**Posthumanism and its implications for discourse studies**

Gavin Lamb and Christina Higgins

University of Hawaiʻi at Mānoa

**Abstract:** This chapter maps the emerging conceptual terrain of posthumanism and its relevance for discourse studies, with a particular focus on sociolinguistics and applied linguistics work. Posthumanism is a label applied to a range of theoretical and methodological approaches across the humanities and social sciences that are calling into question dominant assumptions generated by Western Enlightenment thinking about the human by giving greater consideration to the role of material objects, animals, and the environment in understanding the social world. Posthumanism thus considers the implications of the central role of materialism in our understandings of human agency, language, cognition and society. For discourse studies, a turn to posthumanism requires us to examine the role of discourse in how humans become entangled with the material world through their everyday embodied interactions with objects, artifacts, technologies, plants, animals, and the built and natural environment. Through embracing an activity-oriented perspective toward these human-nonhuman entanglements, the implications are that we must rethink modernist categorical boundaries between subject/object, human/nonhuman, and society/nature, both within metadiscourses about these dichotomies and through a more microanalytic lens in the analysis of text and talk.

Keywords: posthumanism, new materialism, nexus analysis, assemblage, actor network theory, spatiality, animals (and communication), ontology, embodiment

**1.0 Introduction**

Hundreds of people are walking along a beach, maneuvering around its rocky shore, wading into the water, and even swimming and snorkeling further offshore. The majority of people are here to see green sea turtles, who emerge from the ocean at unpredictable intervals to crawl up on the warm sand to sleep for several hours at a time. When a sea turtle emerges from the ocean, it moves slowly, pulling itself up inch by inch, stopping occasionally to look around, then pressing on further up the sand, seemingly unfazed by the hordes of people who dash over with cameras. “Give the honu space,” someone yells from behind, using the Hawaiian word for green sea turtle. She then unfurls a red rope to create a barrier between the people and the creature. “Do not touch” signs are promptly staked into ground to create a perimeter around the sea turtle, and on the sign, the sea turtle’s name, Brutus, is provided for the visitors. The person marking off the turtle’s space is wearing a badge, blue shirt and blue hat, all adorned with the logo of a sea turtle, and embroidered with the name of the community-activist organization of which this volunteer is a member: “Mālama na honu,” or ‘care for the sea turtles’ in Hawaiian.

This is an illustration of what Pennycook (2018) describes as the posthumanist question, or “how and why we have come to think about humans in particular ways, with particular boundaries between humans and other animals, humans and artefacts, humans and nature” (p. 445). In posthumanist thinking, discourse plays an important role in meaning-making, though its power to account for our understanding of our social worlds is limited by the material world in which discourse circulates. While discourse studies are usually anchored to social constructionist and postmodern ontologies which privilege meaning-making at the level of language and semiotics, posthumanism emphasizes the importance of materiality in making sense of our worlds. Rather than positioning discourse as emanating only from human cognition and human-made relationships, posthumanism locates discourse at the nexus of semiotic and material affordances. Discourse is important for posthumanism in the form of circulating ideological stances about human-material relations. For example, “Big-D” (Gee, 2015) discourses about human agency and nature are the result of people enacting socially and historically significant identities through their actions and values. On the one hand, the scene above illustrates a Discourse of sea turtle tourism, mobilized in part by a tourism industry that uses wildlife to stage tourists’ thrilling anticipations and encounters with sea turtles frolicking in their natural habitat. On the other hand, we see a rather different Discourse of sea turtle conservation and protection that designates green sea turtles as a protected species and which admonishes tourists’ behavior accordingly, framing such conservation via the Hawaiian language. This Discourse of sea turtle protection mobilizes an institutional infrastructure of laws protecting sea turtles, educational outreach, and the recruitment of volunteers to carry out the communicative goals of sea turtle protection and education (Lamb, forthcoming). Human-sea turtle interactions have only recently come into being in the past few decades as Hawaiian green sea turtle populations have recuperated from near extinction in the 1960s. Here, at Laniākea Beach, on the island of O‘ahu, Hawai‘i, posthumanism helps to understand how new arrangements of discourse, culture, and nature are taking shape as different actors, human as much as nonhuman, converge and conflict. In terms of Gee’s (1986) “little-d" discourses of conversational interactions and texts, we can monitor how these arrangements are dynamically produced and altered in dialogue with the material aspects of transportation routes, sea turtles, the ocean, and the beach.

Discourse plays an important role in mediating the boundaries between the human and the nonhuman, for through discourse, we signify events and relations among people, things, history, and actions. Discourses constrain knowledge about how to behave around endangered sea life, and they also enable new knowledge formations to be produced in relations of power, as expressed through language and actions (Foucault, 1970). Discourses are also embedded in the material world through histories of actional and discursive resemiotization, as meaning is transformed into more durable objects and built infrastructure (Iedema, 2001; Scollon and Scollon, 2003). Laniākea Beach offers a rich illustration of how discourse operates as humans come to understand their role in the material world, and how discourses in turn are “concretized” into material effects that shape both human and non-human action (Latour, 1990). In the case of green sea turtles in Hawaiʻi, discourses of tourism, which naturalize the human entitlement to nature as spectacle, come into contact with discourses that assert conservation, and which question that entitlement.

Moving away from human-animal encounters, consider human-airplane relations for a moment. As [Thurlow (2016)](https://paperpile.com/c/3JY6CN/FWKq) points out, airplane travel, as a microcosm of social class relations, provides insight into global consumption practices, class ideologies and material and structural inequalities dividing identities, communities, nation-states and hemispheres (Thurlow, 2016). His critical discourse analysis of elite travel discourse tells us as much. But in taking us beyond, or behind the first-class curtain of logocentric and visio-centric dimensions of discourse analysis, we are brought on board to experience the materiality of classed plane travel. Here, we are also made to hear and touch how class divisions are realized in the sounds of clinking cutlery echoing from first class, the soft touch of first-class pajamas provided to elite travelers (and denied to others), or the ‘snap-snap-snap’ of a flight attendant buttoning up a blue curtain separating coach from elite class, with a sign reading “world class business (only) - lavatories in rear.” Plane spaces, with their tight juxtaposition of eliteness and the rest, do not just turn on the material and embodied semiotics of inclusion and exclusion. They are also shot through with, and economically dependent on, seemingly more immaterial affective effects that strategically circulate euphoria, excitement, disappointment, disgust, jealousy, and desire among target consumers. In this way, the semiotic landscapes of aerospace elite mobility “do not just get into one’s head; they also get under one’s skin” (p. 496). The physicality of class division and the affect felt through being given ‘superior’ service (or the desire for it) come together with language as a means of knowing and being in the world. Posthumanist discourse studies push us to consider how discourse analysts might show this multisensorial knowing of the world through our research.

Of course, those elite few who do travel on planes – as all plane travel is essentially elite considering the vast majority of human beings will never step foot on a plane – are increasing their carbon footprint on the planet exponentially beyond what they might if they were to stay on the ground. Climate change discourse implores us to fly less, as every flight we take adds to the global-warming gases wreaking havoc on the planet. Rising sea-levels, desertification, coral reef die-offs, industrial animal agriculture, species extinction, deforestation. The list of human-induced ecological devastation goes on, a global socio-ecological catastrophe captured by the idea of the Anthropocene, the scientific diagnosis of our current era. The Anthropocene indicates that humans are influencing every micro and macro aspect of earthly existence, from genetics to the global climate, leaving traces of our signature in the fossil record for millennia to come: ‘we’ have become a geological force of nature. But in lumping all humanity together in this global we – Anthropos – the Anthropocene blurs human responsibility for the ecological crises proliferating around the world. These current ecological crises underscore the point that “mainstream linguistics has forgotten, or overlooked, the embedding of humans in the larger systems that support life” (Alexander & Stibbe, 2014, p. 585). More fundamentally, attending to the embedding of humans in the living and material world involves a recognition of the foolishness of human exceptionalism. This is an idea that has fueled the violent and exploitative treatment of animals and the natural world. But it also shows how human exceptionalism insidiously worked its way through centuries of colonialism and capitalism to position some humans as more human than others along lines of racial, gender, class, and sexual discrimination.

Posthumanism is an umbrella term for a range of approaches across the social sciences and humanities that, at their core, challenge this liberal Enlightenment notion of human exceptionalism. Posthumanism raises questions about human entanglements with material objects, technologies and living beings. In attending to these entanglements, posthumanism asks what it means to be human when we recognize the empirical flimsiness of modernist divides between society and nature that have erected ideological boundaries between the human and what is deemed to be non-human. In one sense, posthumanism suggests “we have never been modern” [(Latour, 2012)](https://paperpile.com/c/3JY6CN/G3Su), or phrased another way, we have always been posthuman. In this chapter, we present posthumanism as a challenge to notions of human exceptionalism and human hubris undergirded by a Western philosophical tradition privileging the liberal Enlightenment human subject. Rather than a new academic turn, we recognize that “scholars working across varied fields in sociocultural linguistics have contributed to a general posthumanist perspective for some time now, even if they rarely identify them as such and may not entirely align with these theoretical frameworks” (Bucholtz & Hall, 2016, p. 187). Important contributions include discourse research on embodied interaction with objects, technologies and the built landscape (Goodwin, 2000; Jones, 2009; Norris, 2004; Pennycook, 2017; Scollon and Scollon, 2003). This work examines the semiotic-material alliances forged between bodies, objects, discourse and place through embodied interaction. Materiality is not mere, passive ‘stuff’, but through semiosis, becomes a vibrant, dynamic and active partner in human action. In this chapter, then, we suggest posthumanism offers an important re-turn for discourse studies to questions of what it means to be human when we recognize our embeddedness in the material world and the larger systems that support life, or what the posthumanist geographer Sarah Whatmore [(2006)](https://paperpile.com/c/3JY6CN/osBl) calls a “return to the livingness of the world."

**2.0 Overview of the topic**

In this section, we briefly map out five key areas contributing to posthumanist thinking in the social sciences and humanities. These broad academic engagements with posthumanism include critiques of humanism, actor-network theory, assemblage theory, new materialisms, and critical plant/animal studies. In briefly discussing these approaches, our aim is not to provide a comprehensive overview of what posthumanism is, but rather highlight some of the threads in this wide-ranging body of work that we see as offering fruitful theoretical and methodological avenues for discourse analysts to pursue.

**2.1 Provincializing Western knowledge about the human**

One important point of departure for posthumanist approaches is an argument for “provincializing” (Chakrabarty, 2000) the classic narrative of modernity inherited from European Enlightenment thinking about the human. This modernist narrative has sought to standardize and universalize a rational, culture-neutral, and value-free science of human reason and progress across the globe. The kind of knowledge produced by this modernist project is justified as universal because it is claimed to be context-independent, and therefore can (and should) be applied everywhere and to anyone. One profound outcome of this narrative is the notion of a universal human subject undergirded by a shared human nature. While this perspective helps to advocate for inclusivity in the realm of universal human rights, Western humanism has just as often been used as a powerful political technology of exclusion. Universal humanism has largely served mainly white, western male elites who police the boundaries around the category of the human to determine who qualifies as fully human and who does not: historically people of color, women, and people with disabilities. Furthermore, the universal capacity for language is an important scaffold for the modernist notion of humanism. But in another exclusionary move, people whose language is deemed as divergent from its particular model of humanity, such as creole speakers and the Deaf community, have been historically stigmatized and denigrated by those with authority.

In light of these concerns, one way to understand posthumanism is as an umbrella term for projects trying to critically rethink these representationalist-realist debates about (human) society and (nonhuman) nature by more directly engaging with the concept of ontology. The intellectual impasse between social constructionism and scientific realism is due to the fact that both perspectives “subscribe to a form of representationalism that the new materialism can help us avoid.” (Pennycook, 2018, p. 458). Traditional notions of representationalism are grounded in a Cartesian mind-body dualism and Saussurean structuralism that theorizes an insurmountable divide between linguistic representation and the material world. In resisting these dualisms, posthumanist approaches are asking how discourse, language and representation are emergent from and continuous with the embodied and material world. In this sense, they are not just seeking to bridge this language-materiality divide, but to potentially dissolve it altogether. From this perspective, discourse is grounded in and made possible through its *entanglements* with materiality, a view that emphasizes how matter is active and continuous with discourse rather than passive and set apart from it (Barad, 2003). The aim here is to open up ways for discourse analysts to bring the material and living world more forcefully into our analyses.

Broadly speaking, a posthumanist call to ‘provincialize’ Western divides between human/nonhuman, society/nature, and representation/materiality aims not to get rid of these divides, but to situate them within a particular knowledge-making lineage emanating from Europe. In doing so, a posthumanist stance aims to dethrone this lineage of ontological dualisms and situates it among other knowledge traditions, including non-Western and Indigenous sources of knowledge production about human-nonhuman relations. Next, we summarize how key approaches in the realm of posthumanism engage in this epistemological reterritorialization.

**2.2 Actor-network theory**

Actor-Network Theory (ANT) has been a major stream of inspiration for posthumanist arguments critiquing human exceptionalism and giving greater appreciation for the role of nonhuman agency in explanations of ‘the social.’ Bruno Latour’s [(2005)](https://paperpile.com/c/3JY6CN/eXvO) work is a major touchstone among posthumanist approaches, and particularly in ANT’s diasporic set of research concerns across a wide range of interdisciplinary research interests. In his book, *We have never been modern,* Latour (1993/2012) challenges modernist divisions between nature and society, arguing that these categories work to purify the indeterminate ‘hybrid’ natureculture entities and beings that proliferate in the world. Building on this, ANT proposes a flat or symmetrical ontology that rejects a priori distinctions between subjects and objects or society and nature. Instead ANT develops an analytic set of concepts to aid researchers in maintaining a sensitivity to the indeterminacy and open-ended emergence of what comes to count as social or natural in practice.

Classic ANT is largely concerned with the network-building and network-consolidating practices of social actors, whether an individual, a group or some human-nonhuman collective. *Translation* is one of the key notions in classic versions of ANT to describe these network-building processes [(Callon, 1984)](https://paperpile.com/c/3JY6CN/h02k). Here, translation involves a dialogic process of semiotic-material transformation. The concept aims to describe how social actors come into being and extend their influence by reshaping the discursive grounds for relation-making in order to recruit other entities and beings into their strategic projects of network-building. ANT is perhaps most well-known for its claims about nonhuman agency, or the capacity for material objects to act. In making this argument, ANT begins with two basic theoretical moves: first, agency is destabilized as a manifestation or emanation of individual human intention. Researchers instead investigate how agency emerges as a relational achievement spun among heterogeneous entities and beings all coming together in a network of relations to make some course of action possible. A second move, building from the first, is to de-couple binaries such as subject-object, society-nature, mind-body, and time-space, where human qualities of intention and agency are primarily placed on the first element in these binaries. Instead, rather than assume these binaries in advance, emphasis is placed on investigating how agency emerges in these relations in situated practice. That nonhuman entities and beings can be actors – a turtle, a plane, a door, or a rock – has been one of ANT’s more controversial claims. However, ANT’s approach is not to attribute human-like agency to nonhuman objects, but to disentangle intentionality from agentive potential and focus instead on effects: any entity that has an effect in a network – that makes a difference – is agentive (Law & Mol, 2008).

**2.3 Assemblages**

Assemblage is an English translation derived from the French word *agencement* (‘arrangement, fitting, fixing’) in the spatial philosophy of Deleuze and Guattari [(1987)](https://paperpile.com/c/3JY6CN/sMPX), and shares many concerns with the human-nonhuman practices of relation building in ANT. Whereas early versions of ANT were vague about what lies beyond networks and what forces destabilize them, assemblages help give greater focus to the fluidity, non-linearity and unpredictability of association-making of actor-networks. There are two insights in particular that have been especially influential in this work. The first involves how assemblages theorize not just the provisional assembly of heterogeneous entities, but how relations among bodies, objects, practices and places are transformed along trajectories of discursive movement. These trajectories are described with the metaphors of rhizomes, on the one hand, and trees on the other. Rhizomes (such as ginger roots) grow horizontally under the surface of the earth and, are mobilized as a metaphor to describe non-hierarchical and non-linear network-building trajectories, where associations can be made at any node along the rhizome. In contrast, arboreal structures, like trees, are hierarchical, static and rooted in the ground. Their dendritic logic seeks to impose structure, controlling the trajectory of networks for strategic purposes. As Deleuze and Guattari describe it, “The tree imposes the verb ‘to be,’ but the fabric of the rhizome is the conjunction, ‘and...and...and.’” (1987, p. 25). This point about assemblages is not that they emphasize change over stasis, but that they seek to explore how stasis and change, or fixity and fluidity (Pennycook & Otsuji, 2015) always operate together, along dynamic pathways of discursive transformation.

In seeking to better understand the complex kinds of semiotic associations that link discourse with human bodies acting in the material world, the concept of assemblage also draws attention to the alternative forces of human-nonhuman connection that lie beyond or exceed humanist discursive representation. Affect, in particular, has emerged as an energetic force that triggers relational exchanges beyond the threshold of language or representations and which connects us to the material and ecological world through more visceral emotional and corporeal channels of meaning-making (Thrift, [2008)](https://paperpile.com/c/3JY6CN/ni5H).

**2.4 New Materialisms**

 Another central body of work informing posthumanist perspectives on human relations with the material and living world are a variety of “new materialisms.” These approaches draw on a different line of thinking from the historical materialism of Marxism, which focused on the economic relations in societies as the explanation for their development. New materialisms extend insights from feminist and phenomenological theories of the body’s situated entanglement with the material world, drawing attention to the material inequities related to gender, race, class, and sexuality. Emerging understandings in physics describing the vitalism and agentive qualities of matter also play an important role here as well. Nature is no longer conceived of as a reliable script that humans can simply read off, but is a vibrant and unpredictable participant in human meaning-making processes. As Bennett [(2010)](https://paperpile.com/c/3JY6CN/VNtH/?noauthor=1) argues, new materialism aims to experiment with “narrating events (a power blackout, a crisis of obesity) in a way that presents non-human materialities (electricity, fats) as themselves bona fide agents rather than as instrumentalities, techniques of power, recalcitrant objects, or social constructs” (p. 47). The major impetus behind this approach is to challenge the human hubris that assumes nature to be a passive and instrumentalized resource for human use and control. The ontological division between human subjects and nonhuman objects inherited from Enlightenment thinking fuels human hubris as the sole conductors of the world, “preventing us from detecting (seeing, hearing, smelling, tasting, feeling) a fuller range of the nonhuman powers circulating around and within human bodies” (Bennett, 2009, p. ix).

 Barad’s [(2003)](https://paperpile.com/c/3JY6CN/BEb4) notion of posthumanist performativity has also been influential in theorizing new materialisms. It “calls into question the givenness of the differential categories of human and nonhuman, examining the practices through which these differential boundaries are stabilized and destabilized” (Barad, 2003, p. 66). Notably, this approach challenges Western notions of representationalism inherited from a Cartesian legacy that presuppose an ontological chasm between words and things, mind and matter, and culture and nature. This is also a challenge to Saussurean structuralist representationalism which posits language as arbitrary and untethered from its relations to the material world. In this regard, an important point the new materialist approaches make is the silencing effects that representationalism has had on our recognition of the agentive participation of materiality in discursive practices (Coole & Frost, 2010, pp. 6-7). To emphasize the active role of matter in constituting human activity, this approach brings focus to discursive practices as materializing practices that continually compose and (re)configure human-nonhuman relations in the world (Barad, 2003, p. 809).

To a new materialist, then, a sea turtle tourism destination is not simply about the discursive practices, social relationships or even the discursive representations embedded in objects and signs that can be found there, but is better understood as a multifaceted, vibrant assemblage of sand, emotions, transportation infrastructure, seawater, social media, adventure travel lifestyles, ecotourism, sunglasses, credit cards, the excitement of anticipation, and sea turtles. The point is not to make an exhaustive list of all possible entities and beings that make an appearance, but to be attuned to how nonhuman entities and beings interpellate human discursive practices. In other words, it pushes discourse analysts to consider how objects, through their material presence and semiotic intervention in our lives, have consequences for human action and “make people happen” (Kell, 2015). In addressing this admittedly difficult terrain of ideas on how to address the agency of nonhuman materiality in relation to human discourse and practice, posthumanist plant and animal studies have provided important insights here, an area of research we turn to next.

**2.5 Posthumanist plant and animal studies**

 While many posthumanist approaches examine the semiotic-material interactions between humans and objects, technologies, and built infrastructure, there is a growing body of work across the social sciences taking up posthumanist concerns to explore more lively and organic human engagements such as with viruses, bugs, pets, wild animals, and forests. Ethnography emerges as a key method in this disparate body of work spread across anthropology, geography, and the environmental humanities, to attune researchers to the situated practices humans engage in with the nonhuman living world. As Kirksey and Helmreich (2010) argue in their introduction to multispecies ethnography, “Creatures previously appearing on the margins of anthropology—as part of the landscape, as food for humans, as symbols—have been pressed into the foreground” (p. 545). These studies examine the kinds of relationships people construct with a diverse range of creatures, and what kinds of alliances, conflicts and entanglements emerge in these encounters. Exploring these human-nonhuman entanglements raises important questions about how the agency of plants and animals intervenes in human social practices, as well as what kinds of boundaries between nature and culture are being made or unmade in these ‘more-than-human’ assemblages (Whatmore, 2006).

Posthumanist ethnographic approaches to human discursive and interactional practices with animals and natural places serve as a key point of departure for these studies. This work argues that language and discourse has been given too dominant a role, obscuring our understanding other non-discursive connections being forged in these encounters. For example, in exploring the interactions between the Quichua-speaking Runa in Ecuador’s Upper Amazon with their dog companions, Kohn (2007) examines how people and dogs become entangled in one another’s lives through their co-constitutive semiotic practices. Arguing that human language is not radically separate from (or exceptional to) animal forms of communication, he seeks to show how meaning is built on more fundamental embodied semiotic processes used by all living organisms to sense and instigate actions in the world around them. Exploring these human-nonhuman entanglements raises important questions about how the agency of plants and animals intervenes in human social practices, as well as what kinds of boundaries between nature and culture are being made or unmade through discursive-material practices. Perhaps most fundamentally, multispecies studies are asking symmetrical questions about how plants, animals and ecosystems become agentive and integral partners in the emergence of human social practices.

**3.0 Implications for discourse studies**

These posthumanist frameworks deeply challenge most of the current treatment of language as a key component of discourse in sociolinguistics and applied linguistics, which are two fields that have claimed a major stake in discourse studies. These are also the perspectives that we are most familiar with ourselves as scholars who study multilingual practices from a social and semiotic perspective. Much of this research presupposes that language is the primary focus of analysis, and hence largely brackets non-linguistic elements off, regarding them as “context” for the analysis of language. In fact, most academic journal articles that examine discourse data contain a section for the context wherein authors describe the linguistic, demographic, and sometimes, historical context of the situation being analyzed. Several long-standing discourse approaches have taken a deeply contextual view to the analysis of language, including Fairclough’s (1989) three dimensional approach known as Critical Discourse Analysis (CDA) and Interactional Sociolinguistics (e.g., Gumperz, 1982), an approach to studying conversational interactions with attention to not only what is “brought about” in language but also what is “brought along” (Giddens, 1976) from the material world, including structures of inequality. Still, these approaches have largely treated language as indexical to their socio-political contexts, rather than seeing language as enmeshed within and resulting from networks or assemblages involving material and human actors. The result is that most discourse research in these areas has privileged language as the starting points for analysis.

 In our view, *nexus analysis* was the first approach to point to a posthumanist orientation which included language as part of an interconnected set of semiotic dynamics. Scollon and Scollon (2003) and Scollon (2004) use “nexus” to refer to the intersection of historical trajectories of people, discourses, objects, and places to illustrate sites of engagement. While human action takes a central role, the Scollons’ examination of how technology and history mediates human action embraced the posthumanist interest in the material world’s role in human experiences. Their study on the effort to improve Native Alaskans’ access to higher education in the 1980s tied the practices in the classroom and the community to the economic boom brought by the discovery of oil. They analyzed these changes ethnographically, examining how human action was equivalent to a set of cycles of discourse that were mediated by technology for teaching and learning, and particularly, the early days of the internet. Their framework privileged human activity as a series of “itineraries of relationships among text, action, and the material world through what [they] call a nexus analysis” (2008, p. 233). Scholars working in this tradition have since used nexus analysis to analyze discourse from a holistic, integrated, and materially-informed perspective. For example, Jones and Norris (2005) offer illustrations of how texts such as AIDS education pamphlets and computer instructions are used as tools for human action and resources for constructing identities. More recently, Lou (2016) analyzed how the linguistic landscape in Washington D.C.’s Chinatown intersected with the material processes of gentrification and city planning measures which tended to exclude the Chinese community.

Discourse research has also more recently drawn on the metaphor of the rhizome to examine the trajectories of interdiscursive assemblages that interweave together in complex ways to shape people’s discursive practices. In early work in this area, Ramanathan (2006) discussed how the selection and translation of texts and their embedding into other academic texts exemplifies how studying the assemblage of texts invites us to see their constructed nature and encourages us to realize that they are one of many possible assemblages, thereby drawing our attention to the politics of knowledge construction. In more recent work, Pietikäinen (2015) explores the potentialities that Sámi language speakers are experiencing at the current historical juncture where indigenous languages and multilingual resources are increasingly valued but also commodified and contested. In analyzing how Sámi in the village of Inari is represented and used, she illustrates how historical, material, and discursive elements rhizomatically produce and constrain opportunities to use the Sámi language. In tracing these interdiscursive networks, this work raises critical questions about the location of agency, subjectivity and linguistic competence. Rather than attributing language maintenance to individual efforts and capacities, the analysis shows that the capacity for minority languages are relational achievements spun from shifting networks of objects, bodies, people and places, all human as much as nonhuman, and that come together at different moments to make our day-to-day discursive practices possible. Canagarajah [(2018)](https://paperpile.com/c/3JY6CN/SEIR), for example, references the rhizome to describe how a Korean STEM scholar reworked a series of several drafts of an article for publication. In producing this text, the scholar engaged with a multifaceted and shifting trajectory of discursive and material networks that work to transform his polysemiotic interactions into an academic English product along the way. Here, the communicative competence is not an individual capacity, but a capacity to ‘align’ a shifting network of embodied practices, objects, technologies, texts, images and interactions with his communicative objective: publishing an article.

Very recently, posthumanist work in applied linguistics has foregrounded the primacy of semiotics other than language. Pennycook and Otsuji (2015), for example, begin one study of *metrolingual practices* in Sydney by researching a cucumber whose origins in Japan (and consequent reputation for crunchiness) are what cause people to travel to particular markets, thereby producing new spatial repertoires involving not only the languages that they encounter and use, but also the cucumbers themselves. Similarly, Zhu Hua et al. (2017) analyze Polish corner shops in London, noting how the spatial layout of the shop, the display of goods for sale, body movements, gaze and language work together to form communicative zones in which customers and the employee engage in sense-making activities. In our own different studies on language in the tourism landscape in Hawaiʻi, nonhuman elements play a pivotal role in the expansion of Japanese as an important language for communication with tourists, including transportation routes, sought-after food items such as pancakes with macadamia nut sauce, and Hawaiian turtles (Higgins & Ikeda, forthcoming; Lamb, forthcoming). All of this research has highlighted the need to shift focus from language as the starting point and to pay greater attention to the ways that humans are enmeshed in dynamic relationships with the material world.

**4.0 Issues and debates**

There are several issues and challenges that arise for discourse researchers drawing on posthumanist theory. The issue of nonhuman agency, and the flat ontology it implies is challenging researchers in fields such as anthropology and human geography to re-attune their theories and methods so as to give equal weight to the role of materiality and the agency of animals as participants in human activity. Adopting a flat ontology rejects the a priori dualism dividing subjects and objects to foreground instead how nonhuman entities and beings come to provoke, instigate, inspire, resist, block, interpellate and otherwise demand attention of human experiences and practices. As mentioned above, discourse researchers have pointed to a flatter posthumanist view of human agency in their work in treating agency not as an individual capacity, but as a relational achievement spun between mediational means and the mediated actions these resources make possible. However, a flat ontology also raises a number of methodological concerns. Canagarajah (2018), for example, has suggested that, while illuminating in a number of ways, a flat ontology which distributes agency indiscriminately across people and objects may also risk diluting a critical lens on power relations in unequal communicative encounters. Another challenge related to this is to recognize how researchers themselves become entangled in this messy relational ontology of research practice that posthumanist theory encourages (Law, 2004; Jones, 2018).

Moreover, a posthumanist symmetrical stance on research phenomena encourages researchers not to assume in advance what discursive and material resources ultimately mediate the focal event under study but to instead trace what resources become relevant for the participants themselves in moments of action, and across longer chains of events. A concern here arises if language itself emerges as more or less irrelevant to the participants’ activity(ies) under focus. For discourse researchers who ostensibly study 'language and discourse,' this raises questions about what the object of study actually becomes from a posthumanist approach to discourse analysis, when language ends up being of not so great importance. To give one example, in wildlife tourism settings such as the sea turtle tourism site in the introduction to this chapter, much of the human interaction with these creatures may involve little verbal engagement, relying much more or entirely on modalities such as gaze, pointing, body positioning, and other modal aggregates of sense-making such as “touch-response” feel (Norris, 2012).

This also raises the challenging issue of how posthumanist discourse research that is more ecologically grounded in the global systems that support life might account for the participatory ‘actions’ of other living beings and ecosystems, such as sea turtles and their habitats. For example, how might discourse researchers better include a much wider terrain of nonhuman agency and meaning-making in their theoretical and methodological frameworks? This question raise more fundamental concerns about what constitutes ‘discourse’ in the field, and thus what the boundaries and reach of discursive inquiry ought to include.

One fruitful entry point into these questions is to turn to research on semiotic landscapes in sociolinguistics (Jaworski & Thurlow, 2010) foregrounding the body, and the multisensorial rapport of forces it imbricates us in as a central locus of discourse analysis (Pennycook & Otsuji, 2015). Building on mediated discourse analysis (Norris & Jones, 2005; Scollon, 2002), Thurlow and Jaworski (2014) analyze tourists’ embodied *kinesic displays* (e.g. postures, pointing, poses, gestures, gaze, camera holding, walking) in their movements through the site of the Leaning Tower of Pisa in Italy. The mostly silent embodied movements of tourists are seen, not as individual, isolated acts, but as interdiscursive upwellings of activity produced from an irreducible assemblage of bodies, discourse and place. From another perspective, in analyzing the interactional organization of tactility and tasting of gourmet cheese, Mondada (2018) shows how conversation analytic methods can demonstrate the materiality and multisensorial nature of objects constituting intersubjectivty. Perhaps more controversially, a posthumanist approach would also direct discourse or conversation analysts to acknowledge objects like cheese not just as object-like resources for interaction, but as actors in their own right (Ren, 2011).

**5.0 Implications**

The ontology of posthumanism has many implications for how we go about doing research in the fields of applied linguistics, sociolinguistics, and related fields such as linguistic anthropology and literacy studies. At present, much of the writing about posthumanism remains at a conceptual level, with illustrations of the key concepts provided via real-world examples. However, the more practical methodologies remain under-described, in our view. Currently, researchers who embrace posthumanism in these fields engage in ethnography as the key framework for understanding particular actor networks, nexuses, and assemblages. While ethnography is essential to developing a holistic understanding of a place, community, or context, more attention is needed on how researchers’ experience in doing ethnography can be documented and reported on with reference to the concept of a flat ontology. Pennycook and Otsuji (2015) characterize their team-based ethnographic work as steady engagement with the unexpected in markets, restaurants, and city streets in Sydney and Tokyo. Their transcripts of recordings were particularly difficult to accomplish, as the mixtures of languages challenged the multilingual transcribers to identify what language and what meanings were being conveyed, and showed many disagreements over the details. The mobile quality of their data led them to both follow individuals as they navigated through spaces while using a range of semiotic resources. They also chose to analyze spaces from a more static perspective, identifying how resources emerged and were used in those spaces. For particular contexts, they realized the importance of objects in producing multilingual networks of mobility, so they focused on tracing the connections between items like Japanese cucumbers, and the actions of distributing, buying, and consuming these cucumbers, all of which occurred while people engaged in multilingual multitasking.

 Posthumanism calls for researchers to focus on all semiotic affordances from a posthumanist/assemblage perspective, rather than beginning with language or discourse. This holistic view makes issues like the idea of transcription difficult, particularly since many nodes of the rhizome or actants in the network are not synchronous. This leads to the problem of what semiotic modes to transcribe, and what to include and exclude. Mediated and multimodal discourse analysis (Norris, 2004; Norris & Jones, 2005) offers models for transcription that include non-human aspects such as furniture and “frozen actions” such as a plate of warm food, indicating the actions taken prior. Nonetheless, this leaves out many macrolevel considerations, including historically dominant ideologies that shape interaction. An illustration of this is found in Pietikäinen (2015), which shows how the legacy of political oppression toward the Sámi is part of the confluence of forces acting on speakers today. Though the language has become endangered, it is also a cultural commodity that draws tourism around new developments such as reindeer farms, where visitors are apprenticed in how to lasso a reindeer by a Sámi-speaking expert whose use of the language authenticates him as a member of an ‘exotic’ and ‘traditional’ culture that has been long displaced.

Noting the challenges, Canagarajah (2018) analyzes STEM scholars’ work, where he adopts a narrative, case-study approach which allow him to draw on affordances from different spatio-temporal scales. An example is the analysis of a scientific diagram produced by a STEM scholar, Gunter, whose sedimented experience of reading many academic articles intersected with the human resources in his lab, including a fellow scholar who worked with him to transform his ideas into an effective diagram to show how the honeybee population declines in winter. After they produced the diagram, Gunter questioned his original logic, and the result was that his own thinking about the relationship between bee pheromones, foraging, and maturation changed. Canagarajah writes, “The visual model did not simply convey preconstructed ideas or supplement words, but was itself agentive in shaping human thinking and communication” (p. 278). We suggest that future posthumanist scholars do more to show others how the research process unfolds through the “methodology of following” the networks, as Latour (1987) advocates. In addition to the rich description of field work, researchers might consider sharing the process of following networks through open science platforms that allow others to engage in the process.

 Beyond implications for research methodology, posthumanism itself creates new discourses around the issue of origins, cause and effect, and chronology. In recent work on tourism on Oʻahu in the state of Hawai‘i, for example, it has become clear that Japanese celebrities play a key role in the ways that restaurants and shops become must-visit destinations for Japanese visitors in the residential town of Kailua (Higgins & Ikeda, in press). A discourse that has emerged there is a protectionist one, as many residents voice their concern over their hometown becoming overrun with tourists, thus losing its appeal. However, this discourse is in constant dialogue with other discourses from other nodes on the rhizome, including discourses that are both critical of and supportive of gentrification, a process that has taken place in Kailua due to land ownership changes over the past 20 years and ensuing retail and condo development. Japanese celebrities visit Kailua because it is charming, but it is charming because of the gentrification. At the same time, as economic opportunities for tourism have arisen in Kailua, the state’s tourism agency has created its own commodification discourses for Kailua, which have in turn been challenged by residents who have called for the agency to stop recommending Kailua as a destination for Japanese tourists. The result is that Kailua has become a place where NIMBY (‘not in my backyard’) discourses about development and gentrification coalesce with material changes that push these forces forward, resulting in discourses of resistance and critique in the process. It is important to examine other contexts in which competing discourses about social change and social problems arise in the nexus of material, discursive, and embodied engagements, and to explore the role of discourse in these entanglements.

**6.0 Future directions**

We have argued that discourse researchers are already contributing to posthumanist concerns by retheorizing the relation between discourse and key concepts in the field such as (non)human agency, materiality, embodiment and representation. This work is raising fundamental questions about the embedding of human discursive activity in the more-than-human material and living world. Here, we raise some issues we see as especially important for continued dialogue between discourse studies and posthumanist theory.

 How does embracing a flat ontology lead to more dynamic understandings of discursive practices, not as emanating from a purely human source, but rather as an emergent effect of human imbrications with objects, tools, technologies, across both physical and virtual places? One challenge presented by a posthumanist perspective will be to examine how the current era of ‘the digital’ is imbricating embodied and material worlds with virtual worlds in dynamic and unpredictable ways. A focus on the digital raises questions about how embodied-virtual interactivity across online and offline spaces empowers people to disperse and reassemble their discursive repertoire, agentive reach and sense of subjectivity in new ways. This is evident in how social media platforms such as YouTube and Twitter have become increasingly powerful technologies to amplify political activism such as during the Arab Spring and #BlackLivesMatter movement (Bonilla & Rosa, 2015; Shiri, 2015). At the same time, humans are also becoming caught up in the digital landscapes of state surveillance regimes (Jones, 2017). As these digital tools also become powerful technologies in the hands of corporations and nation-states, it will be important to understand how these global online-offline assemblages produce diverse forms of agentivity, carrying both empowering and disempowering agentive potentials for those – human and nonhuman alike – entangled with them (cf. Jones, 2009).

 While a flat ontology sensitizes researchers to the agentive participation of material and digital worlds in human semiotic practices, a further area of concern for discourse researchers to address will be how these practices are shaped through human interactions with the nonhuman living world. For instance, what agency potentials do plants, animals and natural places bring to the formation of social processes and discursive formations? Here, anthropogenic ecological crises from climate change to species extinction are spurring a new urgency for interdisciplinary scholarship in this area. In particular, posthumanist theory is increasingly invoking the idea of the Anthropocene to call attention to the ethically problematic and damaging kinds of relationships being forged between human and nonhuman beings in their relational co-becomings within assemblages. By this token, an important task will be to remain vigilant of where power, inequality and responsibility lie in these assemblages. This will require researchers to be precise in explaining how agency comes to be distributed across human-nonhuman assemblages through discursive practices, and develop a sensitivity to more partial vehicles of human and nonhuman agency such ‘actants’ and ‘mediants’ (Appadurai, 2015).

 Addressing how these and many other questions might be taken up through the ongoing dialogue between discourse studies and posthumanist theory is beyond the scope of this chapter, but much of this work is already underway in the field of discourse studies as we have argued above. In examining the interconnectivity among humans, discursive processes and the nonhuman material and living world, this dialogue will continue to open up interdisciplinary conversations on a range of important empirical topics, theoretical concerns and methodological innovations. Notably, in pointing to the material, embodied and more-than-discursive ways of knowing and being in the world, future work should continue to embrace supplementing more traditional text-based genres of academic knowledge production with multisensorial representations of knowing, being and doing in the world. Taking risks with alternative forms of knowledge production in the field will be especially important when seeking to share this expertise beyond the boundaries of academic debate.

**Summary**

This chapter maps the emerging conceptual terrain of posthumanism and its relevance for discourse studies, with attention to sociolinguistics and applied linguistics work. As a label applied to a broad range of theoretical and methodological approaches, a fundamental aspect of posthumanism is its aim to call into question dominant assumptions generated by Western Enlightenment thinking about ‘the human.’ This critical stance towards the category of the human runs in parallel with efforts to recognize the importance of material objects, animals, and the environment in constituting social processes. For discourse studies engaging in dialogue with posthumanist theory, these interdisciplinary conversations will continue to offer insight into the role of discourse in how humans become entangled with the material world through their everyday embodied interactions with objects, artifacts, technologies, plants, animals and the built and natural environment.

**Further Readings**

Canagarajah, S. (2018). Materializing ‘Competence’: Perspectives From International

STEM Scholars. *The Modern Language Journal*, *102*(2), 268-291.

This article offers a reframing of ‘competence’ by examining how multilingual STEM scholars engage in their work through linguistic, embodied and material resources. Building on conceptual insights from new materialism and actor-network theory, it explores some of the methodological implications of posthumanist thinking for discourse analysts.

Kohn, E. (2013). *How forests think: Toward an anthropology beyond the human*.

Berkeley: University of California Press.

In dialogue with emerging posthumanist multispecies studies, this ethnography investigates the semiotic entanglements of Ecuadorian Quichua-speaking Runa with the plants, animals and ecosystems they interact with in the Amazon. In challenging anthropocentric thinking about language, discourse and representation, the book offers an innovative understanding of semiosis as not only human, but an emergent property of all living beings or ‘selves.’

Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*[.](http://paperpile.com/b/3JY6CN/eXvO)

Oxford: Oxford University Press.

This book offers an in-depth introduction to actor-network theory from one of the key figures in its development. Divided into two parts, it first provides an overview of the theoretical influences motivating ANT’s call for a shift from a ‘sociology of the social’ to a ‘sociology of associations.’ The second part guides readers through the methodological principles underpinning ANT.

Pennycook, A. (2017). *Posthumanist applied linguistics*. New York: Routledge.

This book introduces posthumanism to the field of applied linguistics by arguing against the popular conception that language is the key to human exceptionalism. Pennycook dismantles this logic by drawing attention to the embodied, material, and distributed nature of language.

Scollon, S. W. (2004). *Nexus analysis: Discourse and the emerging internet*. New York:

Routledge.

This book offers an introduction to nexus analysis and remains a cutting-edge example of a posthumanist orientation to ethnographic discourse analysis. The method is illustrated through an investigation of how early internet communication mediated Alaska Natives’ access to various institutional assemblages in the 1980’s. The appendix of the book further summarizes the key princples of nexus analysis in a highly useful ‘field guide’ for examining posthumanist actor-networks and assemblages.

**References:**

Alexander, R., & Stibbe, A. (2014). From the analysis of ecological discourse to the ecological analysis of discourse. *Language Sciences,* 41, 104–110.

Appadurai, A. (2015). Mediants, materiality, normativity. *Public Culture*, 27(276), 221–237.

Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs*, 28(3), 801–831.

Bennett, J. (2009). *Vibrant Matter: A Political Ecology of Things*. Durham, NC: Duke University Press.

Bennett, J. (2010). A vitalist stopover on the way to a new materialism. In D. Coole & S. Frost

*New Materialisms: Ontology, Agency, and Politics*. Durham, NC: Duke University Press.

Bonilla, Y., & Rosa, J. (2015). #Ferguson: Digital protest, hashtag ethnography, and the racial

politics of social media in the United States. *American Ethnologist*, *42*(1), 4–17.

Bucholtz, M., & Hall, K. (2016). Embodied sociolinguistics. In N. Coupland, ed., *Sociolinguistics: Theoretical Debates*. Cambridge: Cambridge University Press, pp. 173-197.

Callon, M. (1984). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. *The Sociological Review*[,](http://paperpile.com/b/3JY6CN/h02k) 32, 196–233.

Chakrabarty, D. (2000). *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton: Princeton University Press.

Coole, D., & Frost, S. (2010). *New Materialisms: Ontology, Agency, and Politics*. Durham, NC: Duke University Press.

Deleuze, G., & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis/St. Paul: University of Minnesota Press.

Fairclough, N. (1989). *Language and Power*. London and New York: Longman.

Foucault, M. ([1966] 1970). *The Order of Things: An Archaeology of the Human Sciences*. (A. M. S. Smith, Trans.). New York: Vintage Books.

Gee, J. P. (2015). Discourse, small d, big D. In K. Tracy, C. Ilie, & T. L. Sandel, eds., *The*

*international encyclopedia of language and social interaction*. Boston: Wiley- Blackwell,

pp. 418-422.

Giddens, A. (1976). *New Rules of Sociological Method*. London: Hutchinson.

Goodwin, C. (2000). Action and embodiment within situated human interaction. *Journal of Pragmatics,* 32, 1489-1522.

Gumperz, J. J. (1982). *Discourse Strategies.* Cambridge: Cambridge University Press.

[Haraway, D. J. (1991).](http://paperpile.com/b/3JY6CN/gilG) *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge.

Higgins, C. & Ikeda, M. (in press). The materialization of language in tourism networks. *Applied Linguistics Review*.

Hult, F. M. (2015). Making Policy Connections across Scales Using Nexus Analysis. In F. Hult and D.C. Johnson, eds., *Research Methods in Language Policy and Planning: A Practical Guide*. Malden, MA: Wiley-Blackwell, pp. 217-232.

Iedema, R. (2001). Resemiotization. *Semiotica*, 137(1/4), 23-39.

Jaworski, A. & Thurlow, C. (eds.) (2010). *Semiotic Landscapes: Language, Image, Space*. London: Continuum.

Jones, R. H. 2009. Dancing, skating, and sex: Action and text in the digital age. *Journal of*

*Applied Linguistics,* 6(3), 283-302.

Jones, R. H. (2017). Surveillant landscapes. *Linguistic Landscape*, *3*(2), 149–186.

Jones, R. H. (2018). Messy creativity. *Language Sciences,* *65*, 82–86.

Kell, C. (2015). “Making people happen”: materiality and movement in meaning-making

trajectories. *Social Semiotics*, 25(4), 423–445.

Kirksey, S. E., & Helmreich, S. (2010). The emergence of multispecies ethnography[.](http://paperpile.com/b/3JY6CN/Iu2e) *Cultural Anthropology: Journal of the Society for Cultural Anthropology,* 25(4), 545–576.

Kohn, E. (2007). How dogs dream: Amazonian natures and the politics of transspecies engagement. *American Ethnologist*, 34(1), 3–24.

Lamb, G. (forthcoming). Towards a green applied linguistics in the Anthropocene: Human-sea turtle semiotic assemblages in Hawai‘i. *Applied Linguistics*.

Latour, B. (1990). Technology is society made durable. *The Sociological Review*, 38 (supplement), 103-131.

Latour, B. (1993/2012). *We Have Never Been Modern*. Cambridge: Harvard University Press.

Latour, B. (1987). *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge: Harvard University Press.

Law, J. (2004). *After Method: Mess in Social Science Research*. New York: Psychology Press.

Law, J., & Mol, A. (2008). The actor-enacted: Cumbrian sheep in 2001. In C. Knappett

and L. Malafouris, eds., *Material agency*. Dusseldorf: Springer, pp. 57–77.

Lou, J. (2016). *The Linguistic Landscape of Chinatown: A Sociolinguistic Ethnography*. Bristol: Multilingual Matters.

Norris, S. (2004). *Analyzing Multimodal Interaction: A Methodological Framework*. New York: Routledge.

Norris, S. (2012). Teaching touch/response-feel: A first step to an analysis of touch from an (inter)active perspective. In S. Norris, ed., *Multimodality in Practice: Investigating Theory-in-Practice-through-Methodology.* New York: Routledge, pp. 7-19.

Norris, S. & Jones, R. (2005). *Discourse in Action: Introducing Mediated Discourse Analysis*.

New York: Routledge.

Mondada, L. (2018). The multimodal interactional organization of tasting: Practices of tasting cheese in gourmet shops. *Discourse Studies*, *20*(6), 743-769.

Pennycook, A. (2018). Posthumanist applied linguistics. *Applied Linguistics,* 39(4), 445–461.

Pennycook, A. & Otsuji, E. (2015). *Metrolingualism: Language in the City*. London: Routledge.

Pietikäinen, S. (2015). Multilingual dynamics in Sámiland: Rhizomatic discourses on changing language. *International Journal of Bilingualism,* 19(2), 206–225.

Ramanathan, V. (2006). Of texts AND translations AND rhizomes: Postcolonial anxieties AND deracinations AND knowledge constructions. *Critical Inquiry in Language Studies: An International Journal*, *3*(4), 223-244.

Ren, C. (2011). Non-human agency, radical ontology and tourism realities. *Annals Of Tourism Research*, *38*(3), 858–881.

Shiri S. (2015). Co-Constructing Dissent in the Transient Linguistic Landscape: Multilingual Protest Signs of the Tunisian Revolution. In R. Rubdy & S.B. Said, eds,. *Conflict, Exclusion and Dissent in the Linguistic Landscape. Language and Globalization.* Palgrave Macmillan, London, pp. 239-259.

Scollon, R. (2008). Discourse itineraries: Nine processes of resemiotization. In V. Bhatia, J. Flowerdew & R. Jones, eds., *Advances in Discourse Studies*. London: Routledge, pp. 233-244.

Scollon, R. (2002). *Mediated Discourse: The Nexus of Practice*. New York: Routledge.

Scollon, R. & Scollon, S. W. (2003). *Discourses in Place: Language in the Material World*. New York: Routledge.

[Thrift, N. (2008). *Non-r*](http://paperpile.com/b/3JY6CN/ni5H)*epresentational Theory: Space, Politics, Affect.* London: Routledge.

Thurlow, C. (2016). Queering critical discourse studies or/and performing “post-class” ideologies. *Critical Discourse Studies, 13(5),* 485–514.

Thurlow, C., & Jaworski, A. (2014). ‘Two hundred ninety-four’: Remediation and multimodal

performance in tourist placemaking. *Journal of Sociolinguistics* 18(4), 459-494.

Whatmore, S. (2006). Materialist returns: Practising cultural geography in and for a more-than-human world. *Cultural Geographies*, 13(4), 600–609.

Zhu Hua, Li Wei & Lyons, A. (2017). Polish shop(ping) as translanguaging space. *Social Semiotics*, 27(4), 411-433.