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Cowley, Stephen J.

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Article

# Made in Linguaging; Ecolinguistic Expertise

Stephen J. Cowley

Department of Language, Culture, History and Communication, University of Southern Denmark,  
5230 Odense, Denmark; cowley@sdu.dk

**Abstract:** *Made in linguaging* aims to help ecolinguists with recrafting ideation and human practices. Inspired by Alexander and Stibbe, I turn to *how* ecolinguistic expertise can favour life-sustaining relations. In approaching normative goals, I start with how knowledge is made, self-sustains and is disseminated. Ecolinguistic analysis of languages, discourse and narratives can thus be enriched by tracing how practices inform linguaging. In turning to epistemic agency, I emphasise the following: (1) building corpora popularia, organised bodies, in order to enhance life-sustaining relations; (2) illuminating life from the inside; and (3) developing bioecological awareness. I contend that, while all living beings use coordinative activities to bring forth what appears to us, humans also use wording types and practices. As we use the already known, linguaging enables subjecthood, a person's little worlds, and a group's common realities. Hence, what appears as (and to) experience is *made in linguaging*. When linked to normative concerns, the resulting middle worlds also offer means of putting knowledge to work. As in social epistemology, one might regard 'wealth and well-being' as a marker of public good. Yet, critical work shows, appeal to these values is anthropomorphic. In order to encompass nonhumans and the biogenic, one can reject market orientatation by tracing linguaging, and knowing, back to living. In showing benefits of so doing, I contrast two evolving wording types. The case of *growthism*, I suggest, attests to praxis and contrasts starkly with the ideational value of *life-sustaining relations*. Yet, in both cases, linguaging meshes practices, happenings and the effects of action. The move shows how one can challenge the hypostatisation of ideology by pursuing how epistemic agency can contribute to the future of evolution.

**Keywords:** linguaging; ecolinguistics; distributed language; expertise; social epistemology



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## 1. Introduction

For Haugen ([1972] 2001), the ecology of language opens up issues in anthropology, sociology, political science and psychology. The field now known as *ecolinguistics* (Steffensen and Fill 2014; Zhou 2022; Steffensen et al. 2024a) was expected to show how, as mediated by a mind, languages 'interact' with the environment. With hindsight, it is plain that Haugen's aspiration fails because, as structures, languages merely interact with other structures (in theories). Descriptions of linguistic forms, functions, sentences, X bars, concepts, etc., do nothing at all. Living beings do not use mental proxies of symbols ('language'), but, rather, practices, bodies and brains. Accordingly, Cowley (2019) turns to a 16th century notion that encompasses doing, thinking, talking and understanding. With the return of *linguaging*, Cowley (2022) shows, Haugen's vision takes on new life. Given how human subjects use linguagings, agency is transformed by languages and practices. As we co-act, coordinative activity combines with the wording types that are also used in *describing* linguistic structure. By starting with linguaging, ecolinguistics becomes transdisciplinary (Cowley, forthcoming) and, in aiming at world-making, our expertise can offer much to social transformation.

The impetus can be traced to how Halliday ([1990] 2003) challenges applied linguists to combat *growthism*. While the wording type<sup>1</sup> is rarely discussed (see, Section 3.1), many turned to how discourse biases perceptions of the environment. While some extended systemic-functional methods, others stressed how practices bears on theoretical questions.

Bang and Døør (2000) turned to social theory, Garner (2004) rejected linguistic reductionism, and Lechevrel (2009) lamented general imprecision. In an overview, ecolinguistics was found to have splintered into four ‘ecologies’ (Steffensen and Fill 2014). As editors of a special issue of *Language Sciences*, they urged proponents to forge a new unity. This began to emerge when Alexander and Stibbe (2014) turned to life-sustaining relationships and, in the same setting, Cowley (2014a) traced languages—and languaging—to bioecologies. Subsequently, the work led to new econarratives (Stibbe 2015, 2024a; Steffensen et al. 2024a), new frameworks (Li et al. 2020) and a focus on leading communities (Stibbe 2024b). Recently, Ponton (2024) pursues how telling and retellings of positive change in farms and nature reserves can amplify effects. In all cases, languaging and practices shape stories about how people live. Hence, in addressing human and nonhuman worlds alike, we can use expertise about how languaging affects living happenings. In turning to practices and their effects, in Section 3.2, I shift Alexander and Stibbe’s normative focus to what I call environment–organism *relations* (Steffensen and Cowley 2021; Cowley, forthcoming). As people happen in languaging, practices set off cascading changes in many earth systems. How we respond matters to policy makers, regulators and, generally, all concerned with the future of the ecosphere.

### Overview

The turn to languaging offers a theoretically grounded approach to life-sustaining relations. It enables ecolinguistics to self-design as a practically oriented field that favours micro-activism. Having overcome Haugen’s problem (Cowley 2022), in Section 2, I show how ecolinguistics expertise can challenge the toxic effects of practices. In Section 2.1, I sketch how knowledge (often held by other people) can reshape realities and imaginings. In a middle world, languaging shapes shared futures of human and nonhuman persons. In Section 3, I introduce social epistemology such that, in Section 3.1, it can be extended by using ecolinguistic expertise to address a new target. Since we need a theory of practices, in Section 3.2, I suggest that we can: (a) constitute collective bodies, corpora popularia, that work for life-sustaining relations; (b) illuminate life from the ‘inside’ or by tracing experiences to how practices channel happenings in the ecosphere. Hence, by aspiration, ecolinguistic expertise can (c) encourage a sense of living hereeness and bioecological awareness. In Section 4, I suggest that, in so doing, we also need to address ecosocial justice. It is by unifying work on languaging and practices that our expertise can contribute to knowledge-making by scientific and other bodies that aim to enhance the ecosphere, habitats and local bioecologies.

## 2. Languaging, Languages and Practices

For many, languaging is an epistemic tool that enables ‘worlding’ (Demuro and Gurney 2021). Although lived in the now, languaging is multiscaled and distributed<sup>2</sup> in that, during practical activities, it meshes human agency with material and immaterial resources (e.g., organisations and infrastructures). In effect, human worlds and selves stabilise as wordings and wording types constantly return as part of a history of coordinative activity. As a result, these are readily imagined (or pictured as ‘words’) and valued by those who dwell in enlanguaged worlds. Increasingly, therefore, the effects of human activity dominate earth systems. Since languaging actualises human practices, ecolinguistics can both describe and, crucially, change how languaging affects earthly life. Given an aspiration to enhance life-sustaining relations, our field must reach far beyond linguistics. Accordingly, the ecolinguist can make normative use of languaging, practices and micro-activism. Hence, we need ecolinguistic practice that brings our expertise to socially organised bodies (or *corpora popularia*) and, just as importantly, we need to clarify how ecolinguistics expertise can be put to work in improving ecosystems.

The ‘ecology of language’ aimed to meet the concerns of “anthropologists, sociologists, political scientists and psychologists” (Haugen [1972] 2001, p. 57). By aspiration, a new sociology of languages was to address language users and their minds. In hindsight, Hau-

gen muddled ‘context’ with a (putative) psychological ‘reality’ (viz. of sentence generating grammars). Today, however, few posit mental aprioria or indeed separate ‘context’ from ‘language’. Elsewhere, Cowley (2022) ascribes the confusion to ‘Haugen’s problem’ or, the (ungrounded) view that languages ‘interact’ with environments (see also, Steffensen et al. 2024a). Mistakenly, causal powers were ascribed to phenomena that enable one to *describe* experience (in terms of repeating verbal patterns). In the new ecolinguistics, by contrast, linguistic abstractions merely inform the particularities of languaging (or, precisely, nonce events). In Becker’s terms:

“There is no such thing as language, only continual languaging, an activity of human beings in the world” (Becker 1991, p. 34)

Languages are polyvocal aspects of experience that can be stabilised by alphanumerical marks and, indeed, machine codes. While indexically related to programs and texts, neither ‘minds’ nor computers ‘represent’ forms and meanings. Rather, coordinated movement suffices to produce, attend to, project and dance over (among other things) wordings. Seen thus, languaging belongs to folk tradition (Cowley 2019) and how, in the 16th century, people conceived of English vernaculars. Far from being a structured system, talk was part of activity undertaken in an enlanguaged world. It was part of practices that bring emplacement and experience to doings, feelings and knowing; they unite people, agency and languaging. Saying and doing set off thinking, doing, speaking, reading, hearing, observing, etc. In modern terms, semogenesis (Halliday [1990] 2003) binds languages into practical activity (as movement evokes wordings). Norms bundle into practices and languages as usage impacts on societies and bioecologies alike. In modes of action such as queuing (Hutchins 2014) or dealing with sewage (Jensen 2017), the results affect living consortia, bioecologies, that include human and nonhuman persons. Even where peripheral to action, languages transform how we perceive/evaluate what happens: bodies bring pasts to the present (Cowley and Fester-Seeger 2023) as we use wordings to co-orient to ‘reality’ (as specified by linguistic content and form). As Ilyin (2023) stresses, we inhabit a ‘middle world’, a domain of saying and doings. Thus, in human forms of life, languaging allows us to engender ‘purport’ as, in Wittgenstein’s terms, we ‘go on’ by hearing (or perceiving) in ‘a particular sense’. As practices and languaging coalesce, middle worlds accumulate social knowledge. Thus, using skilled modes of action, we learn local ways of meshing coordinative activity with both material ‘reality’ and the immaterialities or a consensual domain (Maturana 1988). As practices unfold, they sustain both discourse and what Sellars (1997) calls the resources of reason. On this view, languaging can be covert, overt and hidden: it arises as we integrate thinking, feeling, doing and co-acting in events that are perceived/imagined and, thus, evoke many ways of knowing. Crucially, as multiscaled activity, languaging is *irreducible* to language-use (see, Cowley and Fester-Seeger 2023). In movement, its patterning or wordings, unlike tokens, shadow coordinative activity that uses what Bottineau (2008) calls tokenising (i.e., that results in wording types). Hence, the ecolinguist can ask

- (1) How can we use languaging (and linguistic analysis) to enhance our grip on the bioecological experience of being alive?
- (2) How can we use ecolinguistic expertise in working for life-sustaining relations?

Since languages (Bottineau’s (2012) linguistic ‘technique’) inhere to practices, these bind the continuous activity of ‘human beings in the world’ to movement, wordings, appearances and experience. In a middle world, doings—and practices—incorporate languaging into looking, listening, attending and moving in ways that, often, overrule/determine what is, or can be, said.

In languaging, as Love (2017) phrases it, second-order constructs (e.g., words and rules) supervene on first-order activity. In Batisti’s (2021) construal, languages become “hypostasized pseudo-entities” (Batisti 2021, p. 160). On this structuralist reading, the hearing, structure and meaning of, say, ‘ah bene’ (see, Cowley 2014b) is seen as given. Taking these entities as separable from languaging, Batisti argues that a focus on coor-

dinative activity underplays their semantic role by exaggerating the “interactional side of linguistic phenomena while emphasizing the sociopolitical one.” However, Love can be read as challenging the hypostatization of, not structures, but *phenomena*: if one starts with events, wordings *are* tokenising that actualises practices. Although ‘ah’, ‘bene’, and ‘ah bene’ inform vocalising, they do not presuppose (or ‘reflect’) the *use* of structures (see, Cowley 2014b). Pragmatically, people ‘go on’ in acts of utterance; like LLMs, we do *not* rely on linguistic form. Nor, however, do we rely entirely on stochastic differentiation; whatever the role of statistical knowing, humans use bodily happenings, emplacement and nonce events (Cowley 2014b). Far from being pseudo-entities or phenomena with an ‘interactional side’, wordings arise parties use languages, retroject and perform co-action. Happenings evoke pasts as we enact what Pennycook (2010) calls language practices. Other orientation (Cowley 2024b) meshes historically derived patterns with beliefs, sensibility and co-action. In Bakhtin’s (2013) terms, a silent third guides polyphony or enables Ilyin’s (2023) middle world. In languaging, since many norms operate, we gain from monitoring results and striving to get things right.<sup>3</sup>

Languaging incorporates acting, perceiving and thinking into multiscaled movement and practices. Far from relying on phenomena, humans bring conceptual attaching (Gahrn-Andersen 2021) and purport to reading, thinking and practices. In enlanguaged worlds, wording types anchor feelings, acting and orienting. Hence, just as for *wordings* (see, Cowley and Fester-Seeger 2023), *languages* have three main senses. First, they attest to a biosocial trait that, in past centuries, served to construct national and ‘true’ languages. Second, a language (or vernacular) bundles wording types through vocal and other modes of coordinative activity. Third, given recursiveness, practices ensure consistent ways of managing parts, strategies and rules (e.g., saying, “‘ah bene’ is Italian”). We use wordings-in-events (e.g., ‘ah bene’) as dynamics based on rhythmicality outpace concurrent co-action (and active perception). Coordinative activity links perceiving, acting and thinking with a felt and pre-reflective sense of things, events situations and imaginings. We can achieve careful use of wording types and ways of tokenising that permit considered construal. Of course, we *also* draw spontaneously on what linguists *formalise* as strategies, rules and habits of speaking, etc. The results of activity can, thus, be classified as lexemes, phrases, tones, utterances, sentences, texts etc. In non-spontaneous cases, a ‘language stance’ (Cowley 2011) allows rate independent use of types and attendant skills. In an enlanguaged world, we each learn to repeat and recycle verbal patterns. Indeed, as Pinna et al. (2023) suggest, in mathematics and programming, the same means enable us to use a symbolic stance. Together with text, non-spontaneous linguistic and non-linguistic action enacts vernaculars (that are open to regularisation). In time, diverging social practices shape decontextualisation, standardisation and, today, digitisation. As a result ‘language’ accrues new senses through practices such as composing, editing and using script-like systems or distributed languages (e.g., Java). Accordingly, how languages inform spontaneous activity (including thinking) can be contrasted with how skilled linguistic action uses wording types and their alphanumeric derivatives.

Practices unite languaging with procedures, devices and expert knowledge. The ecolinguist can therefore clarify how practices steer languagings and routine action. Unlike other primates, humans use unintended benefits (Humphrey 1976; Cowley et al. 2022) or, in Gahrn-Andersen’s (2023) terms, sense *what something is*. In a middle world of appearances perceiving draws on conceptual attaching. Crucially, what appears is “not just a seeing but also a taking (in the sense that it catalyses or ties with other practical doings,” Gahrn-Andersen 2023, p. 73). We use “perceived aspects of the material world to engage in other practically relevant actions” (Gahrn-Andersen 2023, p. 73). In an emplaced world, seeing say, a lizard as a threat (sic) presupposes a someone: it unites coordinative activity, doings and reiteration of wording types. Hence, the perceived threat also echoes languaging, vernaculars and languages (a history of skilled and willful action). Indeed, the power of practices is such that Wittgenstein (1957) rejects linguistic autonomy by appeal to a multitude of ‘language games’. Having deflated ‘language’ (qua abstraction),

we engineer ‘practice games’ whose complexity includes getting robots to learn colours (Steels and Belpaeme 2005) or designing cockpits that aid in landing a plane (Hutchins 1995). Cognitive systems enact languaging and practices in social ‘realities’ or, better, in Ilyin’s (2023) middle world. In this public domain of appearances, we encounter each other, evoke common experience and bring expectations and expertise to use of organised and infrastructural systems (see, Secchi et al. 2022).<sup>4</sup> Imaginaries shape purport and, as micro-activists, we can improve habitats and local bioecologies (Ponton 2024). A normative ecolinguistics can prioritise the entanglement of languaging and activity by pursuing, say, how and when practices set off toxic effects. If these are to be replaced or suppressed, we can change organised macro-structures. It is thus theoretically important that languaging actualises practices just as, of course, practices stabilise common ways of using wording types and other more practical techniques.

### 2.1. Made in Languaging

For Demuro and Gurney (2021), languaging contributes to worlding or, simply, it informs knowing, believing and organised practices. In this sense, persons, and human agency, are made in languaging as they accumulate know-how by acting, perceiving and thinking. Given a basis in coordinative activity, the results grant local knowledge of enlanguaged worlds. Each group/person bundles vernaculars in ways that, often, co-occur or compete with the use of coded and digitised lingual systems. While often overlooked, as Druzhinin and Rakedzon (2024) show, the results can be suffocating. Indeed, many earth systems attest to the pernicious effects of human practices, knowledge and activity. In spite of differences, like other living systems, humans rely on coordinative activity. In the emblematic case of von Uexküll’s ([1934] 1992) tick, knowing arises in an animal’s little world or Umwelt; the arachnid climbs a tree, waits and, when it detects a passing entity at 37C, the tick falls and, with luck, feeds on prey. Given the ‘outer’, the organism uses regulatory sub-systems in what Sebeok (1988) calls *modelling* or knowing-in-action. In primates, coordinative activity brings knowing to, say, how bearded capuchins’ stone use unites evolutionary history, social learning and cultural traditions (Falótico 2022). As a monkey acts, an ecosocial technique can set off supersession (Yu 2021) as nut cracking becomes part of an individual’s world. In a capuchin group, it links learning with a local history of opening nuts. In ring tailed lemurs (Jolly 1966) supersession brings rhythmicality and anticipative judgements to collective play and action. Hence, a lemur seamlessly adjusts to movements, a particular rival and the setting, say, a tree, bush or open ground. Yet, these nonhuman persons uses neither languaging nor practices: their sophisticated knowing does not occur in a middle world. While they enact, say, social hierarchy through coordinative activity, their actions/gesturing do not coalesce into customs, roles or a division of labour. Groups do not accrue tools, wordings or institutions: they lack a conceptual world of appearances. In the last million years or so (Sterelny 2010), human worlding has changed as practices have bound coordinative activity into human ways of co-acting. The results shape practices and human forms of life that combine coordinative activity with wordings and co-acting in Ilyin’s (2023) middle world.

Entrenching, practicing and social skills co-occur when modern and other hominins knap flints, groom each other or guard fires. With group-based vocalisation, individuals gain control of wording types that unite phonetic/manual gesturing with acts of tokenizing. Thus, while appearances draw on pico/micro dynamics (and statistical learning), collectively mediated gestures/co-actions allow humans to extend pre-reflective sensibility. As ways of speaking/acting accrue common value, we can control supersession by drawing on the norms of a group. Recursive use of wordings (and doings) allows practices to co-evolve with wording types (Cowley and Kuhle 2020). Hence rhythmical movement—and prosodic pico-dynamics—cofunction with phasal-tonic tokenisings and micro-control of moving/gesturing/vocalising. Unlike ticks, capuchins or lemurs, humans can act to engender *what* supersedes. Groups bring sensibility (Dreon 2022) to appearances and, in the resulting middle worlds, they individuate as persons. Languaging extends

coordinative activity within common enlanguaged domains. We develop realities and imaginings that trigger social meaning (Eckert and Labov 2017) as part of responding to what ‘should’ be evaluated and displayed. We adopt ways of speaking such that a single ‘form’ can show intent (Cowley 2024b). Collective agency arises as sub-organismic regulatory control resonates with polyphony: by stepping forwards, as Heidegger sees, one can perform de-distancing. In human lives, things hang together collectively as we evoke what William James (1991) calls our own ‘little worlds’. We bring our own pasts to how we actualise practices and, with tokenising, orient to public domains where parties co-orient to appearances. Human knowing integrates action, sensibility and wordings in ways that, as argued below, grant new kinds of epistemic agency.

Practices and languaging allow others to inform our realities/imaginings (and use of wording types). Even if learning how to behave draws on skilled action, it is extended by social expertise. Using mimesis, entrenching and wording types, we also orient to practical, aesthetic, legal, religious and scientific standards. Spontaneous action (based on pico/micro control) is insinuated into how others conceive of what is done and said (practices and their use/effects). In organised groups, human modelling allows organised activity and, thus, the use of practices to establish knowledge.

“Epistemic engineering arises as systems and their parts develop functionality that is construed as valid knowledge. By hypothesis, epistemic engineering is a basic evolutionary principle. It ensures that not only that living systems identify the differences that make differences but also ensures that distributed control enables them to *construct* epistemic change (Cowley and Gahrn-Andersen 2023, p. 1—typos removed).”

In illustration, the authors describe an experiment where subjects exert ‘thought control’ over a cyborg-cockroach. Having been told that this is possible, they rely on an evoneered connection of brain, EEG transmitter and a receiver that affects the cockroach’s antennae. Given belief in science, watching and willing can be used to generate novel techniques that make the cockroach move (right and left). Given evoneering, this occurs in a *wide* system of cockroach, person and experiment. However, as actors, humans use the doings and sayings of the middle world: these co-function with the sub-personal regulatory systems that enable valued novelty. Remarkably, parallels reappear across middle worlds. Cowley and Gahrn-Andersen (2023) compare the cockroach case with epistemic engineering in a company that begins to use drones. Over time, and without planning, the personnel of the maintenance department shift their modes of organising. They change their middle world: in terms of, the 3M model (Secchi et al. 2022), coordinated activity alters socially organised practices; people act, derive purport and use experience of *other* people. Routines emerge from modulating coordinative activity arising *as* they feel, act, think and speak/listen. The results bring knowing to practices, languaging and, in time, parties develop effective ways of acting. As knowledge, beliefs and languaging hang together, parties gain expertise or come to ‘know’ what to do/say/believe. By extension, the same applies to working for life-sustaining relations. Not only can ecolinguistic expertise change stories we live by, draw on micro-activism and help us act as leaders but, by aspiration, we can build expert bodies, corpora popularia, that influence macro-activism. As a result, practices that inform life-sustaining relations can reconnect scientific knowledge with the use of practices, languages and languaging.

### 3. Enriching Social Epistemology

When objective reality was challenged, most followed Quine ([1960] 2013) in tracing knowledge to a so-called tribunal of experience. Subsequently, practices came to the fore and, with information technology, how knowledge can, and should, be used. Fields such as history, forestry, technology or science developed *expertise* whose impact was to be channeled within what some call the knowledge economy. Political decision making has been transformed by this epistemological shift. In parallel, new forms of academic bodies have constructed a field of social epistemology. Like Goldman (2018), some highlight

applications of individual expertise; others, like [Collins et al. \(2022\)](#) focus on knowledge communities. However, in turning to life-sustaining relations, more can be gained Steve Fuller's (2012, 2020) view of how knowledge serves what he calls public good ([Cowley 2024c](#)). Since, in Fuller's view, individual knowing is always partial, the knowledge economy needs continuous evaluations of (and judgements about) expertise. Thus, while Fuller's focus is on what is warranted by scientific communities, ecolinguists can significantly extend the view. Our expertise can open up how living subjects activate group-based knowledge as they integrate human agency with practices that unite knowing, experience and languaging.

Fuller views social epistemology as a meta-domain that can be used to channel warranted knowledge. He uses a double distancing ([Cowley 2024c](#)) to work 'outside in' ([Fuller 2002](#)) and specify normative ends and means. In stepping back, first, he addresses warranted (scientific) knowledge and, second, he seeks to motivate proposals (and decisions) around an explicit view of public good. He appeals to knowledge that people need and, in principle, to how it is produced and distributed. The work is directed at think-tanks, lawyers, administrators and media or those who direct research funding. Science offers models, frames, rules and parameters of 'forms of knowledge' ([Fuller 2012](#)) that tie values (e.g., universalism, voluntarism, individualism) to a (usually covert) view of public good. This 'transhuman' stance posits that, like 'gods in the making' ([Fuller 2015](#)), the well-informed shape social life. While endorsing his double distancing, I reject Fuller's transhuman view; in prioritising, life-sustaining relations, I note that, "ecolinguists will quail at anthropocentrism, the transhuman and appeal to the already known" ([Cowley, forthcoming](#)). While Fuller's work matters, it masks issues of power and, presupposing Western values, it leaves out how expertise draws on practices that enact the value-diversity of our many enlanguaged worlds.

In overcoming anthropomorphic bias, ecolinguists pursue how a 'knower' ([Fester-Seeger 2024](#)) connects practices with languaging. While experience matters, coordinative activity also determines how knowledge is made ('produced') and spread ('distributed'). Accordingly, epistemic agency must be traced to languaging, practices and their effects. If ecolinguists make explicit how public good can endorse life-sustaining relations ([Cowley, forthcoming](#)), one can seek to change how practices force 'choices' on us. Hence, the ecolinguist offers new understanding of:

- (a) how we use wordings to inform coordinative activity and actualise practices;
- (b) how languaging directs what we do, say and think through, especially, *genres, linguistic features or discourse*;
- (c) how languaging is enmeshed with linguistic (and other) practices that direct ways with wordings;
- (d) how vernaculars shape enlanguaged worlds.

As people actualise practices, they use emplacement to modulate activity against what appears, doings and, thus, the unnoticed, the unsaid and the unthought. As a result, we both mimic wording types and, at once, attune our regulatory sub-systems (perhaps, using, stochastic differentiation). We gain some semiotic freedom ([Hoffmeyer 1997](#)) or, more precisely, rely on skilled linguistic action. In this mode of languaging, we use coordinative activity in ways *intended* to evoke/evaluate effective outcomes. We construct supersession for self/others as we tokenise wording types, make life choices, read and hone organised practices. In the middle world, as [Ponton \(2024\)](#) shows, skilled linguistic action is needed to turn a farm over to wildlife or, indeed, in broadcasting about the consequences. Both making knowledge spread and skilled linguistic action can reshape coordinative activity, practices and effects. The case has implications for how a new ecolinguists can make careful use of selected knowledge claims.

### 3.1. Ecolinguistic Expertise

Ecolinguists often examine lexicogrammatical features of languages and discourse on ecological themes. As shown by Michael Halliday and Andrew Goatly, middle worlds



stabilise vernaculars, languages and local ‘realities’. For those skilled in a prestigious (standardised) tongue like English, happenings (‘processes’) are suppressed by a grammar that privileges actions and things (Goatly 2021). Human centred bias draws on nominalisations like *ecology*, *evolution* or *growthism*. Cases like these show the great power of practices like discourse analysis, a method that can challenge genres (Martin 2004), seek human/nonhuman harmony (Huang and Zhao 2021) or unleash narratives (Stibbe 2024b). The practice has ‘making’ potential that can be used, for example, to challenge any residual belief in scientific neutrality (Penz 2018). Blindness to how ‘realities’ vary can be traced to how some suppress human agency, its effects and its grounding in coordinative activity. Seen thus, a focus on warranted models distorts our sense of the living. It masks how much is masked by repeatable wording types that sustain recursive practices in a specific (and emplaced) middle world. Conversely, to rethink the making/spreading of knowledge (‘worlding’), one asks how tokenising is integrated with practices. In Douglas’s (2021) terms, this depends on how ‘intellectual structures’ (e.g., wording types) inform both ‘ideation and living agency’? Next, therefore, I exemplify how *growthism* and *life-sustaining relations* channel meaning for communities such as ecolinguists or, indeed, advocates of what Douglas (2008) chooses to call the Green Backlash.

Whilst prescriptivism allows only skill, appeal to ‘explanatory adequacy’ (Chomsky 1965) privileges theoretical expertise. Although largely of historical value, such views effectively sideline the question of how to make good use of what is collectively known. Countering, I argue that, by using double distancing, ecolinguistic expertise can inform practical theories in education, media use and the public use of science. We can address not just how the said uses languages and vernaculars (in discourse), but also how skilled linguistic action can build on conformity to practical, legal, religious, didactic, aesthetic and/or scientific standards. In middle worlds, emplaced experience can bring (perceived) novelties to action. Often these are negative because, typically, impersonal knowledge carries assumptions or, in Ponton’s (2024) sense, we act as if discursively hardwired. Yet, plainly, we also use skilled linguistic action in careful judgements. In languaging, events allow construals that, with experience, can be used breach established norms and enact what was (or seemed) impossible. The emplaced can trigger vital process (see, Steffensen et al. 2024a) as practices draw on languaging. In pursuing how ‘intellectual structures’ operate, therefore, I contrast a wording type that was ‘captured’ by praxis with one whose power is strongly ideational.

After publication of the *Limits of Growth* (Meadows et al. 1972), *growthism* entered academic discourse.<sup>5</sup> Initially, uncontrolled urban development was challenged by appeal to ‘no growthism’ (Walker and Heiman 1975) while others ascribed population and resource depletion to *economic growthism* (Buttel and Flinn 1976). With changing times, however, the term was captured by the interdependency of economics with climate. In a famous talk to applied linguists, Halliday ([1990] 2003) urged us to challenge both classism and growthism. Cannily, he left aside *how* to oppose so-called ‘ideologies’. Related usage spread as, for example, liberals used growthism to oppose populism (Haque 2013) and, elsewhere, neoliberals spoke for the Green Backlash (Douglas 2008). While the -ism suffix marks the term as (loosely) ideological (c.f. neoliberalism, sexism, animalism), some see it as a metaphorical extension of ‘growth’ (Stibbe 2015). Others see it as an ethic, a religion, a state of mind or a marker of faith. In emphasising *growthism’s* power, Ponton (2024) notes that, at times, we act as if ‘hardwired’ and, for Fill (1997), it is ‘engrammatized’. Thus, as Halliday ([1990] 2003) notes, “we construe our experience in such a way that we believe we can expand forever—our own numbers, our own power and dominance over other species, our own consumption and so-called “standard of living” (cited, Fill 1997, p. 451). Crucially, the remarks use languaging to pick out practices of *growthism*. Unlike *classism* (or *life-sustaining relations*), the wording has connotations that place it at a remove from ideation (or institutionalised bias). In this sense, therefore, it has been captured by praxis that is, largely, beyond individual control. In such a case, it is overhasty to say that ‘we’ construe experience by using lexicogrammar. Indeed, growthism is, today, inseparable

from observations of global heating and, thus, negatively charged. Influential figures now advocate degrowth or, cautiously, re-imagine economics.<sup>6</sup> Hence, once traced to languaging, the case of *growthism* shows why lexicogrammar (or discourse) cannot, on its own, show *how* wording types can make and/or spread knowledge and beliefs. The case matters because, as Douglas (2008) notes, “all mainstream politics is moulded (550)” by belief that “the global economy can keep on expanding indefinitely—for all practical purposes forever.” It uses a gap between ‘intellectual structure’ and ‘agency’ or, perhaps, ‘between the material and the ideational’. For Douglas, intellectual structures (e.g., *growthism*) bring meaning to those who ascribe to them. The ecolinguist replies: how can this be?

Measures of GDP and how people, technoscience and markets cofunction determine *growth* (or recession). It attests to hegemonic practices bound up with industrialisation and the institutionalisation of economics. Whereas *growthism* uses English morphology, *growth* (partly) can be quantified. Given measurement and modelling, it is partly detached from languaging. As a result, and by accident, *growthism* has a duplex sense: it indicates markets (where growth is quantified) and, at once, epigenetic change in living systems. As a result, *growthism* is as a hybrid that is contested by rival political camps. By contrast, ecolinguistics brings ideation to *life-sustaining relations*. In shifting attention from environmental discourse to *life-sustaining relationships* (Alexander and Stibbe 2014), weight fell, first, on ‘the systems’ on which humans and nonhumans depend “for their wellbeing and survival” (Stibbe 2015, p. 9). Without (public) discussion, influential voices turned to “*life-sustaining interactions*” between humans, other species and the physical environment (<https://www.ecolinguistics-association.org/>) (accessed on 1 June 2024). Later, given how relationships, systems and interactions are entangled, others turned to vital process (Steffensen et al. 2024a, 2024b) and *life-sustaining relations*. The wording type can therefore unite how life is described scientifically with how living *appears* and is felt. While science highlights evolved forms, mechanisms and wide systems (Cowley, forthcoming), in middle worlds, life also appears ‘from the inside’. Using emplacement, its appearances—and sense (or meaning)—emerges for humans/subjects. As a wording type, *life-sustaining relations* links the spectatorial to a person’s history. It identifies change at rates that, once described, can be used to change practices (Cowley, forthcoming). Since it is ideational it has flexibility: in geology, *life-sustaining relations* shape an Earth system that uses physics and, at once, the living parts of an evolving ecosphere. At slower scales, *life-sustaining relations* connect geography with human influences on geohistory. More slowly still, they include, first, ecosystems and niches and, second, human societies, biomes and lineages. Conversely, from the inside, one encounters *Umwelten* (e.g., for ticks or lemurs) and more and less managed habitats. Finally, *life-sustaining relations* prompt organisms and consortia (for example) act as described both by science and as observed in bioecologies. *Life-sustaining relations* enable what we most value—lived experience (e.g., taste) and the making of valued novelties (not to mention real and fictional middle worlds). Even if often ignored by a focus on ‘warranted knowledge’, *life-sustaining relations* enact living, knowing and a person’s experience (human or nonhuman).

A focus on *life-sustaining relations* provides a contrast with how economics and technoscience exert practical effects. Often, covert praxis (e.g., *growthism*) shapes socioecological decision making. Conversely, with ecolinguistic expertise, one can use ideation to link wording types with lexicogrammar, practices and communities. Both *life-sustaining relations* and *growthism* are intellectual structures that presuppose a nexus of human practices. However, while one is captured by praxis, the other has ideational power: yet, both matter for humans and nonhumans alike. The case show the value of ecolinguistic expertise for those who work for social transformation. At very least, we can endorse modes of activism that seek to replace obsession an economy’s size with action to mitigate *growthism*. In so doing, much will depend on use of languaging to engender and shape expertise. In Section 4, therefore, I turn to what epistemic agency offers to future theory of practices. While this will require an interdisciplinary community–body, or *corpus popolare*, the normative power of

the examples show how intellectual structures can impact on communities, practices and their effects.

### 3.2. Changing Practices

Pursuit of how practices, languaging and discourse work through living beings allows one to specify useful goals. As Li (2018) argues, we can both use practical theories and, in principle, develop a theory of practices (see, Cowley, forthcoming). Just as many use translanguaging for educational and personal purposes, languaging can itself enhance life-sustaining relations. Ecolinguistics can put warranted knowledge into practice both by repurposing scientific knowledge and, in Huang Guowen's terms, living ecolinguistically.<sup>7</sup> In so doing, we can organise as collective bodies or:

- (a) Corpora popularia who work for life-sustaining relations and, at once, seek to suppress toxic practices.

As part of corpora popularia, we can spread ecolinguistic expertise. Many can gain from tracking how languages, lexicogrammar and wording types affect practices. By acknowledging their epistemic power we can help others concerned with, say, how river toxicity is sustained by organised practices. Once challenged by corpora popularia, one can use micro-activism, policy proposals, media campaigns, etc., together with seeking to use science to improve ecosystems, habitats and the ecosphere. Further, languaging allows us to change ourselves. Soft powers (creativity, teamwork, emotional intelligence etc) inform epistemic effects just as do wordings (and wording types). Not only is self-transformation part of education (Cowley 2024a) but, once acknowledged, we see that the dominance of markets often focus, not human becoming, but growthism. Countering, one can seek to disclose the interdependence of human and nonhuman persons. In this perpendicular politics, one "moves individuals into active engagement and dialogue, not driven by ideology but by interactive action and participation itself" (Latour et al. 2018). For Rodríguez Giralt (Latour et al. 2018), practices and the "politics of movement and mobilization" must test what we know and believe. The results open up a second desideratum:

- (b) Using ecolinguistic practices to illuminate life from the inside.

In the middle world, lives are enhanced both by science and insider studies as exemplified by recent work on cow-human languaging (Cornips 2024). In such a case, a living person uses emplacement to become a first *knower* (Fester-Seeger 2024). By focusing on the importance of epistemic agency, education has much to learn from ecolinguistics. Rather than unite assessment with (misleading) promises of future wealth and well-being, one can focus on the becoming of being (Zheng et al. 2024). Weight falls on emplaced activity, interpersonal acting and living well with artifacts (including wording types). As part of living, languaging can also serve epistemic engineering as in retelling old stories about elephants (Oriol et al. 2024), regenerative farming (Ponton 2024) or indeed, rejecting skills based views of reading to stress synthetic processes (Cowley 2024a). Just as corpora popularia use lexicogrammar, one can use them to change discourse, the sayable and the not-yet-said and enact a third desideratum:

- (c) Raising a sense of living hereness and bioecological awareness.

A pond is a unique micro-environment or bio-ecology (Clements and Shelford 1939) where animals, plants and other life co-adapt in ways that are sensitive to human practices. Indeed, merely observing the pond shows how the entanglement of the living can bring sense of natural inclusion (Rayner 2018). Even watching the fish or pond dipping requires epistemic agency. As a result, whether habitat-based, ecosystemic, imaginary or scientific, we can build bioecological awareness. In favouring new kinds of subjectivity, one can use interconnectedness, stories and challenges to expertly crafted realities. With noticings and stories, judging can prompt both micro and macro-activism. One seeks to connect expectations, feeling surprised or, indeed, confounded with both warranted knowledge and how, in specific settings, novelties take on emplaced value. In discourse too, the ideational can become real (as 'construing experience') and, given middle worlds, the

imagined can alter the actual (for good or ill). Thus wording types like *climate change* and *global warming* (Penz 2018) index practices that, as we know, are decimating earth systems. Ideally, to avoid disastrous effects, a theory of practices would help us in acting to channel scientific knowledge. For now, however, we can only stress that discourse often blinds us to the overwhelming importance of bioecologies, habitats, the ecosphere and experience of Earth systems.

#### 4. Pursuing Epistemic Agency

As an epistemic agent, a tick, a capuchin monkey or a human lives by enacting coordinative activity. In an Umwelt, using transduction, subsystems prompt organic function and what Yu (2021) calls supersession. Larger organisms use a body, appearances and sub-regulatory parts like brains that entangle (what we call) the ecological, the genetic and, in many species, the epigenetic (see, Sultan et al. 2022). As with capuchin tool use or how lemurs play, supersession brings modelling and development to agency. In humans, with skilled linguistic action, polyphony falls under an agent's partial control when coupling coordinative activity with careful use of wordings. Indeed, since we are made in languaging, the results can bring many perspectives to imagining, middle worlds and acting. Epistemic agency can bind bodies, devices, wording types and common judgements with material and intellectual structures. Hence, just as organisational structures can drive change, we can also do so by reducing entropy with careful use of wordings (e.g., asking *how* intellectual structures inform meaning). Humans use agency to simplexify (Cowley and Gahrn-Andersen 2023) as they configure wording types around what, at a specific moment, supersedes (for someone). The results serve to construct valued novelties (for us) by using the same simplex tricks that allow animals to live in niches/habitats and, as Berthoz (2017) stresses, vicariance aided by self-selecting neural networks. Hence, tracking life from the inside connects practical use of scientific models to ways in which ideation and action can favour *life-sustaining relations*. By contrast in seeking to challenge power, benefits accrue from a captured wording type like *growthism*. In both cases, material and intellectual structures influence living. What Halliday calls 'ideology' arises in how persons, devices and structures—languages, discourses, wordings-types, etc.—enact epistemic agency. As parts of practices, persons follow convention while, at once, resonating with the emplaced. The same process, I suggest, can be used to channel scientific and other practices that change the ecosphere.

A future normative ecolinguistics needs a theory of practices. For the present, we have to rely on a corpus popolare like the *International Ecolinguistic Association* (International Ecolinguistics Association Website n.d.) in order to connect expertise about languaging and practices with useful knowledge. Its human parts can use bioecological awareness to open up the Earth system, the ecosphere and habitats 'from the inside'. Indeed, if one begins with the emplaced, one can develop normative agenda by giving weight to what is effective. For the same reason, *social justice* (and its lack) gains from connection with issues of place. In each setting, we need selections of means whereby we can challenge human inequities while meeting the needs of nonhuman persons. Having rejected growthism, the well-being of ecosystems become central to a concept of public good. Once achieved, we can unleash forces that shift use of economics and technoscience to favour *certain* life-sustaining relations. The necessary selections speak for both new corpora popularia, practices and ways of languaging. Above all, we must alter the sayable and the not-yet-said. Once we recognise ecolinguistic expertise, we can contribute much to those who seek to benefit the ecosphere, habitats and local bioecologies. Having shown how we are made in languaging, we can devise ways of acting to enhance earth systems, and the lived value of the various places where we dwell.

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## Notes

- 1 What can be reported as *wordings* are part of co-ordinative activity or languaging (see, [Cowley and Fester-Seeger 2023](#)): acts set off overt, covert and hidden statistical/physical properties whose influence is directed, in part, by ‘wording types’. Linguists ascribe these ‘phenomena’ (or signs) to variations in form and meaning that, for lexicographers, bring senses to ‘words’ that can be theorised as ‘lexemes’.
- 2 They write of languages/languaging in a striking terminological move: I read it as allowing nature-in-culture to inform a human trait that is highly variable (in many scales—it spreads across people, things and in historical and even evolutionary scales).
- 3 Languages and wordings are intrinsic to coordinative activity: in uttering/responding to ‘ah bene’, wording types (viz. ‘ah’, ‘bene’ and ‘ah bene’) co-function with prosody or a vocal mode where prosody enacts the ‘Italian’ and what happens (see, [Cowley 2014b](#)). One thus replaces Bakhtin’s view of god with how the aesthetic (a sense of what is right) grants normative order.
- 4 In Organizational Cognition, the ‘middle world’ is seen as ‘social organising’—a world of practices, doings and sayings. Of course, how these are actualised in the middle world (or mesosphere) reflect both a macrosphere (practices are organised) and neurophysiologies (microspheres); but, for many purposes, public events are used to shape what happens. The main advantage in focusing on the middle world is that one avoids treating humans as autonomous/automatic social ‘actors’.
- 5 Limits presents the world system and aspiration for endless growth as unsustainable. They generalise this to population, resource use, food production, consumption, pollution, etc., and predict social breakdown by the middle of the 21st century.
- 6 Today many advocate degrowth (e.g., [Paulson 2017](#)) or, in a regulation-friendly style, doughnut economics ([Raworth 2017](#)).
- 7 I learned this fine motto from Huang Gouwen.

## References

- Alexander, Richard, and Arran Stibbe. 2014. From the Analysis of Ecological Discourse to the Ecological Analysis of Discourse’. *Language Sciences* 41: 104–10. [[CrossRef](#)]
- Bakhtin, Mikhail. 2013. *Problems of Dostoevsky’s Poetics*. Minneapolis: University of Minnesota Press.
- Bang, Jørgen, and Jørgen Døør. 2000. Ecology, ethics & communication: An essay in ecolinguistics. In *Dialectical Ecolinguistics: Three Essays for the Symposium 30 Years of Language and Ecology in Graz December 2000*. Edited by Anna V. Lindø and Jeppe Bundgaard. Odense: Syddansk Universitet.
- Batisti, Filippo. 2021. An Argument for Languages in Languaging. *Rivista Italiana di Filosofia del Linguaggio* 2: 159–75.
- Becker, Alton. 1991. Language and Languaging. *Language & Communication* 11: 33–35.
- Berthoz, Alain. 2017. *The Vicarious Brain, Creator of Worlds*. Cambridge, MA: Harvard University Press.
- Bottineau, Didier. 2008. Language and enaction. In *Enaction: Towards a New Paradigm for Cognitive Science*. Edited by John Stewart, Olivier Gapenne and Ezequiel Di Paolo. Cambridge, MA: MIT Press, pp. 1–67.
- Bottineau, Didier. 2012. Remembering Voice Past: Languaging as an Embodied Interactive Cognitive Technique. In *Conference on Interdisciplinarity in Cognitive Science Research*. Moscow: RGGU [Russian State University for the Humanities], pp. 194–219.
- Buttel, Frederick, and William Flinn. 1976. Economic Growth Versus the Environment: Survey Evidence. *Social Science Quarterly* 57: 410–20.
- Chomsky, Noam. 1965. *Aspects of a Theory of Syntax*. Cambridge, MA: MIT Press.
- Clements, Frederic, and Victor Shelford. 1939. *Bio-Ecology*. New York: John Wiley.
- Collins, Harry, Robert Evans, Martin Innes, Eric Kennedy, Will Mason-Wilkes, and John McLevey. 2022. *The Face-To-Face Principle: Science, Trust, Democracy and the Internet*. Cardiff: Cardiff University Press.
- Cornips, Leonie. 2024. How (Dairy) Cows and Human Intertwine Languaging Practices. In *Language as an Ecological Phenomenon*. Edited by Sune Steffensen, Martin Döring and Stephen Cowley. London: Bloomsbury, pp. 29–54.
- Cowley, Stephen J. 2011. Taking a Language Stance. *Ecological Psychology* 23: 1–25. [[CrossRef](#)]
- Cowley, Stephen J. 2014a. Bio-ecology and Language: A Necessary Unity. *Language Sciences* 41: 60–70. [[CrossRef](#)]
- Cowley, Stephen J. 2014b. Linguistic Embodiment and Verbal Constraints: Human Cognition and the Scales of Time. *Frontiers in Psychology* 5: 99299. [[CrossRef](#)]
- Cowley, Stephen J. 2019. The Return of Languaging: Toward a New Ecolinguistics. *Chinese Semiotic Studies* 15: 483–512. [[CrossRef](#)]
- Cowley, Stephen J. 2022. Ecolinguistics Reunited: Rewilding the Territory. *Journal of World Languages* 7: 405–27. [[CrossRef](#)]
- Cowley, Stephen J. 2024a. Ecolinguistics in Practice. In *Routledge Handbook of Applied Linguistics*. London: Routledge, pp. 374–85.
- Cowley, Stephen J. 2024b. Other Orientation: Uncovering the Roots of Praxis. *Language Sciences* 103: 101624. [[CrossRef](#)]
- Cowley, Stephen J. 2024c. How Expertise is Enabled: Why Epistemic Cycles Matter to us All. *Social Epistemology* 38: 83–97. [[CrossRef](#)]

- Cowley, Stephen J. Forthcoming. Building Ecocivilizations; Putting Ecolinguistic Expertise to Work. In *Ecolinguistics and Emplacement*. Edited by Martin Döring, Stephen Cowley and Sune Steffensen. London: Routledge.
- Cowley, Stephen J., and Anneliese Kuhle. 2020. The Rise of Linguaging. *Biosystems* 198: 104264. [CrossRef] [PubMed]
- Cowley, Stephen J., and Marie-Theres Fester-Seeger. 2023. Re-evoking Absent People: What Linguaging implies for Radical Embodiment. *Linguistic Frontiers* 6: 64–77. [CrossRef]
- Cowley, Stephen J., and Rasmus Gahrn-Andersen. 2023. How Systemic Cognition enables Epistemic Engineering. *Frontiers in Artificial Intelligence* 5: 960384. [CrossRef] [PubMed]
- Cowley, Stephen J., Rasmus Gahrn-Andersen, and Davide Secchi. 2022. Towards a Science of the Artificially Organized. In *Organizational Cognition: The Theory of Social Organizing*. Edited by Davide Secchi, Rasmus Gahrn-Andersen and Stephen Cowley. London: Taylor & Francis, pp. 283–304.
- Demuro, Eugenia, and Laura Gurney. 2021. Languages/Linguaging as World-making: The Ontological Bases of Language. *Language Sciences* 83: 101307. [CrossRef]
- Douglas, Richard. 2008. Historicism and the Green Backlash: A study of Julian Simon and Bjørn Lomborg. *International Journal of Green Economics* 2: 176–89. [CrossRef]
- Douglas, Richard. 2021. The Meaning of Growth: A Hermeneutical Reading of the Discourse of ‘Growthism’. Unpublished. Ph.D. dissertation, University of London, Goldsmiths College, London, UK.
- Dreon, Roberta. 2022. *Human Landscapes: Contributions to a Philosophical Anthropology*. New York: SUNY University Press.
- Druzhinin, Andrey, and Tzipora Rakedzon. 2024. Why Language Kills: Semantic Patterns of (Self-) Destruction. *Constructivist Foundations* 19: 113–26.
- Eckert, Penelope, and William Labov. 2017. Phonetics, phonology and social meaning. *Journal of Sociolinguistics* 21: 467–96. [CrossRef]
- Falótico, Tiago. 2022. Robust Capuchin Tool Use Cognition in the Wild. *Current Opinion in Behavioral Sciences* 46: 101170. [CrossRef]
- Fester-Seeger, Maie-Theres. 2024. Becoming a Knower: Fabricating Knowing Through Coaction. *Social Epistemology* 38: 49–69. [CrossRef]
- Fill, Alwin. 1997. Ecolinguistics as a European idea. *The European Legacy* 2: 450–55. [CrossRef]
- Fuller, Steve. 2002. *Introduction to Social Epistemology*, 2nd ed. Bloomington: Indiana University Press.
- Fuller, Steve. 2012. Social Epistemology: A Quarter-Century Itinerary. *Social Epistemology* 26: 267–83. [CrossRef]
- Fuller, Steve. 2015. *Knowledge: The Philosophical Quest in History*. London: Routledge.
- Fuller, Steve. 2020. Expertise as a Form of Knowledge: A Response to Quast. *Analyse & Kritik* 42: 431–42.
- Gahrn-Andersen, Rasmus. 2021. Conceptual Attaching in Perception and Practice-based Behavior. *Lingua* 249: 102960. [CrossRef]
- Gahrn-Andersen, Rasmus. 2023. Enacting Practices: Perception, Expertise and Enlanguaged Affordances. *Social Epistemology* 38: 70–82. [CrossRef]
- Garner, Mark. 2004. *Language: An Ecological View*. Berlin: Peter Lang.
- Goatly, Andrew. 2021. Ecology, physics, process philosophies, Buddhism, Daoism, and language: A case study of William Golding’s *The Inheritors* and Pincher Martin. *Journal of World Languages* 7: 1–25. [CrossRef]
- Goldman, Alvin. 2018. Expertise. *Topoi* 37: 3–10. [CrossRef]
- Halliday, Michael. 2003. New Ways of Meaning: The Challenge to Applied Linguistics. In *On Language and Linguistics*. Vol. 3 of the Collected works Michael Halliday. Edited by Johnathan Webster. London: Continuum, pp. 139–76. First published 1990.
- Haque, Umair. 2013. This isn’t Capitalism, it’s Growthism and its Bad for Us. *Harvard Business Review* 28. Available online: <https://hbr.org/2013/10/this-isnt-capitalism-its-growthism-and-its-bad-for-us> (accessed on 14 April 2024).
- Haugen, Einar. 2001. The ecology of language. In *The Ecolinguistics Reader*. Language, Ecology and Environment. Edited by Alwin Fill and Peter Mühlhäusler. London: Continuum, pp. 56–67. First published 1972.
- Hoffmeyer, Jesper. 1997. *Signs of Meaning in the Universe*. Bloomington: Indiana University Press.
- Huang, Guowen, and Ruiha Zhao. 2021. Harmonious Discourse Analysis: Approaching Peoples’ Problems in a Chinese Context. *Language Sciences* 85: 101365. [CrossRef]
- Humphrey, Nicholas. 1976. The Social Function of Intellect. In *Growing Points in Ethology*. Edited by Patrick Bateson and Robert Hinde. Cambridge: Cambridge University Press, pp. 303–17.
- Hutchins, Edwin. 1995. *Cognition in the Wild*. Cambridge, MA: MIT Press.
- Hutchins, Edwin. 2014. The cultural ecosystem of human cognition. *Philosophical Psychology* 27: 34–49. [CrossRef]
- Ilyin, Mikhail. 2023. The Ongoing Linguaging Revolution and More. Introduction. *Linguistic Frontiers* 6: 1–4. [CrossRef]
- International Ecolinguistics Association Website. n.d. Available online: <https://www.ecolinguistics-association.org/> (accessed on 27 March 2024).
- James, William. 1991. *Pragmatism*. New York: Prometheus Books.
- Jensen, Casper. 2017. Pipe dreams: Sewage infrastructure and activity trails in Phnom Penh. *Ethnos* 82: 627–47. [CrossRef]
- Jolly, Alison. 1966. Lemur Social Behavior and Primate Intelligence: The step from Prosimian to Monkey Intelligence Probably Took Place in a Social Context. *Science* 153: 501–6. [CrossRef]
- Latour, Bruno, Denise Milstein, Isaac Marrero Guillamón, and Israel Rodríguez Giralt. 2018. Down to Earth Social Movements: An Interview with Bruno Latour. *Social Movement Studies* 17: 353–61. [CrossRef]
- Lechevrel, Nadine. 2009. The Intertwined Histories of Ecolinguistics and the Ecological Approach of Language. Historical and Theoretical Aspects of a Research Paradigm. In *Symposium on Ecolinguistics—Ecology of Science*. Odense: University of Southern Denmark.

- Li, Jia, Sune Steffensen, and Guowen Huang. 2020. Rethinking Ecolinguistics from a Distributed Language Perspective. *Language Sciences* 80: 101277. [\[CrossRef\]](#)
- Li, Wei. 2018. Translanguaging as a Practical Theory of Language. *Applied Linguistics* 39: 9–30.
- Love, Nigel. 2017. On Linguaging and Languages. *Language Sciences* 61: 113–47. [\[CrossRef\]](#)
- Martin, James. 2004. Positive Discourse Analysis. *Revista Canaria de Estudios Ingleses* 49: 179–200.
- Maturana, H. R. 1988. Reality: The search for objectivity or the quest for a compelling argument. *The Irish Journal of Psychology* 9: 25–82. [\[CrossRef\]](#)
- Meadows, Donella, Dennis Meadows, Jergen Randers, and William Behrens. 1972. *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. New York: Universe Books.
- Oriel, Elizabeth, Deepta Sateesh, and Amal Dissanayaka. 2024. Landscape Sentience. In *Language as an Ecological Phenomenon*. Edited by Sune Steffensen, Martin Döring and Stephen Cowley. London: Bloomsbury, pp. 161–90.
- Paulson, Susan. 2017. Degrowth: Culture, Power and Change. *Journal of Political Ecology* 24: 425–48. [\[CrossRef\]](#)
- Pennycook, Alistair. 2010. *Language as a Local Practice*. London: Routledge.
- Penz, Hermine. 2018. Global Warming or Climate Change. In *The Routledge Handbook of Ecolinguistics*. Edited by Alwin Fill and Hermine Penz. London: Routledge, pp. 277–92.
- Pinna, Simone, Fabrizia Garavaglia, and Marco Giunti. 2023. Symbolic Processing as the Result of Social Interactions. In *National Conference on Systems Science-(AIRS) Italian Systems Society*. Cham: Springer, pp. 119–28.
- Ponton, Douglas. 2024. *Ecolinguistic Narratives. Farming, Industry and the Non-human World*. London: Bloomsbury.
- Quine, Willard. 2013. *Word and Object*. Cambridge, MA: MIT Press. First published 1960.
- Raworth, Kate. 2017. *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. White River (VR): Chelsea Green Publishing.
- Rayner, Alan. 2018. Natural Inclusion. In *Balancing Individualism and Collectivism: Social and Environmental Justice*. London: Springer, pp. 461–70.
- Sebeok, Thomas. 1988. Language: How Primary a Modeling System? In *Semiotics*. Edited by John Deely. Lanham: University Press of America, pp. 15–27.
- Secchi, Davide, Rasmus Gahrn-Andersen, and Stephen Cowley, eds. 2022. *Organizational Cognition: The Theory of Social Organizing*. London: Taylor & Francis.
- Sellars, Willfrid. 1997. *Empiricism and the Philosophy of Mind. Introduction by Richard Rorty and Study Guide by Robert Brandom*. Cambridge, MA: Harvard University Press.
- Steels, Luc, and Tony Belpaeme. 2005. Coordinating Perceptually Grounded Categories through Language: A Case Study for Colour. *Behavioral and Brain Sciences* 28: 469–88. [\[CrossRef\]](#) [\[PubMed\]](#)
- Steffensen, Sune, and Alwin Fill. 2014. Ecolinguistics: The State of the Art and Future Horizons. *Language Sciences* 41: 6–25. [\[CrossRef\]](#)
- Steffensen, Sune, and Stephen J. Cowley. 2021. Thinking on Behalf of the World: Radical Embodied Ecolinguistics. In *The Routledge Handbook of Cognitive Linguistics*. Edited by Wen Xu and John R. Taylor. London: Routledge, pp. 15–27.
- Steffensen, Sune, Martin Döring, and Stephen Cowley. 2024a. Ecolinguistics: Living and Linguaging United. In *Language as an Ecological Phenomenon*. Edited by Sune Steffensen, Martin Döring and Stephen Cowley. London: Bloomsbury, pp. 1–28.
- Steffensen, Sune, Martin Döring, and Stephen Cowley. 2024b. *Language as an Ecological Phenomenon*. Edited by Sune Steffensen, Martin Döring and Stephen Cowley. London: Bloomsbury.
- Sterelny, Kim. 2010. Minds: Extended or scaffolded? *Phenomenology and the Cognitive Sciences* 9: 465–81. [\[CrossRef\]](#)
- Stibbe, Arran. 2015. *Ecolinguistics: Language, Ecology and the Stories We Live By*. London: Routledge.
- Stibbe, Arran. 2024a. Ecolinguistics for ethical leadership. In *Language as an Ecological Phenomenon*. Edited by Sune Steffensen, Stephen Cowley and Martin Döring. London: Routledge, pp. 147–68.
- Stibbe, Arran. 2024b. *Econarrative: Ethics, Ecology, and the Search for New Narratives to Live By*. London: Bloomsbury.
- Sultan, Susan, Armin Moczek, and Denis Walsh. 2022. Bridging the Explanatory Gaps: What can we Learn from a Biological Agency Perspective? *BioEssays* 44: 2100185. [\[CrossRef\]](#) [\[PubMed\]](#)
- von Uexküll, Jakob. 1992. A Stroll Through the Worlds of Animals and Men: A Picture Book of Invisible Worlds. *Semiotica* 89: 319–91. First published 1934. [\[CrossRef\]](#)
- Walker, Richard, and Michael Heiman. 1975. Quiet Revolution for whom? *Geographical Review* 65: 67–83. [\[CrossRef\]](#)
- Wittgenstein, Ludwig. 1957. *Philosophical Investigations*, 2nd ed. Oxford: Blackwell.
- Yu, Hongbing. 2021. Modeling in Semiotics: An Integrative Update. *Chinese Semiotic Studies* 17: 639–59. [\[CrossRef\]](#)
- Zheng, Dongping, Stephen Cowley, and Michaela Neusser. 2024. The New Ecolinguistics: Learning as Linguaging with Digital Technologies. *Frontiers in Digital Education* 1: 109–19. [\[CrossRef\]](#)
- Zhou, Wenjuan. 2022. Ecolinguistics: A half-century overview. *Journal of World Languages* 7: 461–68.

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