After Words: There Is No Language without Materiality

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ABSTRACT

Posthumanist thought brings a set of ethical and political concerns to the (socio)linguistic table to do with human relations to the planet and its other inhabitants. This opens up a space for reconsideration of language and materiality. In some accounts, language is an immaterial medium whose relation to the material world is only symbolic or representational. New materialist accounts of language, by contrast, view it as embodied, embedded and distributed activity (language is assembled and extended by bodies in physical space). This is to suggest that language, both material and symbolic, is deeply entwined with a world both material and symbolic and that any approach to sociolinguistics that seeks to grasp language in the world needs to work with an understanding of the dynamic entanglements between an animated world of matter and a material world of language. This is to focus on the material foundations of communication, the corporeal, physical, or technological conditions of human and nonhuman communicative interaction and on the relationships between material realities and discourse. This is to ask what and where language is and to suggest that without material relations there is no language.

The articles in this special issue on unthinking language raise a number of questions for how we can reconsider language, embodiment, artifacts, and signs: What role do bodily dispositions play in sociolinguistic variation? How do deaf people who do not ostensibly share a (sign) language align their communicative practices? How do we make sense of the relations among embodied practices, material artifacts, and commercial enterprises? How is meaning collaboratively achieved between pets, communicative tools, and humans? In a very general sense, however, there is perhaps one simple question lurking behind these inquiries: Where is language? This is not the same as asking the more comfortable

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sociolinguistic question, Where are languages? As Joseph (2022b) observes, this is often answered with rather disappointing confidence through two forms of mapping: On the one hand, linguistic atlases draw lines and fill in colors to show where in geographical space different languages are spoken. As European colonizers—in competition on one level but in collaboration on another—drew up lines to divide their holdings into national and ethnic entities, so linguists came to the table to help in the division of the world by linguistic terrain (Hutton 2002; Errington 2008). More recent technologies, on the other hand, make it possible to attempt with new fMRI scans to map the places in the brain where languages can be found. Both approaches to language location are mistaken on multiple counts: Every line is a lie (Joseph 2022b).

If we try to answer the question "Where is language?" through geographical and cognitive mapping of separate languages, we make three problematic sociolinguistic assumptions: that languages are clearly bounded entities that can be located in cartographic or cognitive arenas; that accounting for its supposed subdivisions (languages) sheds light on the whole (language); and that we already know what language is. One who has asked the question directly is Finnegan (2015) in her book *Where Is Language?* The "cognitive language-centred model of the nature and destiny of humanity," she suggests, with its focus on language in the mind misses so much that matters, including not only many other cultural modes such as music, dance, and drama but also "the gestural, pictorial, sculptural, sonic, tactile, bodily, affective and artefactual dimensions of human life" (18). If we start with the assumptions that language is a set of cognitive operations and that these operations occur in people's heads, then the answer to the question "Where is language?" can be answered fairly simply in terms of its location somewhere between human (and only human) ears. Yet when we look at language with a more anthropological eye, when we observe language performances, when we watch people in interaction, we may start to ask why we have placed such narrow limits on what language is and why we draw such boundaries around the linguistic and the nonlinguistic.

Embodiment, Gesture, and *Hexis*

Sociolinguistics has of course nudged language out of its cognitive box into the world so that language swings back and forth in the social spaces between human heads: Language is something that is used in social contexts. This has been a useful addition to models in which language never seems to leave the cranium, but it does not do enough to redress the historical imbalance that has placed language and cognition inside the human skull, has assumed that language is primarily an

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internal capacity that is then used in social spaces (rather than view language as primarily social with possible cognitive consequences), and has relegated the body and the senses to a secondary domain. To the extent that (socio)linguistics has for a long time supported a view of humans as self-governing individuals, languages as separable objects, cognition as something in the head, language as separating humans and nonhuman animals, or agency as something only humans have, it has been an important player in the promotion of a humanist vision of language, literacy, and learning. Internalized approaches to language and cognition became the dominant modes of exploring second language development, for example, and have greatly hindered the applied linguistic understanding of language learning (Pennycook 2023).

Asking the question "Where is language?" can at the very least bring much greater attention to "touches, sights, smells, movements, material artefacts" and "shared experiences, dynamic interactions and bodily engagements" to go beyond the narrow story of cognition and language in the head or on the page (Finnegan 2015, 19). When we look at cognition from extended and distributed perspectives, when we reflect that the only serious way to study cognition is ethnographically, a consideration of the social, spatial, and embodied dimensions of language, of socially meaningful bodily *hexis*, opens up an understanding of language, learning, and variation as a distributed process. Several articles in this special issue enable this outward push, at least as far as the body and its moving limbs, starting with the observation that nonverbal communication makes up a significant part of interactive meaning, from body posture, facial expression, and eye contact to interactional synchrony and a range of gestures (iconic or deictic signs that indicate an object or nonrepresentational movements that emphasize a point or indicate rhythm). The fact that gestures are part of our communicative repertoires is not, of course, new: there have been calls for at least half a century to pay more attention to nonverbal communication (Pennycook 1985).

What the articles collected here start to suggest, however, particularly through their emphasis on *embodied practice*, is that language cannot be understood without considering the body and repeated social action. Once we understand language in terms of sedimented social acts (practices)—language is how it is because it is social before anything else—and embodiment—language in interaction always involves the body as voice, gesture, and synchronized activity—then its cranial instantiation becomes at best secondary. Levon and Holmes-Elliot's (2024, in this issue) intervention in understanding linguistic variation takes up Bourdieu's (1977) focus on practice and the body: "Certain claims about sound symbolic meanings may be better interpreted as derived effects of

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socially meaningful bodily hexis." Responding to Bucholtz and Hall's (2016) injunction to rethink language through the body, they argue that linguistic variation is not so much a language-internal process as a "natural articulatory result of meaningful forms of embodiment, for which they subsequently serve as indexical diacritics." This takes us beyond typical approaches to sociolinguistic variation on several counts.

Several waves of sociolinguistics have moved us on from accounts of languages as systems that work to their own internal logic. That first, system-oriented phase bore, not coincidentally, a number of resemblances to monetary theory in economics, which emerged around the same time. In both, the system was primary: languages were "self-regulating systems which can be left to take care of themselves" (Trudgill 1998, 8), while changes brought about by human activity were somehow less real or important (Milroy and Milroy 1991); from a monetarist perspective, economies were also self-regulating systems (the market is always right) that should be free of fiscal interference by governments (keep governments small; Blinder 2022). While monetarist policy insisted that the only social responsibility was to the shareholder rather than to consumers, the public, or society more broadly, sociolinguistics became a field of study designed for its own internal consumption rather than an endeavor aimed at working with and for language users themselves: "Linguists have not been good about informing the general public about language" (Bauer and Trudgill 1998, xv). Work in citizen sociolinguistics (Svendsen 2018; Rymes 2020) has sought more recently to overcome this imbalance by returning language study to the people. Both approaches, furthermore—monetarism and sociolinguistics—disavowed any connection to politics: they were neutral sets of theories above the daily fray of people, power, unemployment, or language use.

Levon and Holmes-Elliot's proposal (2024) has much more to do with "third wave" sociolinguistics, however, with a focus on stylistic practices (what people do) and the ways these may be combined with other ideological and behavioral elements as part of a stylistic bundle (Agha 2007a; Eckert 2018). By rethinking language through the body, Levon and Holmes-Elliot explain variation in terms of meaningful forms of embodiment, an orientation toward, for example, certain qualities associated with elite status, such as embodied realizations of restraint, detachment, or indifference. In this way of thinking, it is changes in bodily dispositions, or *hexis*, in Bourdieu's terms, that bring about changes in ways of speaking. Such an expansion pushes language out into the world as part of dynamic interactions among forms of embodiment. For Kusters (2024, in this issue), the resources that deaf signers use are best understood in terms of a *semiotic*

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repertoire that includes "speech, images, text, gestures, signs, facial expressions and objects." To try to understand sign communication, and particularly in contexts of accommodation (where signers do not share a sign language in any obvious sense), little is to be gained by restricting our understanding of the communication to the signs alone.

Kusters (2024) insists that International Sign is best understood as a distributed practice, challenging the idea of languages as internalized systems or individual competence and suggesting that language is embodied, embedded, and distributed across people, places, and time (Pennycook 2018). This moves the focus away from a view of a language as a pregiven system that is then put into use, focusing instead on the ways communicative possibilities are distributed across different spaces. For Gonçalves (2024, in this issue), the question is about how interaction, meaning, and understanding emerge within the specific kind of embodied practices of Bikram yoga. The articles on signing and yoga expand again what we may want to consider as part of our linguistic universe, emphasizing bodies, locations, and things, including yoga mats, yoga gear, blackboards, and the presence (in the case of signed communication) and the absence (in the case of the yoga studio) of mobile phones. This is about embodied practice and sensory experience, suggesting the need not just for multimodal but also for multisensory analysis (Zhu Hua et al. 2017). As Gonçalves suggests when we seek to understand bodies in interaction without necessarily focusing on spoken or written words, when we consider discourse and embodiment in material terms, we are moving into a space where language as commonly understood is not only pushed out into the world but also pushed to the side, "provincialized" in Thurlow's terms (2016).

Assemblages

The inclusion of things or objects or artifacts brings to the fore a new materialist orientation that recalibrates the relations between humans and the nonhuman world. This line of thinking questions the boundaries between what is seen as inside and outside, where thought or language occur, and what role a supposedly exterior world may play in thought, action, and language. The point is not to discount humans in the search for a more object-oriented ontology but to reconfigure where humans sit, to unsettle the position of humans as the monarchs of being and to see humans as *entangled* and *implicated* in other things (Bogost 2012). From this perspective, things, objects, or artifacts are not seen as separate from humans or each other but as part of integrated wholes (Barad 2007). This leads to thinking in terms of *assemblages*, the ways that different things, people, objects, and ideas come together in particular and often momentary constellations, as

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"happenings" that are "greater than the sum of their parts" (Tsing 2015, 23), as "ad hoc groups of diverse elements, of vibrant material of all sorts" (Bennet 2010, 23). New materialist perspectives allow us to rethink the relative weight we give to different aspects of the material world, how they are related, and where humans may (or may not) fit into this picture.

Thinking in terms of assemblages, as Lind (2024, in this issue) suggests, opens up ways of considering a totality of interactants that may include technologies, objects, and nonhuman animals. Lind asks whether dogs—via the technological affordances of "talking buttons" (buttons that activate prerecorded messages)—really understand human language. What is going on in the interactions among pets pushing a button that then produces an utterance to which humans respond can be better understood in terms of *semiotic assemblages* in which "bodies, language, and objects come together to create meaning in interaction." The focus on human language as central to the talking button communication, she suggests, distracts our attention from where it needs to be, on a "form of collaborative semiosis in which the multimodality of embodied communication is central to recognizing it as meaningful interaction." These semiotic assemblages do not just comprise people, dogs, the talking buttons, and the language they produce but also the bodily movements, touch, sounds, and artifacts. Language is not so much in the recordings produced by the pressed buttons but in the complexity of interactions around them.

This argument reflects other work on animal communication, and the "animal turn in linguistics" that has started to develop a "relational framework focusing on language as local meaningmaking distributed among and between species, materiality, place and time" (Cornips 2022, 209). The development of a sociolinguistics of animal communication by Cornips and others is often misunderstood to imply that animals communicate in similar ways to humans.[1] The argument is a much more interesting and complex one, suggesting that "dairy cows, within the power dynamics of industrial farming, make social meaning in their barns by relating to entering human(s) via a processually emergent quality arising from multiple assemblages of human and nonhuman elements, including material things, artefacts and spaces" (Cornips 2022, 226). This argument, like Lind's (2024) discussion of pets and talking buttons, pushes language in several ways. By working with the idea of assemblages that involve humans, cows, materiality, and objects, this thinking shifts the focus to what these elements can do in relationship to each other. It takes the Where is language? question

1. A paper by Cornips on the sociolinguistic repertoire of dairy cow(s) with a focus on materiality was unfortunately not accepted for publication in this special issue.

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further in at least three ways: fieldwork, very literally, occurs on farms (though often, in contexts of industrialized dairy farming, these cows see little of any real fields), it insists that animal communication can be a serious domain for sociolinguistic research, and it shows why thinking in terms of assemblages can show how meaning is produced through the coinvolvement of animals (human and nonhuman), places (barns, cubicles, fields) and objects (food, sand, buckets).

Assemblages describe the way things are brought together and function in new ways, and provide a way of thinking about how agency, cognition, language, and identity can all be understood as distributed effects of a range of interacting objects, people, and places, distributed beyond any supposed human center, rather than as a property of the individual or as something located in the human mind or tied to personal action. The idea of distributed language challenges a conceptualization of languages as internalized systems or individual competence. None of these terms—internal, system, individual, competence—is very useful for grasping what is at stake when language is concerned. Once we dispense with the idea of languages as systems, as nameable entities, as mental representations, there are two main ways forward, a practice-oriented focus on language as a social activity (the "languaging" of terms such as *translanguaging*) and an assemblage-oriented view of language as an amalgam of different elements. Viewing language as an assemblage means it is an ongoing project, adding and subtracting bits along the way (Wee 2021). Rather than being confined to traditional elements of language—words, syntax, and so on—this view incorporates a much wider range of semiotic and material possibilities, including objects, people, and space. There are three slightly different ways that language and languages can be considered in relation to the idea of assemblage: assemblages as combinations of linguistic items (language assemblages), assemblages as semiotic gatherings (semiotic assemblages), and assemblages as material arrangements that involve language (sociomaterial assemblages; see Pennycook 2024).

Provincializing and Reassembling Language

As we have seen above, one effect of pushing language out into the world may be to provincialize language (Thurlow 2016). Part of the posthuman challenge to human hubris is to question the centrality of language not only in defining what it is to be human but also in our sociolinguistic studies. Crispin Thurlow has been concerned about the bias given to language in the workplace in sociolinguistics.[2] For many sociolinguists this kind of challenge may make little sense: if we don't

2. A paper by Thurlow, "Besides Words: Working without Language," unfortunately not accepted for publication in this special issue, did precisely this, pushing the boundaries of what it might mean to do sociolinguistics without a focus on words.

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do language, what are we doing? It is all very well to say there are many other aspects of human life and labor that we miss, but our designation as some kind of "linguist" means we have to return to something identifiable as language. This brings us back to the central question: What do we identify as language and where do we assume it to be? Some may concede that there are undoubtedly all sorts of complexities to the contexts in which language occurs—warm bodies in Bikram yoga studios, gestures, and objects that people draw on to communicate, dogs using talking buttons to suggest it's time for a walk—but these are part of the *context* in which "language proper" operates, not language itself. It all depends, of course, on what we take language to be and where and why we decide to draw certain boundaries. If we engage seriously with language ontologies—what language and languages are—it becomes clear that we may be dealing with very different things, depending on whether language is an object or structure, a social practice, or an assemblage (Demuro and Gurney 2021; Pennycook 2024).

These processes of provincialization are pushed in a different direction by new technologies. While the talking buttons are fairly low-level technological devices (compared, e.g., to proposals that brain implants could directly translate animal thoughts to humans), they are nevertheless interesting in the ways they become integrated into animal (both nonhuman and human) communication, and shift language away from the control of humans. From a *transhumanist* perspective, some have expressed "a profound dissatisfaction with the current human condition and 'the biological chains' that keep human beings from actualizing their fullest potential" (Huberman 2021, 22). From a sociolinguistic perspective, such "technoutopic visions of the future" (Huberman 2021, 217)—bionic eyes, brain implants, and so on—may seem less relevant than new forms of communication technology, from our smart phones to the rise of artificial intelligence–driven language generation. The combination of Large Language Models (LLM) and AI have led to recent developments such as ChatGPT's production of "human-like text."

While this raises pragmatic questions for authenticity, education, and security, it arguably raises much deeper concerns since the capacity to produce language has been one of the defining features of what it means to be human (Pennycook 2018). The production of "human-like" language may be an ontological threat to humanity (a different concern from the possible existential threat to humanity posed by AI taking over the world). It is one thing to augment the physical capacity of the body, but once that supposedly sacrosanct element of humanity that separates us from all the rest—language—can be generated by nonhumans, what then defines humanity? "At the heart of AI's challenge to communication

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research," Guzman and Lewis (2020, 73) suggest, "is a blurring of the ontological divide between human and machine." These new technologies—from AI and speaking robots to brain implants and computer-facilitated telepathy—may fundamentally change not only how we communicate but also what language becomes (Seargeant 2023). This line of thinking urges us to ask how and why we have come to think about language in particular ways, with particular boundaries between human language and other forms of communication, or language and artifacts.

This is not therefore giving up on language, or announcing the end of language, but rather calling for a rethinking of the relationship between language and everything else. It asks what kind of relation obtains between language and the world around us, other animals, the objects we are involved with. When we study interactions that include the nonhuman on an epistemically equal basis as part of an inclusive sociolinguistics that does not separate human and nonhuman animals on the basis of language (Cornips, forthcoming), there comes a point where human language no longer seems necessarily relevant as a separate category. In Hovens's (2022) studies of interactions in a steelworks in the Netherlands, language use as commonly understood became at times fairly minimal. If, as we also found as we sought to study kitchens and construction sites (Pennycook and Otsuji 2015), busy and noisy workplaces may leave little place for talk, we have two main options: We can go somewhere else because talk is what interests us (this was one of our strategies as we sought out workers during their lunch breaks), or we can ask what it is we're really trying to understand and focus on other aspects of interaction.

Amid the noise of the metal foundry and the machines the people worked with, it was the interactions between people and machines that started to matter, the assemblages of what they did together that became important (Hovens 2022). As Thurlow (2020, 353) explains, in trying to understand *commodity chains* and elite spaces (from tomato growers in Spain to business class meals), he found it a struggle "to contain things to words and texts, to stay focused on language." Following the work of linguistic anthropologist Kohn (2013)—*How forests think*—he therefore started exploring "the possibilities of a nondiscursive discourse studies for surfacing some of the multisensory, nonrepresentational (or more-than-representational) practices which evidently structure elite discourse." Likewise in our studies of shops and shopping, and the importance of shopping lists, goods, and the physical layout of the shop, there came a point where we started to ask whether the semiotic assemblages that interested us needed the humans and their language (Pennycook and Otsuji 2022). As we

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sought to understand how items taken from shelves were part of a *chain of shifting meanings*, from recipes to shopping lists to bought items, so Thurlow seeks to understand where language might fit into the *commodity chains* between tomato fields and business class meals, and Kusters (2024) shows how *chaining practices* in deaf communication occur across time and space.

Toward a Material Account of Language

The articles in this special issue push at the borders of language in various ways. For Gonçalves (2024), it is now our duty as scholars of language either to redraw some of the boundaries between human bodies and nonhumans, materiality, and technology to make sense of communication in the twenty-first century or to "erase these boundaries completely." Kusters's work on sign language, for example, with its interest in the semiotic repertoires signers draw on, takes us beyond the liberal egalitarian politics of linguistics that sought to show sign languages were as good as any other languages. Sign linguistics was primarily aimed at identifying linguistic structures within national sign languages to affirm their status as legitimate languages. To argue only that sign languages are as complex as any spoken language, however, is to overlook the ways that they can be very different from spoken languages, and more amenable to flexible usage and interpretation. In such contexts people draw on "an assemblage of shared semiotic resources that they mix and mesh to arrive at shared understanding" (Moriarty and Kusters (2021, 6). While a lot of work sought to show that sign languages are more than gesture, at the same time they downplayed precisely this importance of embodied signing, overlooking the ways that "the embodiment of deafness serves to sharply distinguish the reality of sign languages from that of spoken languages" (Kusters and Lucas 2022, 90).

This work not only sheds light on sign languages but opens up a reconsideration of what counts as language. International Sign is not so much a thing, as a "process of calibrating" or accommodation, a distributed practice that is "deeply rooted within language ecologies" rather than individual minds, societies, or sign languages on their own (Kusters 2024). This brings together what Joseph (2022a, 366) calls a "4T" approach to communication—involving translingual, transmodal, transindividual, and transspecies interactions—with an insistence on the material operation of language. As a result, these moves to push the boundaries of language have implications far wider than the initial scope of these articles: the use of gesture, the use of talking buttons by dogs, the embodiment of articulatory predispositions, interactions in a yoga studio, and so on. These explorations of the edges of language have implications for how we think about language more

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generally, pointing to the need to rethink where and what we consider language to be. The trajectory of linguistics in the future, Agha (2007b) observes, will be shaped by how it formulates its object of study—language—and the breadth or narrowness with which it frames its epistemic project. It can either take a "largely extractionist-restrictivist-and-exclusionist mode"—narrowing the object of study, extracting it from its surrounds, and refusing to engage with other fields of knowledge—or it can take up a more "integrationist-expansionist-and-collaborative mode" (2007b, 232) that brings language, space, objects, and materiality together.

As the editors of this special issue point out, the diversity of perspectives "is held together by a common interest in how human interaction and meaning-making is *not* conceivable as isolated and autonomous but as material behaviour." Materialism has long been tied either to a common critique of the overemphasis on wealth and property at the expense of more spiritual concerns, or to a rather obdurate Marxist insistence on the centrality of material infrastructure. New materialist perspectives, by contrast, suggest an alternative politics centered less on material infrastructure, political economy, and the demystification projects of ideology critique (which reduce *political* agency to *human* agency) and instead on a politics that reorients humans toward their ethical interdependence with the material world (Bennett 2010). This is by no means to eschew political economy but rather to avoid a priori analysis in favor of more contingent understandings of the roles material and economic relations play within assemblages (Tsing 2015).

Posthumanist thought brings a different set of ethical and political concerns to the (socio)linguistic table, issues to do with human relations to the planet and its other inhabitants. An animal turn in sociolinguistics, Cornips (forthcoming) argues, necessitates the inclusion of materiality as part of the sociolinguistic repertoire that includes humans, cows, and objects. This opens up a space for reconsideration of language and materiality. In some accounts, language is an immaterial medium whose relation to the material world is only symbolic or representational. Likewise, some approaches to discourse analysis suggest that discourse either reflects the social world (discourses are as they are because of the nature of society) or create the social world (all we can be sure of are discursive constructions of the world). Both leave us with the problem that we need to reconcile relations of discourse and materiality if critical work is to do more than ideology critique, on the one hand, and social construction on the other. New materialist accounts of language, however, view it as embodied, embedded, and distributed activity (language is assembled and extended by bodies in physical space). It is ultimately unproductive to insist on discursive analysis or socioeconomic analysis

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at the expense of each other, or to insist that one is primary, or causative of the other. They are intertwined and complimentary, and we would be better served if historical materialist critique of the state and political economy and studies of discursive production worked together.

These arguments take us toward a rethinking of the divisions between material and nonmaterial worlds (Barad 2007) but at the same time urge us to understand the material being and effects of discourse. This emphasis on "the relation between linguistic resources and their entanglement with the tangible world of bodies, material objects, and physical places" (Lamb and Sharma 2021, 2) can be understood as a move to see the interdependence between a material world—viewed through a new materialist lens in dynamic terms—and linguistic resources. This is to look beyond language *and* materiality (where language is considered alongside but separate from materiality; Shankar and Cavanaugh 2017). It is not only to accept that "all our experiences with language are only via particular material signs" (Wee 2021, 21) but also to show "how language is not separate from the material world, but irreducibly embedded, embodied and emplaced within it" (Lamb and Sharma 2021, 2). It is to suggest that language, both material and symbolic, is deeply entwined with a world both material and symbolic and that any approach to sociolinguistics that seeks to grasp language in the world needs to work with an understanding of the dynamic entanglements between an animated world of matter and a material world of language.

There are a number of assumptions we could valuably get beyond in the search for a more adaptive sociolinguistics: it would be useful finally to move away from *methodological nationalism* (Schneider 2018), whereby language data have been tied to nations, and (socio)linguists have assumed too easily a relation between named languages and linguistic resources. So too would it be useful to discard *methodological individualism* (Ramberg and Røyneland, forthcoming) and the unlikely claim that language can have some kind of social meaning as an idiolect, that language can be conceived of in individual terms. It is also high time to reject *methodological anthropocentrism* and the assumption that it is only useful to try to understand language in human terms or that it is language that separates humans from other animals (Cornips 2022). *Methodological idealism* could also be usefully surpassed, with its beliefs about language as a self-standing structural system rather than a set of practices distributed across time, place, and objects (Pennycook 2024). The articles in this special issue focus on the material foundations of communication, the corporeal, physical, or technological conditions of human and nonhuman communicative interaction, and on the

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