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Enactive Cognition at the Edge of Sense-Making

Making Sense of Non-Sense

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New Directions in Philosophy and Cognitive Science
Series Standing Order ISBN 978-0-230-54935-7 Hardback
978-0-230-54936-4 Paperback

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First published 2014 by
PALGRAVE MACMILLAN

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Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

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ISBN: 978-1-137-36335-0

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

A catalogue record for this book is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Enactive cognition at the edge of sense-making : making sense of non-sense / [edited by] Massimiliano Cappuccio. United Arab Emirates University, Emirate of Abu Dhabi, Tom Froese, Universidad Nacional Autónoma de México (IIMAS-UNAM), México.

pages cm. — (New directions in philosophy and cognitive science)

Includes bibliographical references and index.

ISBN 978-1-137-36335-0

1. Sense (Philosophy) 2. Philosophy of mind. 3. Cognition. I. Cappuccio, Massimiliano, editor.

B105.S45E53 2014

128'.2—dc23

2014025700

Tom Froese dedicates this book to Iliana Mendoza, whose unwavering support helped to make this book a reality

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Deleuze and the Enaction of Non-Sense

William Michael Short, Wilson H. Shearin,
and Alistair Welchman

Summary

This chapter examines the ways in which French philosopher Gilles Deleuze offers conceptual resources for an enactive account of language, in particular his extensive consideration of language in *The Logic of Sense*. Specifically, Deleuze's distinction between the nonsense of Lewis Carroll's portmanteau creations and that of Antonin Artaud's "translation" of Carroll's *Jabberwocky* highlights the need for an enactive, rather than merely embodied, approach to sense-making, particularly with regard to the general category of what Jakobson and Halle (1956) call "sound symbolism".

10.1 Introduction

This chapter examines the ways in which French philosopher Gilles Deleuze offers conceptual resources for an enactive account of language, in particular his extensive consideration of language in *The Logic of Sense*.¹

¹ References to Deleuze's *Logique du sens* (1969/1990) will be in the form *LS* followed by the page number(s) of the original French edition followed by "/" and then the page numbers of the English translation. Translations are our own, but usually follow Mark Lester (with Charles Stivale). Edition details are in the references section. We render Deleuze's original title, *Logique du sens*, with *The Logic of Sense*, as this is the rendering of the published English translation. Williams (2008), however, raises concerns about this choice, preferring instead the simpler, more literal *Logic of Sense*. On Williams' view, Deleuze is "proposing a logic with a very individual take on things and topics" (p. 22). The use of the definite article "the" in the translated title, he suggests, may obscure this fact. On the other hand, Deleuze himself is happy to refer to "la théorie du sens" [*LS*, p. 7/xiii: "the theory of sense"], so perhaps the definite article is not so out of place after all.

Specifically, Deleuze's distinction between the nonsense of Lewis Carroll's portmanteau creations and that of Antonin Artaud's "translation"² of Carroll's *Jabberwocky* highlights the need for an enactive, rather than merely embodied, approach to sense-making, particularly with regard to the general category of what Jakobson and Halle (1956) call "sound symbolism".³ Deleuze's account of Carrollian (non)sense can seem abstract: he argues, for instance, that sense is the surface between the corporeal realm of things and the incorporeal realm of events and propositions (*LS*, p. 41/28). But Deleuze's analysis of Carrollian nonsense is, in fact, consistent with a standard embodied understanding of linguistic meaning. Similarly, Deleuze presents his understanding of Artaudian nonsense in terms of a renewed confrontation of semantics with the body: in Artaud, Deleuze says, words "burst into pieces" like shrapnel, acting "directly on the body, penetrating and bruising it" (p. 108/87). But this move to the body in Deleuze is more radical than traditional theories of embodiment can accommodate, and marks instead a movement towards an enactive framework. The exploration of these direct connections between sense-making and other apparently nonsensical systems promises to account for the enaction of higher-order cognitive systems in more basic terms, without presupposing the required linguistic sense-making properties. At the same time, such exploration, we suggest, may conjure up its own challenges for enactive thinking.

The chapter has four parts: in the first part we outline the relation of the embodied and enactive theories of linguistic meaning; in the second we discuss Deleuze's analysis of Carrollian nonsense, arguing that it remains broadly within the tradition of embodiment; in the third section, we tease out from Deleuze's encounter with Artaud a more radical, enactive conception of linguistic meaning; and in the fourth and final section, we briefly describe some of Deleuze's later work, specifically *Anti-Oedipus*, which he co-wrote with Félix Guattari in 1972.

² Artaud refuses to call his writings translations of Lewis Carroll: "ce petit poème... m'appartient en propre et n'est pas du tout la version française d'un texte anglais" (Artaud, 2004, p. 927: "This little poem... is properly my own and not at all the French translation of an English text"). The editors of the single volume Quarto Gallimard *Oeuvres* call them "adaptations." For this reason, among others, we place "translation" in quotation marks in the main body of the text.

³ *The Logic of Sense* is not the only place where Deleuze juxtaposes Carroll and Artaud on nonsense. References to Carroll and Artaud also appear in *Anti-Oedipus*, *A Thousand Plateaus*, and *Essays Critical and Clinical*, among other works. See Lopez (2004, p. 103, 109).

This work helps us to see what is at stake in the enactive challenge to cognitive science, in particular in relation to “modal prejudice”.

10.2 From embodied to enactive theories of linguistic meaning

The development of an embodied view of cognition has led to advances in our understanding of linguistic meaning.⁴ Theories of categorization have moved beyond the classical view, often attributed to Aristotle, of defining categories by lists of “necessary and sufficient” features expressed in propositional format (e.g., “A rose is a fragrant flower with at least five petals and thorns”) to recognizing classes characterized by non-objective perceptual, interactional, or purposive properties, which may be organized in relation to “best examples” or according to “family resemblances” (roses are prototypically red, but may also be pink or white, with larger and more curved petals than a carnation’s, symbolize love, are given on Valentine’s day...)⁵ In many cases, scholars now suggest that the meanings of words, rather than being represented mentally

⁴ In this chapter, we are concerned with theories of meaning and conceptions of “sense” in Deleuze and enaction theory that go beyond narrowly linguistic meaning. As a result, much work of Chomskyan inspiration, viewing the primary task of linguistics as the construction of a recursive formal system capable of specifying all and only the syntactically correct utterances of a language, is probably irrelevant to our purposes. (There was an early “generative semantics” movement that attempted to apply Chomskyesque formalism to theories of linguistic semantics; but this movement is widely regarded as either having failed or having been absorbed into cognitive linguistics in general: cf. Harris, 1995). At the same time, it is interesting to note that Deleuze (1980/1988, pp. 11ff./5ff., with Guattari) discusses Chomsky (1965), trying to show that standard criticisms of Chomskyan linguistics (from, e.g., the point of view of sociolinguistics) as too “abstract” are, in fact, quite misplaced. Instead, they argue, it is “not abstract enough” (p. 14/7), in the sense that that the formal tree structures that Chomsky invokes preclude the possibility of directly interfacing linguistic phenomena with non-linguistic ones (cf. the position of Jackendoff, 2003). Such interfaces are possible, on their view, only if linguistics is regarded as a “network” or “rhizome” and precisely not as a tree with a determinate root that blocks further connections. The resonance with enaction and our critiques will become clear, and no coincidence: what Deleuze and Guattari describe as a “rhizome” in 1980 had already been explored by Deleuze in 1968 under the rubric of the “primary process” or “schizophrenia” (see below).

⁵ Cf. Rosch (1978); Fillmore (1985); Lakoff (1987), Johnson (1987). Although it is common to attribute this view to Aristotle, the precise nature of Aristotle’s *Categories* (and his broader theory of categories) remains much debated. Cf. Frede (1987, pp. 29–48).

as language-like symbols, actually correspond to recurring patterns of sensorimotor experience or “image schemas”. These schemas, as they are susceptible to visual and kinesthetic transformations in mental space – rotation, scanning, clustering or segmentation, superimposition, and path or end-point focus, for example – also provide an inferential structure for explaining synchronic sense variation and diachronic change.⁶ The metaphor theory pioneered by linguist George Lakoff further posits that most, if not all, abstract concepts are constituted through mappings of image-schematic structure from physicospatial domains.⁷ Mark Johnson, in turn, has extended this theory, elaborating an aesthetics of human understanding in which our capacity to “make sense” through language depends fundamentally not only on images and metaphor, but also on emotions and certain felt qualities of our bodily interaction with the world (Johnson, 2008).

Despite these advances, this theory of language arising and developing from embodied cognition also may be criticized for repeating certain failings of the very conceptual-propositional theory it claims to supersede.⁸ So-called “objectivist” theories of meaning fail to account for the ways in which cognition depends on the specific character of the human body and brain, instead treating sense-making as the manipulation of abstract, amodal symbols by disembodied minds.⁹ By the same token, mainline experientialist theories, though claiming to take account of the nexus of brain, body, and world, fail to present cognition as fully grounded in the interactions of bodies with their environment, overemphasizing the embodied mind and leaving the environment as colorless and idealized. Lawrence Barsalou’s perceptual symbol systems hypothesis, for example, proposes that thinking relies upon stored representations of sensorimotor states (1999, 2008). On this view, patterns of neural excitement arising from multimodal sensory and motor input are captured and stored for later representation in the same systems from which they originally derive. Mental representations, that is, are taken to emerge from repeated perceptual and motor experiences, and, in accessing these stored representations (“perceptual

⁶ Gibbs and Colston (1995); cf. for example, Ziemke et al. (2008).

⁷ Nuñez (2010) is an attempt to understand the extreme representational abstraction of transfinite numbers in terms of assemblages of concrete sensorimotor schemas.

⁸ See Weiskopf (2010); Hanna and Maiese (2009); Mahon and Caramazza (2008).

⁹ For the critique, see especially Lakoff (1987); Gibbs (1994); Johnson (2008).

symbols", Barsalou, 1999) during thought, the brain re-enacts or "simulates" patterns of neural activation similar to those that produced the initial representation. Yet perceptual symbols would appear able to implement efficient adaptive cognition only by flattening certain experiential information – perhaps, above all, the temporal extension of percepts – especially for the representation of abstract concepts (cf. Boroditsky and Prinz, 2008). More importantly, the perceptual symbols hypothesis gives little space to spoken language, in particular to phonological patterns that may co-occur with other repeated sensorimotor experiences.

By focusing on an individual's sensorimotor interactions or "couplings" with the environment and the ways in which these interactions structure cognition, the enaction paradigm represents an important corrective to the embodied theory of cognition. Yet, even as it offers this corrective, the enaction paradigm has met with its own criticisms. For all that it proposes a view of cognition as the effect of flat brain-body-action-world systems, some have alleged that this paradigm can only address online and fundamentally reactive forms of cognition and that "representation-hungry" types of cognition will elude it (Clark, 1997; Wheeler, 2005). Recent work has endeavored to meet such critiques (Stewart et al., 2010; Froese, 2012) by focusing specifically on language as the central theater for explaining how the enaction paradigm accounts for higher cognition and abstract sense-making (Bottineau, 2010; Nuñez, 2010).

10.3 Carrollian nonsense: Portmanteau words

One leading interpretation of Deleuze's *oeuvre* reads it as supplying the philosophical ontology underpinning an enactive approach to cognitive science. Manuel DeLanda and John Protevi, for instance, argue that Deleuze describes the anti-Platonic, anti-teleological ontology necessary for understanding cognition as a sense-making activity that closely integrates brain, body, and environment.¹⁰ These accounts, while they offer substantial indications as to how Deleuze's *The Logic of Sense* may be integrated into this approach, do not give this difficult work, which often operates precisely at the interface of ontology and language, the

¹⁰ See DeLanda (2002) and Protevi (2010). Holmes (2012) offers a reading of Deleuze's engagement with Lucretius in *Logique du sens*, which highlights *inter alia* his anti-Platonic ontological commitments.

sustained, individual attention it deserves.¹¹ In *The Logic of Sense*, Deleuze understands sense as something more general than mere signification: it is the element in which human beings exist (Williams, 2008, p. 3). *Sens*, the French term rendered as "sense," is not simply a synonym for "meaning" but also a term for describing the "direction" of becoming, or ontological change.¹² The enactivist school treats sense similarly – as the medium for the constitution or enactment of the world of any organic structurally unified system (Di Paulo et al., 2010, pp. 39ff.; Thompson and Stapleton, 2009, pp. 24–25).

For Deleuze, who takes his lead in *LS* from Stoic philosophy, sense emerges out of the material world, what he terms "the actions and passions of bodies," but is itself "incorporeal" (*LS*, p. 115/94). He thus aligns sense with Stoic *lekta*, a Greek term for the incorporeal events that propositions either can express or already have expressed.¹³ Sense is peculiarly hard to think, in Deleuze's view, because we are tempted either to reify it as a transcendent entity operating from on high or to reduce it to the corporeal alone (*LS*, pp. 90–91/72–73; 217/186f.). Although expressed in his own vocabulary, Deleuze shows a commitment to a kind of emergentism similar to the inspiration behind enaction theory (Varela et al., 1991, pp. 85ff.): Varela et al. want to do justice to the phenomenological specificity of enacted worlds while grounding

¹¹ An important starting point for considering *The Logic of Sense* within the framework proposed by DeLanda and Protevi is the Appendix (pp. 157–180) to DeLanda (2002), entitled "Deleuze's Words", where DeLanda indicates specifically how he sees the virtual, intensive, and actual operating in a broad range of Deleuze's works, in a variety of different vocabularies. There DeLanda comments that *The Logic of Sense* "presents the most detailed description of the quasi-causal operator" (pp. 157–158). DeLanda reads "nonsense" as one name for this operator. Despite its title, then, scholars such as DeLanda (2002), Protevi (2010), and Eleanor Kaufman (2012) (anticipated to some extent by Slavoj Žižek (2004)) have shown that *The Logic of Sense* is not primarily a work about, for example, propositional logic, at least not in isolation from larger questions of philosophical ontology.

¹² See, for example, *LS*, p. 9/1: "Il appartient à l'essence du devenir d'aller, de tirer dans les deux sens à la fois" ("It belongs to the essence of becoming to go, to pull, in both directions (*sens*) at once").

¹³ Although he does not use the Greek term, Deleuze is discussing *lekta*, for example, when he writes: "sense, the expressed of the proposition, is an incorporeal, complex, and irreducible entity, at the surface of things, a pure event which inheres or subsists in the proposition" (p. 19). See Long and Sedley (1987, vol. 1, pp. 195–202) for ancient evidence about, and discussion of, Stoic *lekta*. For Deleuze's reading of the Stoics, see Sellars (2006).

such specificity in the organic structures of sense-making and their cultural and evolutionary histories. Similarly, for Deleuze, the medium of *sens* also represents a genuine emergence with respect to the merely material and corporeal, without falling into a transcendent reification that postulates phenomenological experience as belonging to some Cartesian second substance or Platonic second world.

Crucially, however, Deleuze extends his thought beyond the bounds of enaction theory by emphasizing the fragility of sense. For Varela et al., sense-making is closely connected with the structural unity of organic systems and hence acts as a kind of transcendental condition. For Deleuze, who is more circumspect in his relation to the neo-Kantian heritage of phenomenology, this assumption makes it harder to understand how the incorporeal domain of sense could have emerged from the corporeal domain of bodies. But understanding this emergence is crucial to any investigation into cognition. The danger of excessive reliance on the phenomenological tradition is that the hinge between the phenomenological conception of sense-making and the biological realm is left unexplored because sense must already, methodologically and transcendently, have been constituted before one can pose the problem of the organism. But such a view forces the organism as such, and hence its precise relations to sense-making, into an inaccessible obscurity.¹⁴

Deleuze's skepticism about the unity of sense-making comes to the fore in his scrutiny of liminal phenomenological situations in general and borderline linguistic situations in particular. Sense itself may be defined liminally: "[S]ense is never only one of the two terms of the duality which contrasts things and propositions [...]; it is also the frontier, the cutting edge, or the articulation of the difference between the two terms" (*LS*, p. 41/28). Nonsense, in turn, is that which, while itself having no sense, "enacts the donation of sense" and "is opposed to the absence of sense" (*LS*, p. 89/71). Understanding nonsense is, thus, not

¹⁴ See Welchman (2013) for a critique of the influence of Heideggerian phenomenology on broadly enactive cognitive science. Some other developments of enactivism seem to be going in a similar direction. Bottineau (2010, p. 296) interrogates the diversity of the phenomena we call "language", and this recognition of diversity in "linguaging" (and so in at least one form of "sense-making") is therefore making itself felt within enaction theories at the moment (see below). If sense-making is a "transcendental condition", it is a *flexible* one. This "flexibilization" of transcendental conditions exactly expressed Deleuze's philosophical reappropriation of Kantianism. See, for example, Deleuze (1962/1983, pp. 50ff., 85, 93), where Deleuze refers to Nietzsche's will to power as a "plastic" transcendental condition "no wider than what it conditions" (p. 50).

just a challenge for cognitive science and linguistics; it is, for Deleuze, the point at which the seam between incorporeal sense and the corporeal realm becomes visible. Consequently, nonsense resides at the heart of *The Logic of Sense*, especially nonsense as embodied in the work of Lewis Carroll.

Although he addresses it most directly only in the 24th chapter or series, Deleuze appeals widely to the notion of "synthesis" in *The Logic of Sense*. The cognitive scientific use of this term is originally Kantian: Kant uses it to describe the mental actions necessary for the constitution of objective experience. But Deleuze widens its usage considerably, divorcing it from Kant's preoccupations with representation and transcendental unity (Welchman, 2009). Broadly based on the operators of Stoic logic, Deleuze discusses the operation of three syntheses in *The Logic of Sense: conexa, coniuncta, disiuncta*. The first of these, the connective synthesis (if... then), "bears upon the construction of a single series"; the second, the conjunctive series (and), is "a method of constructing convergent series"; and the third, the disjunctive series (or), "distributes the divergent series" (*LS*, pp. 203–204/174). The discussion of these syntheses is recapitulated in *Anti-Oedipus* (Deleuze and Guattari, 1972/1984) with one important difference, to which we will return below.

The syntheses operate between what Deleuze terms "series" – indeed, *The Logic of Sense* itself takes the form of a numbered sequence of different series. Despite the apparent heterogeneity of the different series under discussion, Deleuze makes it clear that they are, with one exception, variants on a primary duality of corporeal and incorporeal, things and propositions, bodies and language (*LS*, pp. 36ff./23ff.), or, in the psychoanalytic register he often uses, eating/speaking. The exception is a special case in which the primary duality is internalized within language itself, that is, in the distinction between the series of signifiers and signifieds, that is, the material and conceptual components of the sign. Deleuze understands "sense" as the surface that distinguishes but also articulates this difference between the (series of) signifiers and (series of) signifieds.

The general problem of the relation of sense-making to its material instantiation is, therefore, reprised in the internal structure of the sign itself, with its corporeal (phonetic) and incorporeal (semantic) components. But what interests Deleuze is not simply the way in which the two series are articulated, that is, joined together, but, rather, the extent to which this articulation is revealed in the ways in which the series do not converge but diverge.

Deleuze argues that what is particularly characteristic of Lewis Carroll's use of esoteric words is that it involves just such a synthesis of the

disparate. *Snark*, for example, synthesizes two disparate series of alimentary and semiological orality (eating/speaking) or two disparate aspects of the linguistic proposition: its denotative and expressive characters. These esoteric words have a peculiar property, according to Deleuze: the empirically accessible esoteric words themselves (e.g., *Snark*) are not actually the words that circulate; they are (following Carroll's logic) merely *names* for those words. Referring this property back to the structuralism prevalent when Deleuze was writing, the words themselves are the "empty place" that is the precondition of signifying structures of any kind; and the names for the words themselves simply designate this place. These words (or their names), therefore, circulate as a general condition of any kind of sense-making at all. Here Deleuze makes the crucial observation that such a condition of sense *does not itself make sense*. Thus, the investigation of *non-sense* is at the same time an investigation into the conditions of sense-making. And, since an understanding of organisms as fundamentally sense-making entities is the basic impetus of enaction theory, Deleuze's philosophical approach both overlaps with enaction theory and at the same time poses a grounding question to enaction theory: how is sense-making itself possible? The theoretical space within which an answer is to be found is non-sense.

It is worth noting that Deleuze draws specific attention here to the activity of "sound symbolism" in constructing such esoteric words: *Phlizz* (a fruit without a taste) is "almost an onomatopoeia for something vanishing" (LS, p. 59/44). Onomatopoeia and sound symbolism, as we shall see in our exploration of Artaud, also play a noteworthy role in enactive accounts of nonsense.

The third, disjunctive, synthesis is somewhat elusive. It concerns different types of series (ramifying or indefinitely subdividing ones) and a special kind of esoteric word, the portmanteau word. Deleuze follows standard linguistic usage here, giving the example of *frumious* = *fuming* + *furios*. But he points out that all the previous examples of esoteric words have elements in common with portmanteau words, and emphasizes the importance of understanding what is distinct about portmanteau words. Really, Deleuze is not interested in the mechanism of joining evident in portmanteau word formation but, rather, in a certain subset of portmanteau words that perform a unique linguistic function on the basis of the content produced by this mechanism. Deleuze is interested in cases where (linguistic, morphological) form follows function. *Snark*, for instance, is a possible portmanteau word (*shark* + *snake*). But here the function of the word (synthesis of disparate, i.e., alimentary/semiological series) is quite different from its formation, which refers to a composite

animal. By contrast, the portmanteau word *Jabberwocky* is formed from *jabber* ("to talk uncontrollably") + *wocer* ("offspring" or "fruit"). Here the formal composition of the word coincides with its function: *both* refer in this case to the synthesis of the disparate registers of the alimentary and semiological.

Why is Deleuze so concerned about this subset of portmanteau words? What worries him is that the merely nominal definition of portmanteau words (*mimsy* = *flimsy* + *miserable*, etc.) makes it seem as if portmanteau words "compose a global sense or meaning" (LS, p. 61/45) that operates within a single series rather than disjoining (but hence at the same time synthesizing) disparate series. It is, according to Deleuze, only within a certain *disorder* in the ordering of sense-making mechanisms that the conditions under which sense-making is possible in the first place come to visibility.¹⁵ Here Deleuze delves below the phenomenological presuppositions of the necessary structural unity of organism-medium structural coupling according to the enaction school (Varela et al., 1991). And the privileged conceptual space within which this takes place is the high-level sense-making constitutive of human natural languages: these are the only sites where nonsense becomes visible as such, and hence where nonsense can be thematized. Without access to non-sense as the condition of sense and sense-making in general, the question of the material basis of cognitive structures cannot be properly addressed, for one is consigned to thinking cognitive systems as always already saturated with sense.

What is this elusive, final "disjunctive synthesis" (LS, pp. 61–62/46)? Using the example of *frumious* again, Deleuze employs Carroll's own account of the origin of the word to claim that the disjunction of a disjunctive synthesis takes place not between the two components that make up the portmanteau (*furios* and *fuming*) but between the two different ways in which they may be synthesized: as *furios-and-fuming* on the one hand or *fuming-and-furios* on the other. This distinction is, indeed, worthy of Carroll – but can it really function as part of Deleuze's theory? We think it can, although Deleuze's means of expression is a little precious. What the example shows is that disjunctions occur not just *between* two series, but *within* each series itself. Thus, the disjunction of the *furios-and-fuming* series (abstract and concrete) involves the mutual interpenetration of the two terms (*furios-and-fuming* versus *fuming-and-furios*); and this, in turn, creates disjunctions within each

¹⁵ Compare here Manuel DeLanda's (2002, p. 160) "Dark Precursor", which he aligns with Deleuze's "nonsense".

series itself: the “fuming” series now contains an implicit reference to the “fury” it presents, and vice versa. As Deleuze puts it, the portmanteau word (insofar as it names the esoteric word) “functions not only to connote or coordinate two heterogeneous series but to introduce disjunctions in the series” (LS, p. 62/47). Here Deleuze alludes to one of his most important themes, the creation and maintenance of novelty (Smith, 2007). Although it would take us too far afield to think about it here, it is worth mentioning that it is probably in the unlimited resources of non-sense that linguistic novelty lies.

On the face of it, such nonsense can be explained in terms of the standard repertoire of “embodied” sense-making: all-pervasive metaphors (Lakoff and Johnson, 1980; Moon, 2004), prototype organization (Fillmore, 1985; Geeraerts, 1984), and encyclopedic knowledge (Langacker, 1987; Croft and Cruse, 2004). Take the seemingly arbitrary combination of *fuming* and *furious* to form *frumious*. What permits this interpretation (and allows this seemingly arbitrary conjunction to “make sense”) is English speakers’ conventional metaphorical understanding of anger through the image of pressurized fluid or gas in a container. Although this image is certainly not the only one English speakers rely upon in conceptualizing anger – anger can also be understood in terms of fire, insanity, conflict, burdens, weather events, and control, captivity, or trespassing – it serves as the basis for what Lakoff and Kövecses (1987) called their “prototypical cognitive model” of anger, structuring not only their regular ways of speaking but also the sorts of inferences they make about anger. The model functions in this way by establishing a series of conceptual correspondences or “mappings” between the fluid domain and the anger domain, which can be summarized as follows:

fluid in a container	anger
the container	the body
fluid	anger
degree of heat	degree of anger

The basic structure of these mappings constitutes English speakers’ inferential structure about being angry. Thus, a lack of anger is viewed in metaphorical terms as the “coolness” and “calmness” of the fluid. As anger becomes more intense, this is viewed as an increase in the temperature of the fluid and of internal pressure within the container: so we

speak of “pent-up” or “bottled up” anger and of anger “welling up” or “simmering” inside someone; of someone who is angry as “hot and bothered” or “hot under the collar”; of a “heated” argument; and so forth. When the anger reaches a certain point of intensity, we say that it has reached a “boiling point”; that someone is “brimming” or “seething” with anger. If a person does not express such anger verbally or physically, we say that they “contained” or “suppressed” or “kept in” their anger, or “turned blue in the face.” If, on the other hand, the anger is too intense, the person will “explode” or “burst” or “blow up”, “blow their stack”, “flip their lid”, “go through the roof”, “hit the ceiling”, “blow a gasket”, “blow a fuse”, or “let off some steam”. In other words, according to the entailments of this metaphorical image, a person expressing extreme anger is viewed as a container of liquid that, due to the excessive buildup of heat and pressure, has overflowed in a violent and uncontrolled manner.

The “pressurized container” metaphor does not, of course, deliver English speakers’ entire conceptualization of anger. Though affording a general model that supports thinking and reasoning about anger in a wide variety of contexts, the image focuses primarily on the understanding of a scale of anger – from “cool” to “fuming” – and on aspects of control. In particular, the metaphor captures the notion that, as anger grows more intense, one’s ability to control its effects diminishes, until a point is reached where it is impossible to “contain” one’s anger any longer and normal functioning ceases. The image of “blowing one’s top” or “bursting” also captures an understanding that the angry person represents a danger to himself as well as to those around him (Lakoff, 1987, pp. 386–387). Other metaphors target other dimensions of anger. For example, the “conflict” metaphor (as reflected linguistically by, e.g., “I’m struggling with my anger”, “I was seized by anger”, “I’m coming to grips with my anger”, and so on) focuses on the dangers of anger to the self, whereas the “animal” metaphor (“a ferocious temper”, “he unleashed his anger”, “bite someone’s head off”, “bare one’s teeth”, “bristle with anger”, “snarling with rage”) focuses on anger’s effects on others. The “burden” metaphor (“unburden oneself”, “get something off one’s chest”, “a chip on the shoulder”) focuses on questions of responsibility for causing, or alleviating, anger. Still, this metaphor is anything but trivial, providing an indispensable “folk model” of anger that constitutes English speakers’ everyday logic about anger. Indeed, without the metaphor, they would have perhaps no other means of comprehending these particular aspects of anger.

Similarly, the “sense” of combining *snake* and *shark* to form *snark* as a designation for a fearsome animal requiring courage to hunt depends

on their "prototypicality" as dangerous predators and a certain conceptual "sameness" that emerges from their metonymical and metaphorical relationship in this respect. A central pillar of the embodied theory of meaning in cognitive linguistics, we know, is the notion of "radiality". Contrary to the traditional (objectivist) view of category structure in which the inclusion or exclusion of items with respect to a class is determined on the basis of discrete criterial features ("necessary and sufficient conditions"), in cognitive linguistics categories are taken to be typically graded and organized according to a "prototype" in relation to which all other members of the category share some (but not any single determinative) commonality. Leading directly out of Wittgenstein's discussion of the meanings of *game* in terms of "family resemblances", Eleanor Rosch (1975, 1978) demonstrated that category formation is, in fact, normally contextual, dynamic, and defined by a "best example" or particularly salient exemplar. For example, the category of *bird* in English is structured prototypically, with robins and sparrows typically judged as the best representatives of the class – and with penguins or ostriches as marginal members. Similarly, for most English speakers, saws and hammers are "central" examples of the category of *tool*, while awls and planes represent more "peripheral" members of the same category.

Prototypicality is ubiquitous in linguistic sense-making (Rosch and Mervis, 1975; Smith et al., 1974). In English, the senses of the deverbalized adjectival suffix *-able (-ible)*, for instance, appear to be organized around a central meaning "able to be x'ed" – as reflected in *washable* ("able to be washed"), *provable* ("able to be proved"), *flexible* ("able to be flexed, bent") (see Lee, 2001, pp. 54–55). This is the most common, "default" reading of the suffix. However, the sense of the suffix can also vary from this core meaning along certain dimensions: for example, in *readable* the suffix does not mean "able to be read" so much as "interesting to read". In *payable*, the suffix does not mean "able to be paid" so much as "due to be paid". Two things that are *comparable* are not merely "able to be compared" but "able to be compared in a specific respect". Likewise, what is *drinkable* is not simply "able to be drunk" but "able to be drunk safely"; what is *flammable* is not only "able to catch fire" but "likely to catch fire". An example from our own research might be the Latin word *sermo*, the semantic structure of which constitutes a real radial network built out from two related instantiations of an image-schematic prototype of linkage: alternate rotational configurations of the prototype image motivate the word's dual monologic and dialogic senses – roughly "conversation" and "utterance" – which then

chain out to cover, for example, "debate" generally or "literary disputation" specifically, and "rumor", "gossip", "style", or even "word" (Short, 2012). In all such cases, the prototypical meaning is modulated according to specific contexts of use, as well as to regular human experience of the world.

Prototypicality effects can also guide the construction of ad hoc or goal-derived ("uncommon") categories and can motivate reasoning about relationships between categories. Barsalou (1983, 1985) discusses how aspects of embodied experience variously contribute to the construction of ad hoc categories. A person's category of "things to take on a camping trip" is likely defined to a large degree by items that have served that person well on previous camping trips or that a person has frequently seen others take with them. On the other hand, frequency of exposure probably (hopefully) has little to do with membership in someone's category of "things to take from one's home during a fire". Instead, the kinds of things that might fall into this category – "children", "dog", "stereo", "blanket" – are determined by context-induced value-judgments. Vallée-Tourangeau, Anthony, and Austin (1998) have also shown that "experiential mediation" – more or less perceptually detailed mental imagery – strongly governs category construction, exemplars of categories such as "things dogs chase" and (more abstractly) "reasons for going on a holiday" very often being generated on the basis of richly imaged concrete situations (a scene of a dog chasing a series of objects; memories of holiday celebrations). Even presumably common taxonomic categories such as *fruit* tend to be constructed in this way – in this case, by scanning, for instance, a memory of the produce section of a grocery store.

In this light, it is easy to grasp a *snark* because the two categories of which this portmanteau word is composed – *snake* and *shark* – easily fit together conceptually in prototypical terms. In the very first instance, a snake and a shark present certain obvious experiential (perceptual) and interactional properties: both have, to human eyes, scaly, shiny skin; both have elongated, flexible bodies; though inhabiting greatly different environments, both move in a similar manner, propelling themselves forward by moving their bodies rhythmically back and forth in a sort of sine wave. Furthermore, both animals are long- and sharp-toothed, biting predators, with similar feeding habits, swallowing their prey whole or in large chunks, without first chewing. They differ, of course, in their natural habitat – land and sea, respectively – although these are also structurally opposed in conception. *Shark* and *snake*, therefore, emblemize the category of "fearsome animals", representing

best-example terms for their respective environments. The metonymic relationship of *shark* and *snake* emerging from these considerations has, in fact, become entrenched in English speakers' imaginations (cf. Trout, 2011). They appear together as a formula with an almost proverbial character in, for instance, H. H. Breen's "The Diamond Rock" (1849), which recounts the Napoleonic battle of the same name, when a small British force occupying Fort-de-France Bay (Martinique) managed to hold out for some days against a much larger Franco-Spanish fleet as "Round the sturdy Rock / The assailants turn in vain; / They try it East, they try it West, / No footing can they gain. / And in their wake prowl the shark and snake, / Unsated with human gore." They also often appear paired in metaphorical talk to characterize various professionals generally deemed untrustworthy (especially lawyers: McGlone and Manfredi, 2001; Goatly, 2007, p. 151). Indeed, their conceptual closeness even leads English speakers to often speak figuratively of sharks as "snaking" through the water.

Overall, then, it appears that both aspects of Deleuze's Carrollian nonsense are well accounted for within the confines of traditional cognitive linguistics, modulated by a concern with embodiment: in the case of nonsense words of the *frumious* type, by a structural mapping from a literal, concrete domain of sensorimotor experience (fluid dynamics) to a metaphorical domain (angry emotional responses) in the style of embodied semantics. Although cognitive linguists propose such models primarily with a view to understanding the experience and semantics of abstractions, and lay particular emphasis on the isomorphism between the inferential relations in the two domains, the extension to an explanation of an (apparently nonsensical) neologism on the basis of the semantic interactions of the domains is relatively straightforward; and, in the case of nonsense words of the *snark* type, by means of prototypicality relations, through which individual corporeal experience intersects with and makes possible cross-categorization of a kind that underlies the attribution of provisional sense to portmanteau words.

However, Deleuze also contends that portmanteau words are formed from a semantic content domain that aligns with their function: in this case, they possess a special significance. But even this claim is adapted to explanation in terms of sensorimotor metaphors for abstraction. The action or function of portmanteau words, that of disjunctively synthesizing the disparate realms of the corporeal and incorporeal, is itself thematized in the semantic fields that the word "Jabberwocky" syntactically conjoins: the corporeal, alimentary fruiting of "wocer" and

the incorporeal, linguistic sense of "jabber". To put the point in terms of embodied cognitive science, the nonsense of portmanteau words like "Jabberwocky" presents, within language, the general principle according to which non-corporeal abstractions, including language itself, can be thought only on the basis of structurally isomorphic metaphorizations with corporeal, concrete, sensorimotor domains of experience. To revert to Deleuze's terse formulation: nonsense propositions like these say their own sense (*LS*, p. 84/67).¹⁶

10.4 Artaudian nonsense: the cries of the body

If this analysis represented all that may be said of Deleuze's interpretation of nonsense, nonsense would seem rather sensible, or at least to occupy a definite place within frameworks already well developed in linguistics and cognitive science. But Deleuze extends his consideration further. He steps outside the work of Carroll himself to address the adaptations of *Through the Looking Glass* written by Antonin Artaud in 1943 while he resided as a mental patient at the asylum in Rodez suffering from what would now probably be described as schizophrenia.¹⁷ In these writings, Deleuze discovers a quite different kind of nonsense.

We may recall that, for Deleuze, sense is defined structurally: it is the incorporeal event that arises from the duality of propositions and things. It is, moreover, the "cutting edge" that articulates the difference between the two terms of this duality. Nonsense, in turn, is the zero node of sense, that which enacts sense without itself having sense. It allows sense through its own opposition to the absence of sense. Deleuze, as we have seen, develops these structural definitions through consideration of Lewis Carroll and the Stoics. Yet his analysis of Artaud turns such definitions on their head. Deleuze's analysis of "l'Arve et l'Aume", Artaud's adaptation of the sixth chapter of *Through the Looking Glass*, focuses upon the first four lines of "Jabberwocky", a starting point apparently

¹⁶ Following Frege, Deleuze sees "normal" propositions as denoting or referring to things through or by means of their senses. But this implies that a further proposition would be needed to refer to the *sense* of the first, and so on in a regress exploited at various points by Carroll. By contrast, nonsense words *do* refer to or say their own senses.

¹⁷ The adaptations of Carroll were written in Rodez at the end of September 1943, and held by Dr Ferdière, one of Artaud's physicians, until their publication in 1947. For further details, see the unnumbered note in Artaud (2004, p. 917).

similar to that for his investigation of portmanteau words. In Deleuze's view, this "translation" begins innocently enough. "The two opening verses", he writes, "still correspond to Carroll's criteria and conform to the rules of translation generally held by Carroll's other French translators." Yet in the third verse, where the original text reads "All mimsy were the borogoves", Artaud offers instead: "Jusque là où la roughe est à rouarghe a rangmbde et rangmbde a rouarghambde" (cited in *LS*, p. 89/110). On Deleuze's view, this rendering is not mere mistranslation. Rather, it causes "us to be in another world and in an entirely different language".

What does this claim mean? In short, it calls into question the entire structure of sense (and, therefore, also of nonsense) that Deleuze has built through his examination of Carroll and the Stoics. While Deleuze does not deny that one may, at least in part, analyze Artaud's creations just like Carroll's portmanteau words – Artaud, in fact, performs some such analyses himself – this procedure, nonetheless, feels inadequate. As Deleuze puts it, these analyses simply "persuade us of the presence of something very different" (*LS*, p. 90/110). In place of the duality of propositions and things we find another duality, what Deleuze calls the duality of the schizophrenic word. No longer a duality of proposition and thing, it consists instead in the action-word, which joins inarticulate tones, and the passion-word, which explodes into "wounding" phonemes. Both the action-word and passion-word are signs, but they are signs merged with bodies. This last point is crucial, for it means that schizophrenic words – and schizophrenic nonsense – operate not on the surface of language, where Deleuze has heretofore located incorporeal sense. Instead, these "words", this nonsense, operates in bodily depths that are no longer exclusively, or even primarily, linguistic. Schizophrenic nonsense thus destroys the axes at the core of a structural analysis of language (and sense-making more generally). As Deleuze puts it, "there is not, there is no longer, any surface" (*LS*, p. 106/86); "there are no longer any series at all" (*LS*, p. 111/91). Schizophrenic nonsense refers language back to the realm of bodies prior to the development of language.

Such a state of affairs seems rather desperate, although Deleuze is in part using the term "schizophrenic" as a psychoanalytic term of art, and hence referring the (non-)phenomenon of a pure corporeal nonsense of the body to an early stage of child development in which proper linguistic sense-making capacities have not yet emerged (see Hughes, 2011, pp. 20ff.). On Deleuze's reading, Artaud brings language back to the point where it has no structure, no sense, where it is indistinguishable

from bodily noise.¹⁸ Yet the apparent blind confusion induced by schizophrenic nonsense also offers the possibility of more basic insight. While sense-making, at least as it is characterized in the bulk of *The Logic of Sense*, fails in the case of Artaud's nonsense, this failure may illuminate the relation of language to the non-linguistic, to what lies beyond intra-linguistic metaphorization. Indeed, schizophrenic nonsense – insofar as it no longer supposes the structures (e.g., signifier, signified, referent) common to Saussurean linguistics – brings us much closer to the tenets of the enaction paradigm, which flattens out traditional distinctions between subject and object or mind, body, and world. Artaud's adaptations of Carroll are more amenable to explanations grounded in the creative power of an individual to enact her world.

Perhaps the most significant work towards defining and conceiving an "enactive linguistics" has been carried out by Didier Bottineau, who focuses especially on what he calls "linguaging", or "the act of speech in all its forms" (Bottineau, 2010, p. 271; cf. Maturana and Varela, 1980). Linguaging is more in line with enactive thought because, rather than presupposing the constructs of traditional linguistics (e.g., *langage*, *langue*, *parole*, grammar), it focuses on the experience of speakers within the medium of language. Thus, even as Bottineau discusses traditional features of linguistic study such as morphology or syntax, he considers not so much abstract rules as how those rules are implemented in individual acts of speech. Moreover, linguaging differs from other models of embodied language use in that it constantly takes account of sensorimotor experience – not simply metaphors or mental categories drawn from the surrounding material world. Specifically, linguaging maintains a consistent focus upon speaking, seeing, and hearing as instrumental in the construction of thought.

What are the implications of linguaging for "understanding" Artaudian nonsense? If we return to the third line of Artaud's adaptation of Carroll's *Jabberwocky* – "Jusque là où la roughe est à rouarghe a

¹⁸ In reading Artaud as an author of "bodily" nonsense, Deleuze follows the lead of Artaud himself. See Ward (1999, p. 128): "In Rodez Artaud would invent new languages, write poems using these languages, poems which would involve beating out rhythms or experimenting with the human voice, incorporating screams and whispers. These efforts were regarded as symptoms of an illness, but seen in the context of Artaud's writings as a whole they can be seen as a logical development of his closely argued contention that conventional literary forms, like conventional theatre, appealed only to the mind, that he wished to develop forms which involved the whole person and which were received as visceral assaults" (emphasis added).

rangmbde et rangmbde a rouarghambde" (cited in *LS*, p. 110/90) – we observe several features that resonate with an enactive linguistics. First, even as the line is obviously “nonsense”, native speakers may nevertheless, at least to a limited extent, recognize fragments of syntactical structure. “Jusque là où” is perfectly good French, and it forms an acceptable parasyntactical (adverbial) complement to the verb phrase “Allaient” (expressed in the second line) and the noun phrase “les vliqueux tarands” (expressed in the first line). In other words, even as Artaud enacts nonsense, he employs fragments of syntactical structures that he has internalized (orally, aurally, and manually, i.e., through various sensorimotor capacities) and that native French speakers will recognize. Moreover, while the syntax at the end of the third line is murky – there seem, for instance, to be too many verbs – other aspects of languaging may cast some light upon it.¹⁹

Particularly illuminating in this regard are onomatopoeia, synesthesia, and submorphology (phonesthemes), aspects of “phonosymbolism”, namely, linguistic phenomena in which the semantic content of a word is in part motivated by its phonic shape.²⁰ Although verbal signs may be arbitrary and onomatopoeia words may be “nonsense,” there is, nonetheless, an empirical “iconic” uniformity about them: in English dogs go “bowwow”, in French “buff”, Italian “bau”, Latin *bau*, and Greek *báu*; we “whistle” in English, but Germans say “Pfeifen” and Russians “svist”. Various submorphological features – features that fall below the level of prefixes, suffixes, verbal endings, and other typical morphology – manifest consistent, naturally motivated semantic patterns (see Dogana, 1983; Tsur, 1992). One may think, for example, of *th*- words (*the*, *this*, *that*, *thus*, etc.) in English, which signal the retrieval from memory of something immediately available, or of the related *wh*- words (*who*, *what*, *when*, *where*, *why*, etc.) that signal the unavailability (in memory) of some pre-established knowledge (Danon-Boileau, 1983). The *scr*- of *scrape*, *scratch*, *scramble*, *scribble*, *scrub* may evoke spasmodic movement over a surface. The *sl*- of *slack*, *slime*, *slop*, *slouch*, *slow*, and *slug* may signal “softness” and “slowness” (see Tournier, 1985, p. 146). *Gl*- words

¹⁹ As regards the syntax of the second half of the line, one difficulty is caused by mild textual uncertainty. While Deleuze prints “la rourghe est à rouarghe,” Artaud (2004) instead prints “la rourghe est a rouarghe,” omitting an *accent aigu*.

²⁰ The so-called “Sound Symbolism Hypothesis” was developed in the works of, for example, Bloomfield, Jakobson, Jespersen, Sapir, and Firth. For an overview and bibliography, see Magnus (2013).

(*glide*, *gloss*, *glisten*, *glimmer*, *glow*) tend to have to do with smoothness, wetness, and shininess; *sw*- words (*swing*, *sweep*, *swap*, *swim*, *sworn*) with pendulation; *st*- words (*stop*, *stick*, *stack*, *stamp*) with fixity. Such patterns, even if they do not fix the diachronic “sense” of neologisms, effectively create a backdrop against which neologisms may be evaluated, and they may be particularly important for the synchronic creation of such neologisms. From the standpoint of cognitive science, such sound-symbolic features may be understood as markers of the sensorimotor couplings through which speakers apprehend objects, events, and culture more generally.²¹

In the specific case of Artaud’s line, we observe repeated *r*-sounds, which, as Bottineau (2010, p. 294) notes, are commonly used “for forceful launching (*passage en force*)” in a variety of languages.²² This analysis at the level of submorphology accords well with other evidence about the “sense” of *rourghe*, which Artaud (or rather Alice) suggests may be interpreted as *la ruée* (“rush”) (Artaud, 2004, p. 923). Alice also indicates that this “rushing” occurs *autour de la roue circulaire* (“around the circular wheel”), a fact that is reinforced by the seemingly new suffix *-mbde* or *-ambde*. This rare collocation of consonants – *mbd* – is reminiscent of the Latin prefix *amb(i)-* (Gk. *ἀμφί*), which itself connotes this idea of “around” or “about”. Moreover, we could almost say that the final four terms of the line which begin with *r* form a chiasmic structure, a pattern that “crosses” itself and – not unlike a circular wheel – takes one back to the original element: *rouarghe*: *rangmbde*, *rangmbde*: *rouargh(ambd)e*. Apart from the final *-ambd-*, the crossing symmetry is perfect. The configuration of phonemes within the clusters *-rgh-* in articulatory terms also “crosses”: pronouncing *r* and *gh* of *-rgh-* in French (that is, the voiced uvular fricative [ʁ] followed by a voiced velar fricative [ɣ]) involves raising the back of the tongue to the uvula and then moving it

²¹ We consider the term “phonosymbolism” to be too restrictive. It assumes that repeated phonological elements must reflect specifically *symbolic* relations with semantic (or, better, subsemantic) elements. But this is an unwarranted assumption, for it is perfectly possible that originally *arbitrary* relations are fixed in phonic populations by means of a mechanism akin to random drift’s role in fixing sequences in genetic populations. See Short and Welchman (forthcoming).

²² The sound symbolism of /r/ has been studied by, for example, Chastaing (1966, pp. 502ff.), whose experimental respondents categorized this sound as “very rough, strong, violent, heavy, pungent, hard, near-by, and bitter”, while for Fónagy’s (1963) Hungarian respondents, /r/ was overwhelmingly “wild, pugnacious, manly, rolling, and harder”.

slightly forward to the soft palate, whereas pronouncing *m* and *b* and *d* of *-mbd-* (that is, the bilabial nasal [m] followed by bilabial stop [b] and alveolar stop [d]) involves moving the tip of the tongue backwards from near the lips to the alveolar ridge.

A similar analysis may be applied to another response to, or adaptation of, "Jabberwocky" written by Artaud. This "poem" was written two years after the first, on September 22, 1945, also from the asylum at Rodez, in a letter to Henri Parisot (who was himself a translator of Lewis Carroll). In that letter, Artaud remarks that Carroll's work "is only a rip-off...of a work written by me that has been made to disappear so that I myself scarcely know what's inside it" (Artaud, 2004, p. 1015). The poem is then presented as "a few attempts" (*quelques essais*) that the language of that book ought to resemble: "Ratara ratara ratara / Atara tatarara rana / Otara otara katara" (cited in *LS*, p. 102/83). The poem seems to have elements of French onomatopoeia words. Both *ra* and *ran* are used in French to describe the sound of a drumstick striking a drum. The poem also strikingly recalls the so-called "glossolalic" utterances found in Greek tragic and comic poetry, such as Cassandra's lament and invocation to the god Apollo in Aeschylus' *Agamemnon*: *ototototói popói dá / Ópollon Ópollon* (pp. 1072–1073, 1075–1076), or the cries of the chorus in Aristophanes' *Birds*: *epopopói popói popopopói popói / ió ió íto íto* (pp. 227–228). Although the complement and arrangement of consonant and vowel sounds that are repeated in the Greek text differ somewhat from Artaud's line (*t-p-d*)–*o-l* vs. *r-t-(r)-(t)-o-k*, it is perhaps telling that Artaud's poem so closely resembles well-known passages of Greek literature precisely in the context of a claim about Carroll's "translation". The "sense" of the utterance lies not so much in the words themselves, then, as in their very ability to recall another text.

None of this analysis assigns Artaud's adaptation of Carroll a singular meaning, but it does show that constructs of an enactive semantics (cf. Zipoli Caiani, 2010) such as submorphology give far greater "sense" to Artaud's nonsense than it might otherwise be thought to have.

10.5 From *Logic of Sense* to *Anti-Oedipus*: from surface to depths, enabling an attack on "modal prejudice"

At the time of publication of *The Logic of Sense* (1969/1990), Deleuze appears conflicted about the possibility – indeed, the actuality – of this second, Artaudian, kind of nonsense, what he calls an *Untersinn*, a subsense (*LS*, p. 111/90), in a reference to the development of a chaotic,

energetic conception of the unconscious in German romanticism.²³ Or perhaps it would be more accurate to say that Deleuze feels the power, both of this kind of nonsense, and of the theoretical importance of drawing an analysis of non-sense down from its Carrollian understanding (as something like a structural condition of sense) into the abyss where nonsense signals the ultimate inherence of sense (structural conditions and all) within the corporeal realm. At the end of his discussion of Artaud, for instance, Deleuze claims: "we would not give up a single page of Antonin Artaud for the whole of Carroll". But, at the same time, it is only on the surface and not in the depths that "the entire *logic* of sense is located" (*LS*, p. 114/93, emphasis added). So Deleuze's whole text concerns *only* surface (non)sense, while simultaneously claiming that subsurface nonsense is considerably more important. Why would Deleuze do this?

We think it is fair to say that Deleuze's thought is itself at this point in flux. The utter chaos and complete formlessness that Deleuze attributes to the corporeal, material unconscious of *Untersinn* makes its "howl-words [*mots-cris*]" (*LS*, p. 108/88) all the more pathetic and affecting for their very resistance to any kind of theoretical understanding: Deleuze sees their interest, but all the resources he has for understanding the production of (non)sense – the three "syntheses" that comprise the "logic" of (non)sense – are located only on the surface. It is this that gives rise to a situation in which sense operates essentially transcendently or structurally as a medium within which the organism is always already immersed; this that gives rise to the situation in which nonsense is understood only as the condition of sense; and this that gives rise to an understanding of sensorimotor schemas as already imbued with a sense that is merely transposed, in metaphorization, from one already meaning-bearing domain to another.

It is, in this respect, highly noteworthy that, very soon after publishing *The Logic of Sense*, in his productive collaborations with renegade psychoanalyst Félix Guattari, especially the 1972 *Anti-Oedipus*, Deleuze takes the productive apparatus of the logic of sense and subtracts it from the surface, relocating it in the (schizophrenic) depths of the corporeal itself.²⁴ This move is crucial for an appreciation of the importance of the

²³ A little later on in *The Logic of Sense*, Deleuze refers explicitly to this tradition, talking of the "moments in which philosophy makes the Abyss [*Sans-fond*] speak... [in] the mystical language of its wrath, its formlessness, and its blindness: Boehme, Schelling, Schopenhauer" (*LS*, p. 130/106).

²⁴ Welchman (2006) makes this point, and it is taken up again in Smith (2009).

role of a pluralistic conception of “linguaging” in Bottineau as well as of the significance of submorphological features, syntactic fragments and phonosymbolic (or phonosynthetic) elements in the analysis of Artaud’s “deep” nonsense. Such partial processes (in *Anti-Oedipus* Deleuze and Guattari call them “partial” uses of synthesis, e.g., 1972/1984, p. 70) do not presuppose the constitution of sense as the medium in which the organism must always already be understood as operating; they are the beginnings of an enactive account of the constitution of (global) sense itself.

These partial processes of sense-making are particularly relevant to an enactive semantics because they help alleviate a pervasive “modal prejudice” in cognitive science, including in theories of embodied cognition. “Modal prejudice” is the privileging of one sense – typically vision – over the others in the formation of structures of meaning. This prejudice is perceptible in embodiment’s treatment of image schemas (whose very linguistic label marks visual perception as prototypical) as a primary basis for sense-making. In theory, image schemas are pre-conceptual structures of meaning that capture patterns of recurring experience in all sensory modalities (see, e.g., Gibbs and Colston, 1995, p. 349: “Image schemas exist across all perceptual modalities [...] image schemas are at once visual, auditory, kinesthetic, and tactile”), yet, in practice, their description tends to be limited to visual and kinesthetic properties (cf. e.g., Hampe and Grady 2005). Johnson (2008), for instance, describes the “felt qualities” of auditory experience, but his analyses of musical understanding still rely on overridingly visuospatial schemas. Perhaps this bias is understandable: since Plato, vision has been considered the most “trustworthy” of the senses (cf. *Pl. Tim.* 47a–47c, Archer-Hind 1888/1988). Indeed, its predominance has been ingrained in our “folk” understanding of the senses: Cristina Cacciari (1998) has argued that our synesthetic metaphors, in fact, reflect a mental model according to which the senses constitute a hierarchy running from the visual (color, dimension), through the tactile, gustatory, and auditory, to the olfactory.²⁵

An enactive approach to meaning (including linguistic meaning as one specific case) presents the opportunity to overcome such modal prejudice, giving a greater place to the less “objective” senses in sense-making. As our analyses of Artaudian nonsense above demonstrate,

²⁵ Cacciari (1998, p. 129) points out that the “touch” words *sharp* and *dull* transfer metaphorically to color; but it is not clear that *sharp* and *dull* denote exclusively tactile properties (at least in the way that, say, *rough* and *smooth* do); they may already partially capture something of visual perception.

reading language enactively, through constructs such as phonesthemes at a minimum, places the auditory alongside the visual in the construction and interpretation of linguistic sense. Moreover, even if it is harder to imagine precisely how taste, touch, and smell figure in the specific examples we explore in the present essay, Deleuze’s analysis of Artaud takes steps towards incorporating these senses into linguistic meaning: Artaudian nonsense, for example, takes us back to the place where speaking meets eating. In giving us a way of thinking about how (global) sense is constructed, partial processes at least open the door for exploring the work of the full range of senses in meaning-making. While the objective senses, especially vision, separate us – even in our embodiment – from the (purely corporeal) environment precisely because they are objective, locate objects outside of us in space, presuppose a representational outlook, and have no discernible medium; by contrast, the less objective senses, especially smell, are “an-objective”, connect us to the corporeal environment, do not locate objects outside of us, dispose of the representational outlook, and do have a discernible medium (when I am aware of the dogshit, its smell comes out to me: cf. Arendt, 1971/1981, p. 264: “In the matters of taste or smell, the it-pleases or displeases me is immediate and overwhelming”). The challenge for future enactive linguistic research, if it truly wishes to re-unite the brain, body, and world, lies precisely in “re-incorporating” these “an-objective” senses, which, in fact, have never themselves been incorporeal.

References

- Archer-Hind, R. D. (Ed. and Trans.) (1888/1988). *The Timaeus of Plato*. London: McMillan & Co.; reprinted, Salem, NH: Ayers Co. Publishers.
- Arendt, H. (1971/1981). *The Life of the Mind*. (M. McCarthy, Ed.). Boston: Houghton Mifflin Harcourt.
- Artaud, A. (2004). *Œuvres*. Paris: Gallimard.
- Barsalou, L. (1983). Ad hoc categories. *Memory & Cognition*, 11, 211–227.
- Barsalou, L. (1985). Ideals, central tendency, and frequency of instantiation as determinants of graded structure in categories. *Journal of Experimental Psychology*, 11, 629–654.
- Barsalou, L. (1999). Perceptual symbol systems. *Behavioral and Brain Sciences*, 22, 577–660.
- Barsalou, L. (2008). Grounding symbolic operations in the brain’s modal systems. In G. R. Semin, & E. R. Smith (Eds), *Embodied Grounding: Social, Cognitive, Affective, and Neuroscientific Approaches* (pp. 9–42). New York: Cambridge University Press.
- Boroditsky, L., & Prinz, J. (2008). What thoughts are made of. In G. Semin, & E. Smith (Eds), *Embodied Grounding: Social, Cognitive, Affective, and Neuroscientific Approaches* (pp. 98–115). Cambridge: Cambridge University Press.

- Bottineau, D. (2010). Language and enaction. In J. Stewart, O. Gapenne, & E. A. Di Paolo (Eds), *Enaction: Toward a New Paradigm for Cognitive Science* (pp. 267–306). Cambridge, MA: MIT Press.
- Breen, H. H. (1851). *The Diamond Rock, and Other Poems*. London, UK: William Pickering.
- Cacciari, C. (1998). Why do we speak metaphorically? In A. Katz, C. Cacciari, R. Gibbs, & M. Turner (Eds), *Figurative Language and Thought* (pp. 119–157). Oxford: Oxford University Press.
- Carroll, L. (1937). *The Complete Works of Lewis Carroll*. New York: Random House.
- Chastaing, M. (1966). Si les r étaient des l. *Vie et Langage*, 159, 468–472; 174, 502–507.
- Chomsky, N. (1965). *Aspects of a Theory of Syntax*. Cambridge, MA: MIT Press.
- Clark, A. (1997). *Being There: Putting Brain, Body and World Together Again*. Cambridge, MA: MIT Press.
- Croft, W., & A. Cruse. (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Danon-Boileau, L. (1983). *This, that, which, what et la construction de la référence: Quelques hypothèses*. In *Méthodes en linguistique anglaise: Travaux du CIEREC XXXIX* (pp. 35–36). Université de Saint-Etienne.
- DeLanda, M. (2002). *Intensive Science and Virtual Philosophy*. New York: Continuum.
- Deleuze, G. (1962/1983) *Nietzsche and Philosophy*. (H. Tomlinson, Trans.). London: Athlone Press.
- Deleuze, G. (1969/1990). *The Logic of Sense*. (M. Lester, Trans.). New York: Columbia University Press.
- Deleuze, G., & Guattari, F. (1972/1984). *Capitalism and Schizophrenia. Volume 1: Anti-Oedipus*. (R. Hurley, M. Seem, & H. R. Lane, Trans.). London: Athlone.
- Deleuze, G., & Guattari, F. (1980/1988). *Capitalism and Schizophrenia. Volume 2: A Thousand Plateaus*. (B. Massumi, Trans.). London: Athlone.
- Di Paolo, E. A., Rohde, M., & De Jaegher, H. (2010). Horizons for the enactive mind: values, social interaction, and play. In J. Stewart, O. Gapenne, & E. A. Di Paolo (Eds), *Enaction: Toward a New Paradigm for Cognitive Science* (pp. 33–87). Cambridge, MA: MIT Press.
- Dogana, F. (1983). *Suono e Senso: Fondamenti Teorici ed Empirici del Simbolismo fonetico*. Milano: Franco Angeli.
- Fillmore, C. (1985). Frames and the semantics of understanding. *Quaderni di Semantica*, 6(2), 222–254.
- Frede, M. (1987). *Essays in Ancient Philosophy*. Minneapolis: University of Minnesota Press.
- Fónagy, I. (1963). *Die Metaphern in der Phonetik*. The Hague: Mouton.
- Freese, T. (2012). From adaptive behavior to human cognition: a review of *Enaction*. *Adaptive Behavior*, 20(3), 209–221.
- Geeraerts, D. (1984). *Diachronic Extensions of Prototype Theory*. Trier: LAUT.
- Gibbs, R. (1994). *The Poetics of Mind*. Cambridge: Cambridge University Press.
- Gibbs, R., & Colston, H. (1995). The cognitive psychological reality of image schemas and their transformations. *Cognitive Linguistics*, 6(4), 347–378.
- Goatly, A. (2007). *Washing the Brain: Metaphor and Hidden Ideology*. Amsterdam, The Netherlands: John Benjamins Publishing Company.
- Hampe, B. & Grady, J. (Eds) (2005). *From Perception to Meaning: Image Schemas in Cognitive Linguistics*. Berlin: De Gruyter.
- Hanna, R., & Maiese, M. (2009). *Embodied Minds in Action*. Oxford: Oxford University Press.
- Harris, R. A. (1995). *The Linguistics Wars*. New York: Oxford University Press.
- Holmes, B. (2012). Deleuze, Lucretius, and the simulacrum of naturalism. In B. Holmes, & W. H. Shearin (Eds), *Dynamic Reading: Studies in the Reception of Epicureanism* (pp. 316–342). Oxford: Oxford University Press.
- Hughes, J. (2011). *Deleuze and the Genesis of Representation*. New York: Continuum.
- Jackendoff, R. (2003). *Foundations of Language*. Oxford: Oxford University Press.
- Jakobson, R., & Halle, M. (1956). *Fundamentals of Language*. Berlin: De Gruyter.
- Johnson, M. (1987). *The Body in the Mind*. Chicago: University of Chicago Press.
- Johnson, M. (2008). *The Meaning of the Body*. Chicago: University of Chicago Press.
- Kaufman, E. (2012). *Deleuze, the Dark Precursor: Dialectic, Structure, Being*. Baltimore: The Johns Hopkins University Press.
- Lakoff, G. (1987). *Women, Fire, and Dangerous Things*. Chicago: University of Chicago Press.
- Lakoff, G., & M. Johnson. (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, G., & Kövecses, Z. (1987). The cognitive model of anger inherent in American English. In D. Holland, & N. Quinn (Eds), *Cultural Models in Language and Thought* (pp. 195–221). Cambridge: Cambridge University Press.
- Langacker, R. (1987). *Foundations of Cognitive Grammar*. Stanford: Stanford University Press.
- Lee, D. (2001). *Cognitive Linguistics: An Introduction*. Oxford: Oxford University Press.
- Long, A. A., & Sedley, D. N. (1987). *The Hellenistic Philosophers*. 2 vols. Cambridge: Cambridge University Press.
- Lopez, A. (2004). Deleuze with Carroll: schizophrenia and simulacrum and the philosophy of Lewis Carroll's nonsense. *Angelaki*, 9(3), 101–120.
- Magnus, M. (2013). A history of sound symbolism. In K. Allan (Ed.), *The Oxford Handbook of the History of Linguistics* (pp. 191–208). Oxford: Oxford University Press.
- Mahon, B., & Caramazza, A. (2008). A critical look at the embodied cognition hypothesis and a new proposal for grounding conceptual content. *Journal of Physiology-Paris*, 102(1–3), 59–70.
- Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and Cognition: The Realization of the Living*. Dordrecht; Boston: D. Reidel.
- McGlone, M. S., & Manfredi, D. A. (2001). Topic-vehicle interaction in metaphor comprehension. *Memory & Cognition*, 29(8), 1209–1219.
- Moon, R. (2004). On specifying metaphor: an idea and its implementation. *International Journal of Lexicography*, 17(2), 195–222.
- Núñez, R. E. (2010). Enacting infinity: bringing transfinite cardinals into being. In J. Stewart, O. Gapenne, & E. A. Di Paolo (Eds), *Enaction: Toward a New Paradigm for Cognitive Science* (pp. 307–333). Cambridge, MA: MIT Press.
- Protevi, J. (2010). Adding Deleuze to the mix. *Phenomenology and the Cognitive Sciences*, 9, 417–436.

- Rosch, E. (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology: General*, 104(3), 192–233.
- Rosch, E. (1978). Principles of categorization. In E. Rosch, & B. B. Lloyd (Eds), *Cognition and Categorization* (pp. 27–48). Hillsdale, NJ: Lawrence Erlbaum.
- Rosch, E., & Mervis, C. B. (1975). Family resemblances: studies in the internal structure of categories. *Cognitive Psychology*, 7(4), 573–605.
- Sellers, J. (2006). An ethics of the event. *Angelaki*, 11(3), 157–171.
- Short, W. (2012). Mercury in the middle: the many meanings of (*medius*) *sermo* in Latin. *Classical Journal*, 108(2), 189–217.
- Short, W., & Welchman, A. (in prep.). Phonosynthesis.
- Smith, D. (2007). The conditions of the new. *Deleuze Studies*, 1(1), 1–21.
- Smith, D. (2009). From the surface to the depths: on the transition from *Logic of Sense* to *Anti-Oedipus*. In C. V. Boundas (Ed.), *Gilles Deleuze: The Intensive Reduction* (pp. 82–97). New York: Continuum.
- Smith, E. E., Shoben, E. J., & Rips, L. J. (1974). Structure and process in semantic memory: a featural model for semantic decisions. *Psychological Review*, 81(3), 214–241.
- Stewart, J., Gapenne, O., & Di Paolo, E. A. (Eds) (2010). *Enaction: Toward a New Paradigm for Cognitive Science*. Cambridge, MA: MIT Press.
- Thompson, E., & Stapleton, M. (2009). Making sense of sense-making: reflections on enactive and extended mind theories. *Topoi*, 28(1), 23–30.
- Tournier, J. (1985). *Introduction descriptive à la lexicogénétique de l'anglais contemporain*. Paris: Champion.
- Trout, P. (2011). *Deadly Powers: Animal Predators and the Mythic Imagination*. Amherst, NY: Prometheus Books.
- Tsur, R. (1992). *Toward a Theory of Cognitive Poetics*. Amsterdam, The Netherlands: North Holland Publishing Company.
- Vallée-Tourangeau, F., Anthony, S. H., & Austin, N. G. (1998). Strategies for generating multiple instances of common and ad hoc categories. *Memory*, 6(5), 555–592.
- Varela, F., Thompson, E., & Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge, MA: MIT Press.
- Ward, N. (1999). Twelve of the fifty-one shocks of Antonin Artaud. *New Theatre Quarterly*, 15(2), 123–130.
- Weiskopf, D. (2010). Embodied cognition and linguistic comprehension. *Studies in History and Philosophy of Science Part A*, 41(3), 294–304.
- Welchman, A. (2006). Into the abyss: Deleuze. In J. Protevi (Ed.), *Edinburgh Dictionary of Continental Philosophy* (pp. 131–138). New Haven, CT: Yale University Press.
- Welchman, A. (2009). Deleuze's post-critical metaphysics. *Symposium: Canadian Journal of Continental Philosophy/Revue canadienne de philosophie continentale*, 13(2), 25–54.
- Welchman, A. (2013). Heidegger among the robots. *Symposium: Canadian Journal of Continental Philosophy/Revue canadienne de philosophie continentale*, 17(1), 229–249.
- Wheeler, M. (2005). *Reconstructing the Cognitive World: The Next Step*. Cambridge, MA: MIT Press.
- Williams, J. (2008). *Gilles Deleuze's Logic of Sense: A Critical Introduction and Guide*. Edinburgh: Edinburgh University Press.

- Ziemke, T., Zlatev, J., & Frank, R. (Eds) (2008). *Body, Language, and Mind*. 2 vols. Berlin: De Gruyter.
- Zipoli Caiani, S. (2010). Elements of an enactive approach to semantics. In G. Ferrari, P. Bouquet, M. Cruciani, & F. Giardini (Eds), *Pratiche della Cognizione – Settimo Convegno Nazionale di Scienze Cognitive*. AISC.
- Žižek, S. (2004). *Organs without Bodies: On Deleuze and Consequences*. New York: Routledge.