "respons-ability" (Haraway, 2016). Critiques of the Anthropocene urge us to occupy narrative spaces that acknowledge our fellow journeyers: "Our ability to share this space, to journey together, does not imply sameness; rather, it signifies our capacity to be drawn to each other through our differences, which should inform the script of our lives" (Krenak, 2019, p. 33).

The celebration of difference as a potential multi-species attraction inspires this narrative *string figure*. String figures refer to the formation of figures interconnected by knots and lines. They are a childhood game, taught to me by my mother under the name of *stringing* (*passar barbante* in Brazilian Portuguese). String figures illustrate Haraway's literary methodological proposal, SF, an acronym that also develops in Science Fiction and Speculative Feminism.

Following Haraway, this text is the discursive materialization of a specific string figure: the one in which my life is immersed. From a linguistic-anthropological-philosophical<sup>1</sup> perspective, I will discuss the multi-species relationships that take place in my apartment and their communicative intricacies, questioning some epistemes that guide our understanding of language. I will discuss my gratitude to calcium, share my formicary passions, sing to the memory of moths, and mourn for bees in the composition of a sympoethics: a network of ethical and linguistic care that revolves my intimate, expandable universe.

By interweaving narratives surrounding speciesism, interspecies symbology/communication, and the linguistic performativity of existence within my immediate surroundings, I've crafted a sympoethics—an ethical framework rooted in acknowledging the interconnected genesis and development shared among all beings, aimed at reimagining a future that embraces the inclusion of fellow species. If the narrative of the end of the world is "a possibility of making us give up on our own dreams" (Krenak, 2019, p. 27), telling a story is a way of

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<sup>1</sup> Povinelli suggests that multidisciplinary perspectives are fundamental for understanding the status of the non-human in the governance of difference and markets in late liberalism (2023, p.71). Because disciplinary perspectives do not provide answers to questions that go beyond their epistemic paradigms, it is a logical imperative that this text celebrates undisciplined authors and thoughts.

postponing the end of the world. For Haraway, great narratives are free from "determinism, teleology and plan." (2016, p. 50), but I'm content with a small one, whose aim is to provide a contextualized ethnographic practice by describing the sym-poeiethical relationships within my intimate cosmology. In doing so, I endeavor to uncover the parasitic, symbiotic, and companionable relationships forged between humans and various insects' species, elucidating the intricate discursive entanglements that shape our collective existence, teetering between life and death.

### **1. From Anthropocene to intimate cosmology: a conceptual shift**

Anthropogenic processes have triggered profound planetary shifts, evident to most species: from agriculture and industrialization to urbanization, mineral extraction, and pollution, human activities have indelibly altered Earth's landscape. Mindful of humanity's transformative impact on the planet, Eugene Stoermer and Paul Crutzen coined the term Anthropocene (Crutzen & Stoermer, 2000) to denote the age of humans. However, for Haraway, the Anthropocene represents not merely an epoch but a defining "boundary event" (2016, p. 100). According to Povinelli, this boundary delineates the threshold between life and its demise: "The Anthropocene, the geological age of the Human Being, will be the last age of humans and the first stage of Earth becoming Mars, a planet once awash in life, but now a dead orb hanging in the night sky. (Povinelli, 2016a, p. 60).

The delineation of this pivotal juncture by its performative interplay between life and death sparks vigorous debates. For instance, Moore (2016) introduced the term *Capitalocene* to underscore the commercial aspect of Earth's metamorphosis, emphasizing our role in orchestrating extinction through the proliferation of human enterprise. In a collective debate regarding the nomenclature of our era, Haraway et al. (2016) suggest that *Plantationocene* might be more apt, as it captures the material and symbolic displacement of nature spurred by capital accumulation concurrent with agricultural expansion. Haraway elucidates *Plantationocene* as emblematic of the devastating conversions of various landscapes into closed, extractive plantations, bolstered by coerced, exploited, and often displaced labor (2016, p. 206). She invites us to collectively cultivate alternative narratives that provide sanctuary, for the earth is teeming with refugees, human or otherwise (Haraway, 2016, p. 100).

Narrative becomes a refuge, offering us tales and theories capacious enough to accommodate the intricacies of planetary life, fostering receptivity to novel and unexpected connections that bind us to others. Stories that enable us to grieve irreparable losses, stories of perpetual renewal, stories of ethical-political-biological regeneration and resilience, stories of embracing life and death harmoniously, stories of solidarity in the chthulucenic era. The designation may matter less than the affectivity of "All of our stories, whether it is the

Anthropocene, or the Capitalocene, or the Plantationocene or my current new lover, the *Chthulucene*, with whom I am now in bed ... in tentacular embrace." (Haraway et al., 2016, p. 561). The Chthulucene, a mythical creature that involved Haraway in its tentacles, invokes a mythical monster, Chthulu, and its kin (octopuses, anemones, insects, crabs). The inclusion of invertebrates in the semantic composition of the Chthulucene is a matter of scientific precision, given that they constitute 95% of the world's species diversity, including insects, the protagonists of this narrative.

The Chthulucene comprehends the past, present, and future in their tangible and potential realms of imagination and lived experience of our entanglement in a sympoiethics, an ethics that fosters tentacular thinking, in its etymological sense: from Latin, *tentare* (to feel), *tentaculum* (instrument of/for feeling). In Haraway's words: "Myriad of tentacles will be needed to tell the story of the Chthulucene" (2016, p. 31). Embracing, listening and storytelling in the Chthulucene entails shedding the ideologies of the Anthropocene—the epoch of upright man who gazes skyward—even if it means turning one's gaze downward: to the earth, the soil, the humus that Haraway redefines as the etymological and biogenic foundation of humanity. Abandoning greed, the impulse to destroy, exceptionalism, and embracing the fecund, fertile dirt of Gaia (Lovelock & Margulis, 1974), symbiotically collaborating for life and for reimagining the present and the future requires acknowledging that 1) "The myth system associated with anthropos is a setup, and the stories end badly" (Haraway, 2016, p. 49) and 2) "Revolt needs other forms of action and other stories for solace, inspiration, and effectiveness." Writing is one of these forms of rebellion. This article is conceived as an ethical, ecological, and aesthetic exercise in chthulucenic solidarity, probing the sympoiethic dimension of our symbolic existence, the multi-species symbolic entanglement in whose tendrils we are enmeshed.

While I celebrate the desire to become together and the polymorphism of the Harawayan Chthulucene, I propose a shift in focus from the transitional moment, and thus from time, to the space we sense with our tendrils. "-Cene", stemming from the Greek (*kainos*), denotes a temporality that can only be sensed communally, a dense time of the collective, of past and present. For the *anthropo*, it embodies a pervasive catastrophic menace because "-cene", our epoch, touches all and none. Instead of investing in a concept that accuses capitalism, modernization, agribusiness, or any Other, I traverse the realm of my intimate cosmology, for it is in intimacy that we undress our exceptionalism. *Intimate cosmology* not only amalgamates the realms of cosmology and "intimate grammars" (Povinelli, 2016b) but also facilitates the boundless expansion of our own capacity for perception and meaning-making through joint attention, with language as its primary mean. This intimate cosmology is accentuated in the subjective vein of the ancestral catastrophe of liberalism and Chthulucene, but

most significantly by my immediate vicinity—where I dwell, how I slumber, and who else resides alongside. My intimate cosmology serves as the substance of my narratives, a web of interspecies connections unfolding between June 2021 and March 2024 within an apartment in central Rio de Janeiro.

## 2. Linguistic existence, joint attention, and recognition

Povinelli's scrutiny of extractivist liberalism is characterized by a conceptual concern, for "late liberalism attempts to control the expression and trajectory that their analytics of existence takes" (Povinelli, 2016a, p. 49). The acknowledgment of existence and the epistemes accountable for its analytics would be co-opted and undermined by the neoliberal management of life and death, unveiling ontology as a biontology. The Karrabing collective<sup>2</sup> addresses these concerns with four principles that contemplate existence through Karrabing analytics. I aim to direct our joined attention to the first: "Things exist through an effort of mutual attention. This effort is not in the mind but in the activity of endurance." (Povinelli, 2016a, p. 49). Endurance is not synonymous with life; rather, it pertains to a spectral discursive existence. Povinelli (2021) elucidates that endurance alludes to a form of posthumous survival in language. We carry our deceased with us whenever we speak. Drawing inspiration from Bakhtinian polyphony and Benveniste's enunciative theory, she posits that endurance does not signify life itself but the vanishing in discourse that death beckons. Povinelli (2021) delineates language beyond the subject, affirming that language is inseparable from life and intimating that our dead speak.

I interpret the *Karrabing* principle "Things exist through the effort of mutual attention" as implying that existence is performative and relies on joint attention, which shapes the contours of being (re)discovered through the act of mutual focus. This performative capacity to bring forth existence extends beyond the animate realm; "[t]his performative power is situated in a cell's metabolic function" (Povinelli, 2016a, p. 63). By situating performativity at the cellular level, Povinelli challenges its purely semiotic nature and allows it to permeate the complexities of existence via joint attention. While not exclusive, language serves as the primary means for humans to collectively engage in attention. Language becomes a performative embodiment of joint attention. Speaking is the principal method of creating, attributing existence, acknowledging it, and engaging in dialogue, communication, and empathic receptivity to other perceptions and senses. The performativity of existence transcends language and the human sphere.

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<sup>2</sup> According to <https://karrabing.info>, "The Karrabing Indigenous Corporation seeks to integrate their parents and grandparents ways of life into their contemporary struggles to educate their children, create economically sustainable cultural and environmental businesses, and support their homeland centres".

A specific gesture of joint attention through language is the attribution of names. Naming is a perlocutionary symptom of such linguistic materialization, although it is not exactly language, in Saussure's *Course in General Linguistics*. Naming things is one of the most primordial linguistic activities. Wittgenstein (2022 [1953]) explains that naming is one of the language games, one of the facets of language play. For Foucault (2014 [1971]), naming is subjective rather than linguistic: a gesture of intimacy between the subject and the world. Naming is a mystical and philosophical gesture that allows us to look closely (philosophy) or from afar (myth). Naming things seems to unveil them, to get to know them more intimately, to stop fearing the unknown and the new. To name is to produce meanings about, to turn our attention to. Naming the entities that surround us in their specific singularity (this adjective referring directly to the species), however, is not the task for a linguist and philosopher. As such knowing which creature inhabits my cosmology depends on knowing about its habits, its life, its *conatus*<sup>3</sup>, what it eats, where it lives and how it affects me, how it has become a companion species that shares my intimate cosmology. It means assessing possible bonds and companionship, accessing the risks and benefits of living together. I then turned to naming the species that surround me in order to understand our reconciliatory capacities, our closeness or ethical distance and how we communicate, from the perspective of the production of meaning and the interactional production of meaning-affectations. Following Bonfante (2020), meaning is affective and all affect is meaningful. Even if we don't know how to read the ant's chem-trails, interpret the vibrations of the sick plant, mourn the death of the bees, or access the caterpillar's memories, joint attention would recognize in these creatures their significance, their inaccessible meaningful nature.

Deutscher reckons that language's journey toward complexity happened in stages, with naming being a pivotal one: the stage "me, Tarzan," where objects were named and deictic gestures employed, marks the boundary of our linguistic knowledge. He asserts, that once languages began acquiring words, they began resembling modern tongues, allowing us to draw parallels between then and now (Deutscher, 2014, p.28). Expounding this evolutionary theory of language, influenced by late Liberalism's analytical lens, it's postulated that any species' linguistic evolution would culminate in a language both warlike and beautiful, a marvel and a menace, much like ours: one which celebrates our "splendid cognitive isolation" (Deutscher, 2014, p. 34). This philosophical elevation of language serves to distinguish humans from animals, reinforcing the notion of human exceptionalism and implying the instrumental role of non-human beings in our lives. This hierarchical view traces back to Aristotelian philosophy, where voice served as the dividing line. Aristotle asserted that voice is the expression

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<sup>3</sup>The Spinozan concept of *conatus* refers to a driving force that moves a being and keeps it alive.

of a being with a soul, encompassing humans and select animals (Wollock, 1997, p.8). In *De anima* and *De Motu animalium*, Aristotle contends that humans and certain birds possess voice and, by extension, soul, while other creatures lack both (Keeling, 2023).

According to Wollock (1997), who delves into the historical trajectory of natural philosophy of linguistic performance, language capacity, synonymous with voice manifestation, attests for the presence of a soul. Within Aristotelian linguistic philosophy, the presence of language/soul serves as the foundational marker for distinguishing humanity from the rest of existence. This notion implies human superiority and legitimizes our dominion and potential for devastation. As Deutscher (2014) asserts, "Without it [language], we could never have embarked on our ascent to unparalleled power over all other animals and even over nature itself" (p.13). For this scholar, language's capacity empowers our imaginative ownership of the non-human realm. Essentially, theoretical discourse surrounding our communicative exceptionalism functions as an episteme that sanctions a destructive, hubristic, and frivolous approach to our planet. Where does our species' ascension to dominance conclude? And what ramifications does this ascent hold for other life forms? Are we so exceptional as to inhabit a desolate planet, which turned its back to care? Or will earth descendants be the cockroaches?

While the exact bounds of Western linguistic greed<sup>4</sup> remain elusive, the entanglement of linguistics with liberal extractivism is overt, and the utilitarian role that language or human linguistic prowess assumes in the scientific narratives across various linguistic disciplines is striking, notably within their introductory texts: "It is remarkable that no other being on the planet, except the human, is capable of naturally mastering a language system as complex as *natural* language" (Kenedy, 2015, p.129). My focus lies on his metalanguage, for if human exceptionalism hinges on possessing language and the demarcation it imposes between us (the cultured, endowed with voice) and others (savage, soulless, mute), does this political construct called language truly reflect nature? Within the aforementioned quote, certain presumptions about humanity are evident: firstly, that we can only grasp complexity in entities and modes akin to our own, thereby highlighting a perceptual confinement of the world engendered by our idolized self-image and linguistic delusions of divine superiority. Moreover, it becomes apparent that the significance of language resides not solely in its structural framework, but in its agentive and performative capacities. Human linguistic uniqueness doesn't solely stem from possessing a sophisticated communication system, but from the pragmatic achievements it enables. Nevertheless, it's undeniable that other entities (animals, plants, fungi, minerals)

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<sup>4</sup>By linguistic greed I mean the gesture of limiting all the cognitive wealth of language to ourselves and denying them to other species.

exhibit remarkable abilities: mycelial networking (Tsing, 2015), forest semiotics (Kohn, 2013), and the wisdom of the grandfather river (Krenak, 2019). Thus, our fixation on language as a paradigm for understanding ourselves inadvertently blinds us to languages existing beyond the realm of human language.

There's a prevailing agreement that language isn't merely a soul you put on but rather the manifestation of our cognitive uniqueness. "The faculty of language is the most striking mental characteristic that separates humans from other higher primates and the rest of the natural world" (Kenedy, 2015, p.129). One of the rationales for the symbolic divide between us and the linguistic refugees of the Anthropocene lies in our vast and unparalleled brain, the evolutionary tool<sup>5</sup> that marks a cultural boundary between us and the broader natural realm. While our comprehension of the brain remains incomplete, its extraordinariness isn't disputed in scientific circles: "The human brain is the only one with the structure necessary to master human language – that is incontrovertible" (Deutscher, 2014, p. 35). If, as the author proposes, incontrovertible truths stem from direct inference, then why impart human languages to other creatures? And more pointedly, why perceive the Homeric results of animals engaging in human activities – activities for which they would require a different cerebral apparatus – as deficient, indicative of cognitive simplicity, or a demeaning incapacity?

Numerous endeavors have been made by scientists to impart their own language, be it spoken or signaled – since primates lack a speech apparatus –, to birds (Jarvis, 2004), parrots (Pepperberg, 1999), chimpanzees (Gardner & Gardner, 1969), and gorillas (Patterson, 1978), in the hope that they might symbolically engage in a more sophisticated manner, thereby averting the existential void that accompanies the absence of meaning (Foucault, 2023): for "even chimpanzees, when trained by humans, can be taught to communicate in a much more *sophisticated* way than they do naturally" (Deutscher, 2014, p. 29). Interestingly, although apes have acquired human-like communication abilities, humans have never managed to converse in the communicative codes of apes. This question remains largely unexplored within scientific discourse. Now, if our mode of communication surpasses that of apes, insects, plants, and fungi in sophistication, why do we struggle to perceive, comprehend, and utilize it effectively? From our western privileged point of view, we preclude the acceptance of any alternative form of language that might challenge our ethical

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<sup>5</sup>Physiological changes in species, such as the appearance or development of a powerful brain, are not caused by natural selection. Lynn Margulis (2001), author of the theory of endosymbiosis, attributes a very modest role to mutation as a vehicle for change. Margulis revolutionized scientific understanding of cells with nuclei by arguing that mitochondria result from symbiotic fusions between bacteria. In Margulis' view (2001), new types of cells, tissues, organs and species arise from symbiotic interactions that originate through "lasting intimacy with strangers". Thus, the brain we have is not a human achievement, but the fruit of a long symbiotic relationship with other beings.



prerogatives within humanism. Consequently, our language serves not as a benchmark for assessing communicative complexity; rather, it delineates the boundaries and essence of humanity itself, and of our understanding. These linguistic-epistemological ideologies warrant ethical scrutiny. Could our presumed linguistic superiority not serve as a catalyst for ethical and empathetic engagement with the world around us, fostering a practice of performative collective attention that engenders creation and recognition?

It is precisely this ethical imperative that guides the weaving of this discussion. This article endeavors to explore the linguistic refugees of the Anthropocene, divested of any sense of superiority and armed with the recognition that our comprehension of the communicative intricacies of the wider natural world is hindered by creative, ethical, and philosophical blindness. Yet, we must strive to engage in contemplations on languages within the Chtulucene (Haraway, 2016) by narrating tales that serve as threads in the tapestry of a networked ethic transcending humanism: a sympoietic, ethical gesture acknowledging our existential entanglement within planetary networks. The irretrievable aspect of this ethical gesture lies in the de-dramatization of human existence, epitomized by the fourth Karrabing principle:

We must de-dramatize human life as we squarely take responsibility for what we are doing. This simultaneous de-dramatization and responsabilization may allow for opening new questions. Rather than Life and Nonlife, we will ask what formations we are keeping in existence or extinguishing? (Povinelli, 2016a, p. 49)

### 3. The uninvited

One of the formations that humans are actively trying to extinguish are the sucking insects belonging to the *Coccoidea* family, a homogeneous group known in the literature for its parasitic potential on ornamental plants and for causing great economic loss in crops (Guindani et al, 2017; Gillot, 2005, Zani, 2021): the mealybugs. There are thousands of species of mealybugs, which feed on plant fluids, piercing plant tissues with their mouthparts to extract nutrients. Although mealybugs can be found in any part of the plant (stems, leaves, roots and trunk), they commonly prefer to settle in the younger parts of plants such as shoots (Godfrey et al., 2005), but also in the joints of plants. "I noticed that the mealybugs were burrowing into the ligatures between leaves and stems. There they found an entrance to the plant vessels and penetrated until they killed the leaf. These gaps were also exploited by the insects during attempts to eliminate them with natural insecticides" (Appointments of Fieldwork, June 2022). Colonization of plants by mealybugs can happen in several ways: (a) passive transport between plants: insects or eggs carried by wind, raindrops or other insects and animals; (b) contamination of seedlings and soil; (c) human action. The ones that came home arrived in a Trojan horse, a gift plant. I noticed the mealybugs when the appearance of the plant was already changing, but I was relieved to notice the

presence of ants surrounding the mealybugs. Considering ants to be powerful and ruthless beings that turned everything they encountered along the way into substrate for their fungus farm, I interpreted the symbiotic relationship between them as predatory. A human error in the world of insects: to attribute to ants the desire to eliminate species that compete with the human. Feeling somewhat betrayed in my vital cause, I ignored the fact that ants and mealybugs are natural allies (Guindani et al, 2017; Godfrey et al 2005; Zani, 2021): by metabolizing plant cellulose, mealybugs secrete honey dew, a substance rich in glucose and a source of food that attracts ants. In return, the ants act as spreaders of mealybugs, dispersing them to new feeding points in places of interest to the colony.

Upon witnessing the uncanny connection between these unfamiliar beings, inquiries sprouted within me: What manner of communication was that? Why was I excluded from the semiosis of insects? Was I truly the axis of my intimate cosmology?<sup>6</sup> Though detrimental to me and fatal for my flora, this communicative exchange held immense significance for ants and mealybugs alike. This symbiotic rapport bolstered the prosperity of both species. A profound indexical relationship thrived between ants and mealybugs, one I struggled to decipher despite my intricate language. Within this interconnected web that beckoned my inclusion, a semiotic component was absent, one that could tilt the balance in my favor – a living embodiment of non-life, calcium, a mineral abundant in our bones, shells, and plant cell walls. Anecdotes abound among plant tenders regarding their battles with pests, wherein the presence of mealybugs is often attributed to the plants' calcium deficiency. Such deficiency can compromise a plant's overall vigor, rendering it more susceptible to pest incursions. Certain pests, including mealybugs, are drawn to chemical cues emitted by distressed plants, particularly those lacking essential nutrients, heightening the risk of infestation. I posit that the sudden appearance of mealybugs stems from a form of communication between plants and their allies, wherein the presence of calcium signifies a robust and resilient plant, endowed with sturdy cell walls. Inert calcium, serving as an indicator of plant fortitude, is semiotically interpreted by insects in their symbolic interactions.

The restoration of harmony in the garden unfolded through the practice of companionship, as suggested by Haraway (2016): *cum panis*, companion species share the bread, sit together at the table. Over the span of a moon, I diligently

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<sup>6</sup> This rhetorical question can be answered with no. The center of my intimate cosmology was not me, but the organic products of the machine-me: what went in, what came out, the products and waste, the fruit, the peelings, my blood, the sap of the plants, microparticles in their soil, the insects, my epithelial cells around the house. The center of life is death, which restarts it with a putrid source of nutrients. Non-life is the origin of all life. So we will be the center of our intimate cosmology when we perish. According Povinelli, "Nonlife has the power to self-organize or not, to become Life or not. In this case, a zero-degree form of intention is the source of all intention. The inert is the truth of life, not its horror." (2016a, p. 72)

collected all the eggshells I had consumed, cleansing them and placing them in a vessel. After macerating them, I distributed the resulting mixture to all my plants, particularly those plagued by infestation, leading to a gradual and steady decline in mealybugs' presence. This instance of the interplay between eggshells (and the calcium within them), plants, and mealybugs exemplifies the "increasingly unavoidable entanglements of Life and Non-life in contemporary capitalism" (Povinelli, 2016a, p. 67). The dissemination of calcium among plants can be viewed as an act of chthulucenic solidarity, a reorganization of minerals (i.e., Non-Life) for life. Redirecting valuable nutrients from plastic bags back to the earth can be perceived as an intimate endeavor in plastic depollution. Calcium, my translator, holds significance and evokes emotion despite its lack of vitality. "Nonlife is affect without intention and is affected without the intentional agency to affect." (Povinelli, 2016a, p.71), yet it can serve as a means of communication between humans nurturing plants and ravenous mealybugs.

This form of knowledge nurtures an indexical relationship with nature, a capacity or desire to tend to the beings around us and thereby care for ourselves, by attributing to them semiotic capacity. This semiotic, indexical, and performative interpretation is essential for recognizing the interconnectedness of existence. Drawing on Krenak (2019, p.25), who reflects on the "experience of living in a land rich with significance," I posit that there exists an indexicality within nature: a boundless array of indices, signs, and symbols that denote natural meanings interpretable by each being within its own context. To propose that we – plants, animals, fungi, bacteria, and viruses – share a natural indexicality, we must acknowledge that beings are capable of language in their own right. Dethroning the linguistic exceptionalism of *Homo sapiens* is not merely a scientific inquiry but, rather a matter of seeing ourselves as parts of the world, what may lead to novel ways of perceiving communal existence.

#### 4. Formic friendship

When the mealybugs left, the ants inherited the apartment. Tiny, intrepid and tireless, they crawled in wherever they could. Although there are around 2,000 types of ant in Brazil with very clear differences, the species that cohabited my intimate cosmology were the ghost ant (*Tapinoma melanocephalum*) and the Argentine ant (*Linepithema humile*), two very common species of urban ants, which, closely associated with human activities, establish their nests in structures of commercial buildings and homes (Santos, 2016, Barbosa et al, 2023).

The Argentine ant (*Linepithema humile*) stands as a prime example of entomological colonization, its populations scattered across the globe (Wetterer et al, 2009), save for Antarctica. The Argentine ant is considered a worldwide pest that spreads like colonialism. These ants serve as companions in colonial expeditions, territorial expansion, and human commercial ventures, though many

humans remain unaware of their presence. Like colonial powers, they invade and devastate the native life of the regions they infiltrate. Highly adaptable, they refrained from nesting within my apartment but made daily visits, particularly favoring my bathroom, where they diligently patrolled drains and the vicinity of the toilet. Due their smaller numbers, the Argentine ants were overshadowed by my true companions, the ghost ants (*Tapinoma melanocephalum*). These spectral insects, characterized by small translucent abdomens and erratic trails, gravitate toward sweet sustenance. Their presence has garnered my favor since my arrival, simply by virtue of their companionship. Besides providing company, Gómez-Núñez (1971) identifies them as the primary predators of *Rhodnius prolixus* eggs, the vector beetle for Chagas disease. They were credited with curbing the beetle's presence in coastal Venezuela. Myiagi et al (2009) further document their predatory role against spider mites (*Tetranychus urticae*) in Japanese greenhouses. While in my intimate cosmology – the physical and symbolic place we share – the ants have aligned with mealybugs, I like to believe that my plants and my ants share common adversaries. Their nests dot my apartment, hidden behind tiles, door jambs, skirting boards, wooden doors, plant pots, and various crevices. I've witnessed ghost ants preying on termites (*Cryptotermes brevis*) within a wooden sculpture adorning my living space. Given their penchant for transient habitats, ghost ants rarely linger in one location for extended periods. In the realm of ecology, the study of insect behavior encompasses a vast domain, encompassing the observation of animal performances. Behavior, as elucidated by Del-Claro (2004), encompasses all actions undertaken or not by an animal. Through their behavior, I've observed the symbolic and communicative interactions that unfold within our intimate cosmology, spanning multiple species.

Highly communal, ants reside collectively within their colonies, boasting intricate "multimodal" communication systems (Hölldobler, 1999) among themselves (Jackson & Ratnieks, 2006), as well as with their guest species, symbiotically dwelling within the anthill (Hölldobler, 1971), and with species fostering symbiotic bonds, such as mealybugs (Guindani et al, 2017). These communications manifest through pheromones (Jackson & Ratnieks, 2006) and acoustic exchanges (Hickling & Brown, 2000).

The ghost ants I live with wander around erratically and form other colonies, expanding their presence throughout the house when the queens leave, accompanied by a large number of workers. The more abundant they were, the more annoying their wanderings became. Frequently, entire colonies would relocate as one unit, prompting me to undertake what can only be described as massacres—not with the intent of eradicating them, but rather to restore equilibrium to our intimate cosmology, coaxing them away from the warmth of the computer (a favored spot for their gatherings) and the bookshelf. Following these incidents, the souls of the ghost ants always lingered. Those ants that now

traverse the pheromone trails of past generations are akin to specters of the countless others that had to die<sup>7</sup> so I could live. They scurry frenetically along deserted pathways, now transformed into the resting grounds of their dim spirits, steeped in irreparable solitude. Indeed, how much does an ant's spirit weigh? Would Aristotle have lent it a voice? Even if an entire ant community were to vanish, their trails would persist, communicating to subsequent generations or different species the routes they once traversed, the paths that guide the way, albeit unseen and indecipherable to us. Whenever they collectively vanished, I would still behold the lost souls wandering the trails like relics of bygone civilizations, often bearing the remnants of their past journeys. The ghost ants literally carry their deceased, embodying their spectral essence in life and the promise of renewal in death.

### 5. The moth archive

In this passage, I envision the moth as a harbinger of meanings, as a discourse that writes itself and unfolds in a historicity that is not ours alone. Moths are earth's living tattoos adorning its surface with meaning. Lepidopterans like moths and butterflies acquire and retain knowledge by encoding memories and transmitting them onward. This continuum remains unbroken through metamorphosis, a profound transformation involving the dissolution of the moth's form within the cocoon, wherein the body seems to liquefy yet memory endures (Blackiston et al, 2008; Lima, 2022). These living archives have thrived for generations within the fern in the living room, returning unflinchingly to perpetuate their lineage within that very fern, itself an archive of moth lore. While the caterpillars may elude detection were it not for their excremental *communiqués*, the moths unflinchingly resurface, as if intimately acquainted with the locale. Yet, how do they rediscover my fern each year? What secrets does this knowledge hold, and what narratives are excluded? What remains embedded within the fern's memory, preserved across time?

My comrade Pedro de Souza often reminds me that archive embodies memory. Thus, the memory of butterflies serves as a lepidopteran archive, that narrates them, carrying their memories and wisdom across. Transient beings like moths and butterflies retain echoes of past lives within them. Their metamorphosis transcends mere physical change. Within the depths of the

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<sup>7</sup> Deleuze, in his discussion of Spinoza's, shares his intrigue with observing spiders devouring their prey and provides several reasons for this fascination: a) the concept of death being external, b) the interconnectedness within nature, and c) the subjective nature of perfection. Of particular interest is his exploration of the second point, where Deleuze elaborates, stating, "Animals demonstrate to us the inherently external nature of death. They don't bring it upon themselves, yet they inevitably inflict it upon each other: death as an unavoidable consequence within the natural order of existence" (Deleuze, 2002 [1981], p.18). We, as humans, also bestow the gift of death upon animals on various occasions, though they seldom reciprocate this external force towards us.

chrysalis, where the caterpillar dissolves to emerge anew with wings, traces of knowledge endure. Similar to the moth, metamorphosis is inherent to the essence of the archive. Hence, archives and butterflies are akin to kin. Moths embody archives as they serve as gateways to the "phantasmatic horizon of the past" (Margel, 2017, p. 117). Moths, dispersed in diaspora, weave narratives as they journey. Insects are archives of forgotten encounters, of all the meetings to which humans have not bestowed significance or affect. They are archives of unheard voices, housing tiny realms of memories, wisdom, and experience, suspended within a narrow perspective. Insects are traces of ourselves and our connections with strangers that stretch back to a past encapsulated only within living archives: be they deceased or alive, and all the discourse that emanates from them.

Lima (2022) also regards butterflies and moths as vessels of memory, as remnants of discourse, as imprints of events, when she delves into the National Museum's assembly of lepidoptera, transfigured in the flames through a final "metamorphosis by carbonization" (Lima, 2022, p. 4). Lima elucidates that the generational memory of butterflies embodies a gesture not confined to the past but one that paves the way for the future:

Why remember? Survival would be the main function of memory. Being able to remember previous events related to accumulated experiences helps with decision-making, such as finding food, avoiding predators and choosing mates. Remembering, from this neuroscientific perspective, would not be the characteristic of storing as much information as possible, but of saving the most important points in life that could be important for the future. In this way, remembering would not be an attachment to the past, but a possibility for the future. (Lima, 2022 p. 10)

The memorable future that my moths clung to was the fern in the living room, the nursery of generations. A butterfly's memory is not solely her own; it embodies a collective kaleidoscope of soaring archives. Margel (2017) discerns a shift in perspective concerning collective memory, where a fresh interpretation of the archive holds less sway than the proliferation of its points of emergence. The new archivistic places are political arenas that have liberated themselves from institutions, morphing into "an art of discourse, a technique of argumentation, or even a fictional space of writing" (Margel, 2017, p. 118). I assert that moths are an archive, a discursive endeavor "that alters an order of things, displaces a source of production, reconfigures a social vision, classifies, dissects, distributes, or redistributes events within the realm of knowledge" (Margel, 2017, p. 118). By conceptualizing insects as archives, I advocate for proximity. Designating entomological existence as an archival imperative entails acknowledging that the ineffable essence of language unfurls its wings and takes flight within the shadows of lepidopterans.

The flapping of the archive's wings echoes a fragment of the past, a path toward the future, and a fervent yearning to persist, linking every being within the planetary memory web to their rightful place. Memory stitches us to our sense of belonging in this world. Regarding the moth as an archive is an act that reshapes the very essence of archives by shifting focus away from humanity's centrality in history, thus broadening our horizons to read other historical objects such as the chitinous exoskeleton. Silence or absence emerges as a notable characteristic of archives, which we may or may not discern, akin to the whisper of a moth's wings. Silence is both constitutive and constituent of archives and moths alike. The hush of and on moths, and their absence, shapes humanity itself, as the sole symbolic entity to partake in the performative advantages of joint attention. In the opening of this form of archive, we acknowledge bodies as repositories, not solely due to their human or entomological nature, but owing to their affective entanglements. Here lies an archive of human-insect affection.

## 6. Honeybee tears

During Rio's nocturnal embrace, the bees (*apis mellifera*) danced through the city's lights, intoxicated by its vibrancy. Each night, they sought refuge at the corner of Lapa St. and Taylor St., finding solace in my apartment, fleeing the city's hostility and the impending human chaos. Their hurried entry into my abode stirred commotion, as I hastened to guide them back to safety through the window they had ventured through. Urgency underscored the rescue efforts, knowing they would not survive the night outside the hive, where their fellow bees might await, bound by affective ties beyond our human comprehension. Indeed, if bees possess the capacity for symbolism (Benveniste, 2010 [1966]), and every sign is an affective instance, then perhaps there exists a form of care, albeit one distinct from human or mammalian bonds. Bees are renowned for their remarkable feats, as evidenced by a study conducted by Wu et al in 2013, revealing their ability to distinguish between paintings by Picasso and Monet. Karl von Frisch, (quoted by Benveniste, 2010 [1966]) renowned for his seminal studies on the language of bees, further demonstrated their extraordinary ability to discern colors, shapes, and visual patterns – a skill intrinsic to their floral interactions, for "a flower is a microfiche of botanical information" (Pinker, 2002, p. 552). Understanding and interpreting the language of plants is a shared gift between flowers and their companion species, including bees and us. Flowers communicate vital information about pollen availability, fruit promises, soil conditions, and their own nature through a complex language of signs, indices, and symbols – although the full extent of their messages remains beyond our grasp. In addition to their keen perception of shapes, colors, and scents, insects are deeply attracted to light. Drawn to the moon's luminance, which serves as a guiding beacon for their nocturnal flights, facilitating encounters vital for reproduction. This narrative provided insight into their nightly visits. However,

their arrival sometimes coincided with the lights being off, leading my friend and biologist Jansen Vargas to speculate that perhaps they sought refuge from the city's chaos—its clamors, laughter, glaring lights, and pervasive smoke from cigarettes and grills. "If the thick barbecue smoke troubles me, surely it troubles them too. Everyone knows that bees are vegetarians" (Appointments of Fieldwork, December 2022).

The bees that grace my presence don't come for the flowers I've nurtured, but rather, they enact a solemn dance of departure. Some arrive hurling themselves toward the lampshade without hesitation. They tumble, ascend, flutter about, yet with diminished vigor and vitality. Others I discover standing solemnly in the corner, as though in anticipation. Among these, some sway their abdomens in a rhythmic motion akin to deep breathing or a human's sensual pelvic movement. The third type proves most disquieting: agitated and disoriented, they buzz about like lost spirits. Frantically, they flit to and fro, devoid of purpose, failing to signal the presence of sustenance. Yet, I discern their silent plea: agony. How does one convey the agony of bees? They frenziedly scrub their limbs across their bodies, as if cleansing themselves of an unseen foe. Engaged in frenetic dances, they seem intent on piercing themselves, their tiny legs in a wild flurry, akin to disrobing in haste. In advanced stages, they whirl upon the ground, spinning upon their axis. Poison, I suspect.

Though they remained silent<sup>8</sup>, their communication resonated in the language of life and death, touching all beings alike: pain, despair, the primal urge to endure. As Spinoza observed, each entity embodies its *conatus*, an inherent drive to persist. I posit that this impulse fosters bonds of solidarity—a shared resolve to persevere, stitching us together amidst life's trials and triumphs. It is the common thread weaving us together amidst life's trials and triumphs, tethering us to Spinoza's God-Nature—a realm of affective cosmology that enfolds us, pointing towards infinity.

None of the bees ever made an attempt to harm me. Perhaps they sought my aid, or perhaps they simply remained unaware of my presence. Nonetheless, they performed the dance of departure. At times, I endeavored to place them amidst the plants by the window, hoping that the greenery or the scent of the street would offer solace and guide them through the night. If only I could decipher their language more fluently, I might find repose, for I would reveal how linguists and bees share a commonality, how diverse species engage in mutual communication. Benveniste illuminated this truth decades ago. In the 1960s, he shed light to bees' capacity for symbolism, albeit they lack the means to defy or disregard a message. As Benveniste aptly stated, the "message of bees is not to be analyzed." Despite showcasing a penchant for symbolic cognition, European

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<sup>8</sup> Thanks to Benveniste, we know that communication between bees takes place about a fixed content without metalinguistic reflections, namely the existence of a source of sugars or pollen.



bees (*apis mellifera*), as Moreno et al. (2012) assert, lack the ability to forge new arbitrary connections from their learned relations.

The following day, they lay still, their wings spread on the earth, bellies turned upwards. Occasionally, I discovered them maimed, crushed under the weight of hurried footsteps in the dark night. Yet, despite the fierce foot, they never resisted. As morning breaks, I step into a bee graveyard. I find them strewn in varied places, lifting them tenderly and placing them within the soil of a potted plant, for my species hold reverence for the departed, engaging in rituals to honor their passing. This small act of tending to such minuscule beings, extending to them the same wishes we hold for ourselves, evokes empathy, illuminating our relationship with life, death, and the interconnectedness of all earthly existence. In Spinoza's view, this act signifies both the autonomy of a liberated being and the reasoned approach to existence. Such multi-species care embodies what I term *sympoiethics*.

From the bees' point of view, we are living in the *Apicene*. However, from the Anthropocene perspective, the end of the *Apicene* would be the end of any *anthropos*, whether they look at the sky or the mud. The end of the discursive time of bees marks the terminus of our own, so that attention to the existence of bees, their life and death is a condition of human life. This is the cultural basis that conditions the communicability between humans and bees: the interest in pollination, planetary coexistence, the sharing of a discursive time, which is responsible for forging intersubjectivity. "The condition of intersubjectivity is what makes linguistic communication possible" (Benveniste, 1974, p.78), and this intersubjectivity is conditioned by discursive time, the time of language in which humans and bees are subjects.

## **7. *Sympoiethics***

*Sympoiethics* is a word of blended essence, merging *ethics* with *sympoiesis*. With Foucault (1984) I define *ethics* as a *free and unrestricted desire to take care of oneself and others*. It is a responsibility that every free human has. *Sympoiesis*, on the other hand, "means 'making with'. Nothing makes itself; nothing is really autopoietic or self-organizing. (...) *Sympoiesis* is a word proper to complex, dynamic, responsive and situated, historical systems. It is a word for worlding-with, in company" (Haraway, 2016, p. 58). *Sympoiesis* is a perspective on existence that displaces the blind individualism and human exceptionalism that we have fully experienced in the epistemological history of linguistics. This concept gains ethical force as it dramatizes our relationality and our insertion into an indexicality of nature that puts us in intimate contact with other forms of life and non-life. *Sympoiesis* sheds light on the fact that our evolutionary race has not been solitary and that our adaptive advantages are also the achievements of our fellow species.

Critters interpenetrate one another, loop around and through one another, eat each other, get indigestion, partially digest and partially assimilate one another, and thereby establish sympoietic arrangements that are otherwise known as cells, organisms, and ecological assemblages." (Haraway, 2016, p. 58)

Relationships between species are neither simple, nor can be romanticized. Associations of coexistence are not naive and present risks: "Interspecies kin has consequences." (Haraway, 2016, p. 106). Positive or negative, these consequences of conjugalities between strangers, between different species, are performative of life and non-life as it exists today. "Critters do not precede their relatings; they make each other through semiotic material involution, out of the beings of previous such entanglements." (Haraway, 2016, p. 60). In these formative and performative relational imbrications, the concept of sympoiesis is very timely when referring to "collectively-producing systems that do not have well-defined spatial or temporal boundaries. Information and control are distributed among components. The systems are evolutionary and have the potential for surprising change." (Haraway, 2016, p. 61). Furthermore, this concept denies any presumption of autopoiesis, self-formation or self-generation. On the contrary, sympoiesis proposes the recognition and dramatization of the distribution and decentralization of the generation of vital systems, such as our own bodies.

Humans are always a "form of life" that has at its origins only an interval between itself and its origins. Thus, the human is not in itself; its body is always also against itself and others. As a consequence, one does not preserve life through ridding oneself of conflict. Nor does one merely survive by preserving and expanding one's form. (Povinelli, 2016a, p. 80)

By honoring the interconnectedness that produces all beings and the endurance after death, sympoiesis becomes a guiding principle for joint attention through language. More importantly, it serves as a conduit for embedding ethics, for weaving ethical bonds into our epistemological essence. "Ethics must be seen as embodied, as individuals are inseparable from their bodies, and their bodily actions shape their experiences in the world" (Bonfante, 2020, p. 158). *Sympoiethics* emerges as a rejection of predefined structures of oppression, acknowledging our shared composition and embracing the enduring connections we hold with other species. For if we envision a mutual sense of care between humans and other beings, it must encompass our intertwined existence in space while honoring the diversity that defines us, underscoring the varying dynamics of power. It is within these differences that our ethical responsibilities lie, recognizing our performative relationships and the shared desire for collaborative conjugation.

## Final words

In the midst of our extractive knowledge-driven field of Linguistics, intricate modes of communication thrive within the interspecies realm, where we hold no central position. In my personal journey, rooted in my *intimate cosmology*, I embarked on an ethnographic exploration, immersing myself in the insect world with the curiosity of a linguist pondering a planetary ethics that transcends human-centrist perspectives. How the smells, colors and shapes of the flowers tell, the agonizing dances of the bees, the distress signals emitted by calcium-deprived plants, the glucose exchange between mealybugs and ants, and even the intricate memory trails of caterpillars – each element intricately interwoven through my writing, entangled in the fabric of *sympoethics*. *Sympoethics* was meant as an *endeavor to share the world through alternative modes of joined attention, primarily through language and discourse*. It recognizes language as our primary vehicle for directing attention, which is evident not only in the use of deictics in our verbal exchanges but also in the convergence of desires and the conversion of energy toward shared objectives that culminate in dialogue. Embracing sympoethics entails contemplating an ethics of shared attention and performative reciprocity and assuming an important role for linguistics and applied linguistics in the coming climatic disturbances. It entails challenging the complacency of axioms that elevate human language or consciousness as the sole arbiters of existence. My goal here was to ethnographically convey how insects have illuminated some ethical dimensions of language, emphasizing the essential role of joint attention as a conduit for both life and language, and underscoring the political imperative of acknowledging symbolic communion in our shared stewardship of the planet.

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