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Part III

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8 Minding the Gap

In Defense of Mind-Mind Continuity¹

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If a lion could talk, we could not understand him.

Ludwig Wittgenstein²

Introduction

As commonsense would have it, although lions and other non-human animals surely cannot speak, they can communicate with—and understand—each other. Common folks, as well as practicing ethologists, comparative psychologists, and evolutionary anthropologists—not to mention zookeepers, park rangers, and pet owners—readily attribute to non-human animals sensations and feelings (hunger, thirst, fatigue, agitation, pain, and pleasure), intentional actions and intentional states or attitudes (trying to do this or that, looking for or wanting to get something, being startled/surprised/puzzled/scared by specific things), and so on. However, according to the view I call “continuity skepticism”, there is an *unbridgeable gap* (or “deep chasm”, as some put it) separating human minds from the minds of non-human animals.³ Animals’ mental lives, understanding, and communication are said to be so profoundly different from ours it makes little sense to locate them along a natural continuum that culminates in our own mentality and language.⁴

- 1 This paper is a sequel to (and overlaps with parts of) Dorit Bar-On, “Expressive Communication and Continuity Skepticism,” *Journal of Philosophy* 110(6) (2013): 293–330, and Dorit Bar-On and Matthew Priselac, “Triangulation and the Beasts,” in *Triangulation From an Epistemological Point of View*, eds. Maria Cristina Amoretti and Gerhard Preyer (Berlin: Ontos Verlag, 2011), 121–152. Special thanks to Matthew Priselac and Kevin Richardson, and to Carol Voeller, for help in preparing a talk on which this paper is based. And thanks to Kevin Cahill and to audiences at conferences and colloquia held at the universities of Alabama, Auburn, Bergen, Freiburg, and Hertfordshire, where earlier versions of this paper were presented in recent years.
- 2 Ludwig Wittgenstein, *Philosophical Investigations*, 3rd ed. Translated by G. E. M. Anscombe. (Oxford: Basil Blackwell, 1968), 223.
- 3 The sense in which the view is skeptical is explained in Section 1 below.
- 4 Historically, debates regarding animal mentality divided empiricists and rationalists. The rationalist tradition has contemporary supporters even among evolutionary biologists,

My focus here will be on a particular version of the “gap” claim, according to which, not only are there significant ‘synchronic’ differences between relevant capacities of *extant* non-human animals and ours, but we should also doubt that any feasible precursors of our own mentality and behavior could be found in the capacities of some *extinct* species. So, *diachronically* speaking (on the skeptic’s view), there is—to use a well-known metaphor—a “Rubicon” that no non-human animal could have crossed. And this tells against the possibility of constructing a “natural history” of human minds.⁵ I begin by briefly outlining a radical version of this skeptical view—defended by Davidson—which denies that there could be any middle ground between animal mentality and communication, on the one hand, and human reflective understanding and interpretation, on the other (Section 1). In Section 2, I present a form of communication that we share with non-linguistic and prelinguistic creatures, namely, expressive communication—which, I will argue, is apt to present a “synchronic middle ground”, poised between two poles that the Davidsonian skeptic contrasts. In Section 3, I argue that proper appreciation of the role expressive behavior plays in the lives of creatures capable of it, and the kind of communication it affords, point to a “diachronic bridge” that *could* feature in a natural history connecting us with our pre-human ancestors.⁶ Finally, in Section 4, I briefly consider some possible implications of the existence of such a natural history for a philosophical understanding of the relationship between human and non-human mindedness.⁷

ethologists, and comparative psychologists. For two recent volumes, see Susan Hurley and Matthew Nudds, eds., *Rational Animals?* (New York: Oxford University Press, 2006); and Robert Lurz, *The Philosophy of Animal Minds* (Cambridge: Cambridge University Press, 2009).

- 5 This “diachronic” claim, note, is much more radical than any claim about deep *syn-chronic* differences between human and non-human mentality. The presence of extant gaps, however wide, is in principle consistent with the existence of extinct intermediaries. See Bar-On, “Expressive Communication,” 295f.
- 6 I defend this position in several places—see e.g. Bar-On and Priselac, “Triangulation and the Beasts,” Bar-On, “Expressive Communication”; and Dorit Bar-On, “Sociality, Expression and This Thing Called Language,” *Inquiry* 59(1) (2016): 56–79.
- 7 I take the view I outline in Sections 2–4 below to be broadly Wittgensteinian (both in its search for a natural history of human mindedness, and in its appeal to expressive behavior as relevant to the origins of meaning). Although it’s not entirely clear what Wittgenstein’s view is on the question of the origins of human mind and language, what I say below has several points of contact with a number of remarks he makes on animals, mentality, and expression, and on meaning, understanding, and interpretation, in the *Philosophical Investigations*; Ludwig Wittgenstein, *Remarks on the Philosophy of Psychology, Volume I*, eds. G. E. M. Anscombe and G. H. von Wright, trans. G. E. M. Anscombe (Oxford: Basil Blackwell, 1998); Ludwig Wittgenstein, *Remarks on the Philosophy of Psychology, Volume II*, eds. G. H. von Wright and Heikki Nyman, trans. C. G. Luckhardt and M. A. E. Aue (Chicago: University of Chicago Press, 1998); and elsewhere. Wittgenstein exegesis, however, goes beyond my scope in this paper.

1. Davidson's Continuity Skepticism⁸

Contemporary continuity skeptics, unlike some of their historical predecessors, typically disavow Cartesian dualism and are self-proclaimed naturalists. Given that, we can, for present purposes, set aside metaphysical arguments purporting to show that (human) minds are not part of the natural world, as well as arguments that trade on essentially *epistemic*, or else *methodological* problems to do with our ability to *know* the minds of non-human animals. Continuity skepticism as I understand it here is motivated by observations that purport to establish some fundamental differences between human thought and language, on the one hand, and the conduct and communication of all existing non-human animals. The former is said to have essentially intentional, flexible, objective, reflective, rule-governed, symbolic, world-directed, propositional, reason-based, norm-governed character. The latter: merely responsive, stimulus-bound, passion- or need-driven, pattern-governed, non-symbolic, merely world-involving, and thoroughly manipulable character. Given these vast “synchronic” differences, some philosophers have maintained that the application of our concepts of intentional action, meaning, semantic content, reference, propositional attitudes, etc. to non-human creatures is at best a matter of analogy or “metaphorical extension”. Importantly, the idea that there are distinctive, unique, and essentially human capacities that do not have even remote analogues or precedents among non-human animals survives the recognition that various species of non-human animals are not only sentient, but also possess considerable intelligence and are capable of goal-directed behavior and self-initiated action, as well as complex cognition and affect, problem solving, memory, and group organization.⁹

We can discern three key *claims* made by continuity skeptics, in increasing order of strength—and decreasing order of plausibility¹⁰:

- (i) *Observation of significant, deep human/non-human differences (“synchronic discontinuity”)*

Many non-human animals enjoy *sentience*, as well as possessing “*reliable differential responsive dispositions*”. But human beings also enjoy *sapience*, which “consists in knowing one’s way around *the space of reasons*”.¹¹

- (ii) *Denial of mental commonalities between us and “dumb animals” (“synchronic disconnect”)*

8 For a fuller discussion, see Bar-On, “Expressive Communication,” Sections 1 & IID.

9 For relevant references, see Bar-On, “Expressive Communication.”

10 As my aim here is not exegetical, I provide only a highly selective sample of relevant citations below, which obviously cannot do justice to the richness and subtlety of the works cited. For additional relevant quotations, see Bar-On, “Expressive Communication.”

11 Robert Brandom, *Making It Explicit* (Cambridge: Harvard University Press, 1994), 5.

Human mental capacities cannot be “factorized” into those we fully “share with dumb animals” and those we do not.¹² Even as regards sentience, we should recognize that “there are *two species* . . . one permeated by spontaneity and another independent of it”.¹³ Even “our embodied coping” amounts to “*more than* the embodied coping of nonrational animals”.¹⁴

(iii) *Rejection of diachronic continuity in “the order of explanation” (“diachronic discontinuity”)*

The undeniable claim that “there were non-linguistic animals before there were linguistic ones, and the latter did not arise by magic” is only a claim about the causal “order of being”.¹⁵ In the “order of explanation”, the *irreducibly normative* “intentionality of non-linguistic creatures is dependent on, and . . . derivative from, that of their linguistically qualified interpreters, who as a community exhibit a nonderivative, original intentionality.”^{16,17} It is therefore philosophically futile to raise the question of “where we come from”.¹⁸

Continuity skeptics, like more familiar skeptics in other areas, are prepared to distance themselves equally from the deliverances of both commonsense and the relevant sciences.¹⁹ Our commonsense mentalistic attributions to animals are said by the skeptic to be shot through with uncritical application of concepts that are inherently tailored to understanding *our* minds. They are hopelessly anthropomorphic and ‘too thick’ to serve as a starting point for a philosophical explanation of our relation to the beasts. On the other hand, scientific accounts of our mental and linguistic capacities that portray them as continuous with non-human capacities (insofar as they stay clear of uncritical anthropo-

12 John McDowell, *Mind and World* (Cambridge: Harvard University Press, 1996), 69. (See also page 64).

13 *Ibid.*, 69.

14 John McDowell, “What Myth?” *Inquiry* 50(4) (2007): 344.

15 Brandom, *Making it Explicit*, 155.

16 *Ibid.*, 152.

17 For the different ‘orders’, see Wilfrid Sellars, “Empiricism and the Philosophy of Mind,” in *Minnesota Studies in the Philosophy of Science*, vol. 1, eds. Herbert Feigl and Michael Scriven (University of Minnesota Press, 1956), 253–329; and Wilfrid Sellars, “Mental Events,” *Philosophical Studies* 39(4) (1981): 325–345. For a recent critique of Brandom’s view from an evolution-friendly philosophical perspective, see Daniel Dennett, “The Evolution of ‘Why?’,” in *Reading Brandom: On Making It Explicit*, eds. Bernhard Weiss and Jeremy Wanderer (New York: Routledge, 2010), 48–62.

18 Brandom, *Making it Explicit*, 4.

19 A good case in point is the Quinean or Kripkensteinian meaning skeptic, who dismisses both the commonsense confidence that alternative interpretations of speakers’ utterances can be ruled out and scientific attempts to ground interpretation choices in, say, facts about speakers’ behavioral dispositions or cognitive organization.

morphism) are regarded by the skeptic as overly reductionist and ‘too thin’ to deliver a philosophically credible account of the emergence of our minds in nature.²⁰

1.1 Davidson’s Triangulation

The three claims introduced above are all explicitly endorsed by Davidson. A key feature of human thought and language, which all animal thought and communication lack, is the *objectivity* of semantic content—its being “true or false independent . . . of the existence of the thought or the thinker”.²¹ Such thought requires possession of concepts, whose employment involves *rule-following* (as opposed to merely behaving *in accordance with* rules), which brings in its train the possibility of genuine error.²² Davidson, like Brandom and McDowell (each of whom, in turn, regards himself as following Wittgenstein on this point), thinks that the possibility of genuine error requires the rule-follower’s *awareness* of that possibility, and thus *having* objective thought requires the thinker to have an awareness or *grasp of objectivity*, something that goes beyond the capacities of non-human animals.^{23,24}

In “The Emergence of Thought”, Davidson directly addresses the question of “the emergence of mental phenomena”—which, he says, is the “conceptual problem . . . of describing the early stages in the maturing of reason . . . that precede the situation in which [mentalist] concepts have clear application”.²⁵ There (and elsewhere), he explicitly endorses continuity skepticism:

There cannot be a sequence of emerging features of the mental, not if those features are to be described in the usual mentalistic vocabulary. Of course . . . each stage in the emergence of thought can be

20 For more empirical versions of continuity skepticism, see Bar-On, “Expressive Communication.”

21 Donald Davidson, *Subjective, Intersubjective, Objective* (New York: Oxford University Press, 2001), 130.

22 For an earlier articulation of this claim, see Jonathan Bennett, *Rationality: An Essay Towards an Analysis* (New York: Routledge & Kegan Paul, 1964), 87f.

23 Davidson, *Subjective, Intersubjective, Objective*, 130.

24 Brandom and McDowell agree with Davidson that even perceptual thought, if it is to enjoy objectivity, requires reflective grasp of the contrast between subjective and objective). See Brandom, *Making It Explicit*, 48 and 63; and McDowell, *Mind and World*, 114ff. For a critique of the “Individualist Representationalism” betrayed by this view, see Tyler Burge, *Origins of Objectivity* (Oxford: Oxford University Press, 2010), Ch. 2 and *passim*. Burge goes on to offer a continuist view regarding objective thought. In Dorit Bar-On and Matthew Priselac, “Origins: Subjective, Objective, Intersubjective” (in progress), we evaluate the extent to which Burge’s defense of continuity succeeds in engaging Davidson’s skepticism.

25 Davidson, *Subjective, Intersubjective, Objective*, 127.

described in physical terms. But this will fail as an explanation of the emergence of the mental since *we . . . cannot expect to find, a way of mapping events described in the physical vocabulary onto events described in the mental vocabulary. . . .* In both the evolution of thought in the history of mankind, and the evolution of thought in an individual, there is a stage at which there is no thought followed by a subsequent stage at which there is thought. . . . *What we lack is a satisfactory vocabulary for describing the intermediate steps.*²⁶

To support the seemingly questionable move from the last claim, about *lack of vocabulary*, to the claim that there can *be* no intermediate steps or emergence, Davidson introduces the idea of *triangulation*. This is the idea that contentful thought about an objective world, as well as meaningful linguistic communication, requires “the existence of a triangle” whose base connects two subjects, S1 and S2, and whose apex is an object in the world, O.²⁷ In defense of his continuity skepticism, Davidson invites us to contrast a “pure” triangular scenario involving non-human animals with the “reflective” triangular scenarios we are familiar with in our own intersubjective experiences. Subjects in *pure* triangulation, Davidson allows, can “classify” and “generalize” and form “habitual inductions”, even learned ones, grouping various stimuli together “by virtue of the similarity of the[ir] responses”.²⁸ He even allows that they can come to associate each other’s *responses* to O with O. For example, S1 could respond to S2’s O-reaction as S2 responds to O, and vice-versa. This makes room for a simultaneous *discrepancy* that is at the heart of objectivity (as Davidson understands it), whereupon “space is created” for the concept of error to develop.²⁹

But although Davidson thinks that this sort of scenario is *necessary* for providing a conceptual foundation for objective thought, he insists that it’s *insufficient* for its emergence. This is because nothing in the intersubjective interactions of pure triangulation supports the attribution of *reflective grasp* of the concepts of error, belief, truth, etc. From each subject’s point of view, the other subject’s behavior is simply something that can be correlated (or not) with items in the world—objects, events, state of affairs—as smoke is correlated with fire, or deer tracks with the recent presence of deer. Any disagreement between them would amount to no more than *behavioral discord*. What’s missing is one subject’s treating

26 Ibid., emphasis added.

27 Ibid., 121.

28 Donald Davidson, “Externalisms,” in *Interpreting Davidson*, eds. Petr Kotátko et al. (Stanford: CSLI Publications, 2001), 5.

29 Donald Davidson, “Comments on Karlovy Vary Papers,” in *Interpreting Davidson*, eds. Petr Kotátko et al. (Stanford: CSLI Publications, 2001), 285–308.

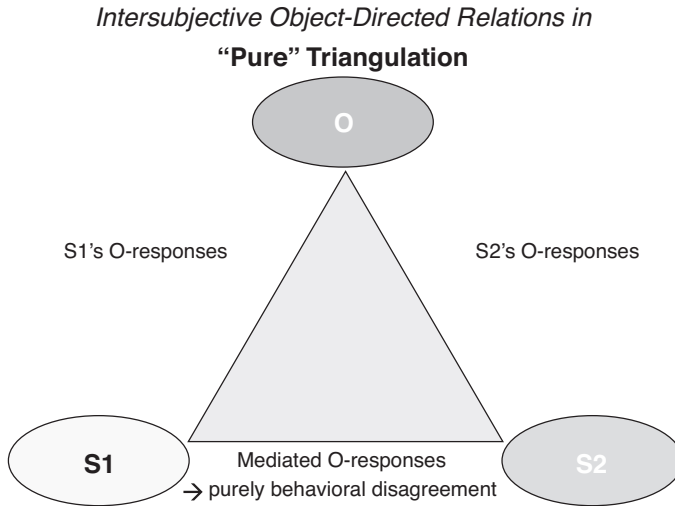


Figure 8.1 “Pure” Triangulation

another *as a subject* who has a *take* on the world, which take can *fit or fail to fit* with the way things are.³⁰

Indeed, Davidson thinks that *nothing short of linguistic communication* between the two subjects could move us significantly beyond pure triangulation, for “[o]nly when language is in place can creatures appreciate the concept of objective truth . . . [and] make use of the triangular situation to form judgments about the world”.³¹ In *reflective* triangulation, we have *language speakers*, capable of responding to objects with meaningful, *true or false* utterances. On a given occasion, S1 may produce a sentence (say, “There’s a leopard nearby”) which S2 presumes S1 to hold-true, and yet which he (S2) takes to be false. Genuine objectivity is provided for via the possibility of each subject recognizing a potential gap between what is *held* to be true (and thus believed) and what *is*

30 See Davidson, *Subjective, Intersubjective, Objective*, 121; and Davidson, “Externalisms,” especially pp. 11–16. See also Naomi Eilan, “Joint Attention, Communication, and Mind,” in *Joint Attention: Communication and Other Minds*, eds. Naomi Eilan et al. (Oxford: Oxford University Press, 2005) for a helpful interpretation of this point.

31 Davidson, *Subjective, Intersubjective, Objective*, 131. See also Donald Davidson, *Problems of Rationality* (New York: Oxford University Press, 2004), 140–141; and Davidson, “Externalisms,” 13. Also, compare McDowell, *Mind and World*, 114f., who argues that a perceiver’s *grasp* of the difference between subjective and objective is required to render her environment “more than a succession of problems and opportunities” and to allow both a [subjective] self and an [objective] world to “be in view.”

*Intersubjective Object-Directed Relations in
“Reflective” Triangulation*

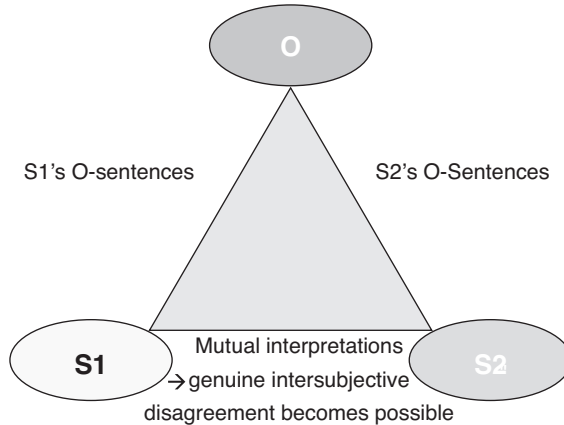


Figure 8.2 “Reflective” Triangulation

the case.³² Reflective triangulation, Davidson maintains, is *different in kind* from pure triangulation, and proper understanding of the reflective capacities manifested in it would give the lie to any attempt to interpose a significant intermediary between them.

By insisting that reflective triangulation is not only sufficient but also necessary for the emergence of objective thought Davidson, in effect, gives up on the possibility of explaining the natural emergence of objective thought and linguistic communication.³³ Such an explanation would require interposing a viable intermediary between the pure and reflective triangulations that he contrasts. This, in turn, would require supposing that we could “have an analysis of thought” or “a *reduction* of the intentional to the extensional”. Yet Davidson (like Brandom and McDowell) thinks that such reduction “is not to be expected”, due to the irreducibly normative character of objective thought.³⁴

We can see Davidson’s continuity skepticism as resting on the following claims:

32 For more on the role language plays, see especially Davidson, *Subjective, Intersubjective, Objective*, 111ff. and 119ff. Unlike Quine, Davidson is not a wholesale skeptic about the legitimate application of the intentional idiom. For him, once mutual linguistic interpretation is in place, there *is* room for genuine rule-following, conceptualization, and the possibility of genuine error and disagreement.

33 Davidson, “Externalisms,” 13.

34 *Ibid.*, emphasis added.

1. The *objectivity* of thought (as well as its *intentionality*, in Brentano's sense) has an irreducibly normative character.

“Irreducibility”

2. To have objective, intentional thought, a subject must have *grasp* of the concept of objectivity.

“Grasp”

3. Grasp of the relevant notion of objectivity requires *intersubjectivity*—it requires understanding of the idea of another subject's *take*.

“Intersubjectivity”

4. Intersubjective interactions in all but reflective triangulation are unfit to provide such understanding. (Alleged intermediate cases either collapse into the pure case, or are assimilated into the reflective case.)

“Reflective Interpretation”

None of these Davidsonian claims is unproblematic. Quinean eliminativists,³⁵ Dennettian instrumentalists,³⁶ and proponents of “new-wave metascience,”³⁷ or of “embodied cognitive science”³⁸ may accept the irreducibility of intentional idioms (1) but *for that reason* maintain that no such notions could have room in a serious science. In a clear sense, these philosophers are not engaging the Davidsonian skeptic, as they are in no way concerned to identify a stable *intermediary* case between Davidson's pure and reflective cases (by tackling 4 head on). They can perhaps be seen as providing a “skeptical response” to continuity skepticism.

In recent years, several philosophers of mind who subscribe to *representationalism*—most notably, Burge—have taken issue with what they regard as the *hyperintellectualism* manifest in Davidson's “grasp” requirement (Claim 2).³⁹ In contrast to eliminativists, these philosophers

35 See Willard Van Orman Quine, *Word & Object* (Cambridge: MIT Press, 1960), Ch. VI. See also Paul Churchland, “Eliminativism and Propositional Attitudes,” *Journal of Philosophy* 78 (1981); and Patricia Churchland, *Neurophilosophy* (Cambridge: MIT Press, 1986).

36 See Daniel Dennett, *The Intentional Stance* (Cambridge: MIT Press, 1987).

37 See John Bickle, *Philosophy and Neuroscience: A Ruthlessly Reductive Account* (Norwell, MA: Kluwer Academic Publishers, 2003).

38 Anthony Chemero, *Radical Embodied Cognitive Science* (Cambridge: MIT Press, 2009).

39 Burge argues that most post-Kantian philosophers of mind have either fallen into hyperintellectualism, clustering into two families of “Individual Representationalism” (see Burge, *Origins of Objectivity*, Part II), or have been in the grip of reductionist naturalism. Burge advocates what can be seen as a *naturalist, nonreductionist, anti-individualist representationalism*. (But NB: Burge's view is only anti-individualist in the sense that it posits constitutive connections to the world outside the individual, *not* in the sense that it assigns any essential connection between mindedness and relations to *other individuals*).

believe that intentional notions do have a substantial role to play in the scientific explanation of perception, behavior, and action. They maintain that, once it is denied that *having* objective thought requires individuals already to have the “psychological resources to represent preconditions of objectivity”,⁴⁰ the road is clear to recognizing that current scientific theories of psychological phenomena (perception, for example) make warranted attributions of intentional states when characterizing the mental life and explaining the behavior of non-human animals (including not only mammals, but even invertebrates). On this representationalist view, by the time we get to (what Davidson describes as) pure triangulation, objective, genuinely representational thought is *already* in place. Thus, this view is clearly apt to fund substantial continuities between the representational capacities of non-human animals and ours. However, proponents of representationalism often also reject Davidson’s Claim 3 (which assigns a special role for intersubjective interactions). So, like the eliminativists (though for different reasons), they do not appear concerned to tackle Claim 4 head on. In any event—and relatedly—from the perspective of the skeptic, representationalists may seem guilty of an overly permissive conception of what it takes to have objective thought; so the skeptic may deny that the representationalist pays sufficient heed to Claim 1.

The representationalist framework has been under much attack in recent years, under the heading of “extended mind”, “embodied cognition”, “enactivism”, etc.⁴¹ In an effort not to over-intellectualize psychological phenomena, anti-representationalists undertake to offer ‘minimalist’ accounts of *all* pre-verbal mentality and intelligent behavior, as well as intersubjective interactions, in purely non-representationist, non-intentional terms. (Anti-representationalist variously appeal to mere sensitivity to natural signs, goal-directedness, response-detection, dynamic embodiment, coordinated action routines, anticipatory mechanisms, and so on.) Although non-human animals and pre-verbal children possess various wholly *nonconceptual* modes of thought and attitudes, *propositional* attitudes (which are *conceptually* structured) are the prerogative of language speakers.⁴² The anti-representationalist finds a deep gulf between the merely enacted, non-conceptual states of non-linguistic subjects and the fully propositional thought of language speakers. One self-proclaimed “radical enactivist”, Dan Hutto, indeed explicitly refers

40 Burge, *Origins of Objectivity*, 139.

41 See Chemero, *Radical Embodied Cognitive Science*; Andy Clark, *Supersizing the Mind: Embodiment, Action, and Cognitive Extension* (New York: Oxford University Press, 2008); and J. Kevin O’Regan and Alva Noë, “A Sensorimotor Account of Vision and Visual Consciousness,” *Behavioral and Brain Sciences* 24 (2001): 939–1031.

42 In a similar spirit, Michael Dummett had earlier proposed that animals can only engage in “essentially spatial,” dynamic, perception-based, and context-bound “proto-thoughts” that lack all conceptual structure. See his *Origins of Analytical Philosophy* (London: Duckworth and Cambridge: Harvard University Press, 1993), 123f.

to “a major cognitive Rubicon” between the “basic minds” of non-verbal creatures and our own “superminds”, the crossing of which is marked by becoming *language users*.⁴³ But, clearly, the bigger the Rubicon, and the more committed one is to the role of language in getting creatures over the representation “hump”, the more one plays into the hands of the Davidsonian skeptic, since the more difficult it would seem to be to envisage an account of the emergence of propositional thought and language in both ontogeny and phylogeny.

Thinking again in terms of Davidson’s triangles and his continuity skepticism, my present complaint is that representationalists are committed to portraying even pure triangulation in terms that are “too rich”. For on their view the languageless thoughts of subjects even in pure triangulation already *exemplify* key features of our own thought (they don’t simply foreshadow them). On the other hand, anti-representationalists seem committed to characterizing even intermediate triangulation in terms that are “too poor.” On their view, the thought of “basic minds” not only doesn’t exemplify but in no way *foreshadows* the thought of “superminds” like ours. Thus, like Davidson, the anti-representationalist would seem committed to denying the possibility of explaining the natural *emergence* of propositional thought and language (in both ontogeny and phylogeny). I agree with representationalists that we should reject Davidson’s “grasp” requirement. I also agree with enactivists who reject the Davidsonian conception of basic mutual understanding as requiring reflective-interpretive mindreading. However, my concern here is to see whether we can provide a “straight” response to the continuity skeptic by offering a viable candidate for a middle-ground that tries to accommodate the distinctive role Davidson assigns for intersubjectivity in grounding objectivity. To do this, I submit, one must identify a distinct type of animal intersubjective interactions that can be seen to *foreshadow* key features of human mentality as the skeptic understands it, without yet fully *exemplifying* all of them.⁴⁴

2. Expressive Communication

Thinking in terms of Davidson’s sharply contrasting triangles, the challenge is to try to bridge the diachronic gap without either underestimating the rich character of linguistic interactions in reflective triangulation or overestimating the power of non-linguistic interactions in pure triangulation. This requires a characterization of a genuinely *intermediate*

43 Daniel Hutto, *Folk Psychological Narratives: The Sociocultural Basis of Understanding Reasons* (Cambridge: MIT Press, 2008), 96.

44 For relevant discussion, see Dorit Bar-On, “Crude Meaning, Brute Thought (Or: What Are They Thinking?!),” *Journal for the History of Analytic Philosophy* (special issue, forthcoming).

triangulation that neither collapses into pure triangulation nor illicitly presupposes capacities that are only possible in reflective triangulation. Toward this end, I would like to propose for consideration *expressive behavior*. In his seminal work *The Expression of the Emotions in Man and Animals*,⁴⁵ Darwin identifies expressive behavior as representing an important common ground between ‘man and animals’. He had in mind a wide range of vocal, facial, and postural displays, including (among others) yelps, growls, lip smacks, distress, food, and alarm calls, fear barks and grimaces, “play faces” and play bows, cowering demeanor, and so on.⁴⁶ Darwin provides a rather nuanced characterization of these sorts of behaviors—as being at once physiological *and* psychological, linking bodily changes and movements intimately with complex, world-directed emotional states.⁴⁷ Yet many philosophers, as well as theorists of animal communication and language evolution, often assimilate paradigmatic natural expressions too closely to mere physiological symptoms, such as red spots on the skin and sneezes, or to nonvoluntary displays that merely convey information about biologically significant features of the displayer (like a peacock’s tail), portraying them simply as reliable *natural signs* of the internal states that regularly cause them.⁴⁸

With Darwin, I believe that a purely causal construal fails to do justice to the richness and complexity of expressive behaviors.⁴⁹ Elsewhere,⁵⁰

45 Charles Darwin, *The Expression of the Emotions in Man and Animals* (London: John Murray, 1872).

46 See Bar-On, “Origins of Meaning” for references to works that describe and analyze facial, vocal, postural and gestural expressions. There is clearly a degree of heterogeneity in the class of behaviors I am including here. I am relying on a measure of pre-theoretic understanding, which can only provide an initial basis for future theorizing.

47 Darwin was arguing against an earlier work by Charles Bell—*Essays on the Anatomy and Philosophy of Expression* (London: John Murray, 1824)—that the expressive behaviors of human and non-human animals had shared ancestry (whereas Bell maintained that there were divinely created human muscles designed for the expression of uniquely human feelings).

48 See, for example, Paul Grice, “Meaning,” *The Philosophical Review* 66 (1957): 377–88; William Alston, “Expressing,” in *Philosophy in America*, ed. Max Black (Ithaca: Cornell University Press, 1965), 15–34; and Jonathan Bennett, *Linguistic Behavior* (Cambridge: Cambridge University Press, 1976). See also, in the animal communication literature, e.g. John Maynard Smith and David Harper, *Animal Signals* (Oxford: Oxford University Press, 2003), especially chapter 7; Stephen R. Anderson, *Dr. Dolittle’s Delusion: Animals and the Uniqueness of Human Language* (New Haven: Yale University Press, 2004), Ch. 2 and *passim*; and W. Tecumseh Fitch, *The Evolution of Language* (Cambridge: Cambridge University Press, 2010), Ch. 4 and *passim*.

49 For the account of expressive behavior that follows, see Bar-On, *Speaking My Mind: Expression and Self-Knowledge* (Oxford: Clarendon Press, 2004), Chapters 6–8. See also Mitchell Green, *Self-Expression* (Oxford: Oxford University Press, 2007). For some reservations concerning Green’s account, see Dorit Bar-On, “Expressing as Showing What’s Within: On Mitchell Green’s *Self-Expression*,” *Philosophical Books* 51(4) (2010): 212–227.

50 Bar-On “Expressive Communication”; Bar-On and Priselac, “Triangulation and the Beasts”; Dorit Bar-On “Origins of Meaning: Must We ‘Go Gricean’?” *Mind & Language* 28(3) (2013): 342–375; and Dorit Bar-On and Mitchell Green, “Lionspeak:

I have argued that animal expressive interactions exhibit features that foreshadow significant aspects of human linguistic communication, despite not being underwritten by complex communicative intentions or ingenious insight. Here I can only rehearse some of the key ideas that bear on the challenge posed by continuity skepticism.

2.1 *Expressing Is a Form of Showing*

Consider first expressive behavior in our own species. Upon seeing a friendly dog, little Johnny's face may light up; or he may let out an excited gasp, pointing at the dog; or he may emit a distinctive sound ("Uh!"), or call out: "doggy!" as he reaches to pet the dog; or he may exclaim: "Wanna pet the doggy!" perhaps with no reaching. Johnny's facial expression and his gasp are what are sometimes described as "purely natural" expressions; whereas his eager reaching and subsequent utterances are expressive behaviors he voluntarily or perhaps even intentionally engages in to give vent to his desire to pet the dog. Among the utterances, note, are English *sentences*, which have conventional linguistic meaning, and express in (what Sellars calls) *the semantic sense* propositions. Still, these all seem genuine instances of expressive behavior. What renders them so has to do with similarities among the *performances* or acts, which equally serve to give vent to Johnny's state of mind. These similarities obtain despite significant differences among the *expressive vehicles* used. One can *give expression to*—express in the *mental-state* sense—one's amusement at a joke by laughing (where we may assume that laughter does not stand in a semantic representational relation to being amused), as well as by uttering a sentence with a structured meaning, such as "This is so funny!" We have here similar expressive performances that use different vehicles of expression.⁵¹

An idea that takes its inspiration from earlier philosophical work on expression, including remarks by Wittgenstein (as well as Ayer) is that distinctively expressive performances are not merely symptoms, nor even simply natural signs that indicate the states of mind that cause them. Unlike verbal descriptions or reports, such behaviors *show* expressers'

Communication, Expression, and Meaning," in *Self, Language, and World: Problems From Kant, Sellars, and Rosenberg*, eds. James R. O'Shea and Eric M. Rubenstein (Atascadero, CA: Ridgeview Publishing Co., 2010), 89–106.

- 51 Wilfrid Sellars, "Language as Thought and as Communication," *Philosophy and Phenomenological Research* 29 (1969): 506–527, distinguishes expressing in the semantic sense from expressing in the *causal* and the *action* senses. Bar-On, *Speaking My Mind*, distinguishes between an *act* of expressing and its *product*, on the one hand, and between the *process* and *vehicle* of expressing, and defends a "neo-expressivist" construal, according to which an avowal such as "I'm so glad to see you!" "a-expresses" *the speaker's joy* at seeing the addressee, using a vehicle that "s-expresses" the self-ascriptive *proposition that* the speaker is glad to see her addressee (see especially Chs. 6–8).

states of mind to a suitably endowed audience, as opposed to hiding them, on the one hand, and as opposed to intentionally and articulately *telling* about the states, on the other.⁵² On the expresser's side, the showing behavior relevant to expressing is behavior that springs immediately from—and directly exhibits, displays, or betrays—the expressed state of mind, as opposed to simply providing information or giving evidence about it (the way, e.g., someone taking an aspirin shows *that* they are in some kind of pain). On the audience's side, the relevant contrast is between behavior that allows some kind of *direct recognition* of the expressed state, as opposed to requiring, say, inference (however secure) based on various features of the behavior coupled with contextual information and background knowledge.⁵³

2.2 What Non-Verbal Expressive Behavior Shows

Unlike English sentences used in expressing one's states of mind, animals' facial and bodily expressions, their calls and other affective displays, are not expressive vehicles that bear a conventional, representational relation to the states of mind the animals express.⁵⁴ Nonetheless, even naturally expressive behavior can directly manifest various aspects of expressed states of mind—their quality, degree and intentional objects. A natural expression can display the location of a pain in the chest, as well as its severity, rage, as opposed to panic, at a specific attacker, extreme or mild curiosity at a doll disappearing behind a screen, and so on.⁵⁵ A dog's cowering demeanor upon encountering another, or a vervet monkey's alarm call, will show to a suitably endowed recipient the kind of state the animal

52 For discussion of the relevant kind of showing (as well as references), see Bar-On, *Speaking My Mind*, Ch. 7, 8; Bar-On, "Expressing as Showing"; and Dorit Bar-On, "Expression: Acts, Products, and Meaning," in *Meaning Without Representation: Essays on Truth, Expression, Normativity, and Naturalism*, eds. Steven Gross et al. (Oxford: Oxford University Press, 2015). And see James Sias and Dorit Bar-On, "Emotions and Their Expression", in *The Expression of Emotion*, eds. Catherine Abell and Joel Smith (Cambridge: Cambridge University Press, 2016).

53 A related distinction is drawn by ethologists and biologists when they describe animals' "affective displays" as "merely expressive", meaning that they are directly tied to, and directly manifest animals' affective states. Such displays are contrasted with *intentionally produced* behaviors that are designed to provide an audience with information about the producer or her environment.

54 Contra Andrew McAninch, Grant Goodrich, and Colin Allen, "Animal Communication and Neo-Expressivism," in *The Philosophy of Animal Minds*, ed. Robert W. Lurz (Cambridge: Cambridge University Press, 2009), 128–155, who use the present framework to argue that animals' alarm calls do express propositions.

55 Of course, not all perception-enabling showing is expression. For discussion, see Bar-On, *Speaking My Mind*, 269ff and 298ff. Reflection on the role naturally expressive behavior plays in the lives of creatures capable of it suggests that part of the effectiveness of such behavior is its capacity to meet with immediate and appropriate reactions on the part the designated audience, which are likelier to ensue if the behavior enables perception-like uptake, as opposed to, say, inference about hidden causes of behavior.

is in, the state's quality or degree (e.g., *how* afraid it is), the state's intentional object (of *whom* it's afraid), and the state's dispositional "profile" (i.e. how the animal is disposed to act).⁵⁶ These sorts of performances are Janus-faced: they point *inward*—to the animal's expressed state of agitation, fear, anger, etc.—at the same time as they point *outward*—toward the object or event at which the state is directed. And they often reveal the relevant behavior's cause or motivation at the same time as they foretell the expresser's impending behavior and move others to respond appropriately.⁵⁷

Expressive communication is different from—and much less ubiquitous than—animal signals that are designed to convey information about the producer's identity, and various biologically significant attributes (such as readiness to mate, or fitness). Inasmuch as expressive performances are keyed to objects and features of an animal's environment *as apprehended* by the animal (and in that sense "psychologically filtered"), they contrast with automatic physiological reactions and hormonally triggered behavioral changes, and may be said to exhibit a measure of *intentionality* or subjective directedness, even if not produced intentionally. And in contrast with perceptual and other, more passive states, which are also often said to exhibit intentionality, expressive communication also has an active dimension. A creature giving behavioral expression to a present state of mind—e.g., a dog bowing playfully—shows designated receivers how he is disposed to act, as well as how *they* should act or *what to do*. Moreover, unlike rote, automatic, instinctive, or reflexive behaviors, expressive behaviors of a wide range of animal species can be brought under voluntary control, intensified or toned down.⁵⁸ Such control prefigures the sorts of intentional production of which humans are capable.⁵⁹

56 For discussion of play bows, see A. Miklosi, J. Topál, and V. Csányi, "Comparative Social Cognition: What Can Dogs Teach Us?" *Animal Behavior* 67(6) (2003): 995–1004.

57 For an early occurrence of the idea that expressive behavior shows what's within while pointing to what's without, see Alan Tormey, *The Concept of Expression* (Princeton: Princeton University Press, 1971), 27f. and *passim*. The Janus-face character discussed here is different from the dual force ascribed by Millikan to "pushmi-pullyu" representations. See Ruth Millikan, "On Reading Signs: Some Differences Between Us and the Others," in *Evolution of Communication Systems: A Comparative Approach*, eds. D. Kimbrough Oller et al. (Cambridge: MIT Press, 2004), 15–29; and Ruth Millikan, *Varieties of Meaning: The 2002 Jean-Nicod Lectures* (Cambridge: MIT Press, 2004).

58 There is considerable experimental evidence that the production of alarm and other calls, as well as other expressively communicative gestures, can be brought under control in all primates, many mammals, and even birds; there is also evidence of various flexible "audience effects" in the production of calls in a number of species. For more on this, see Fitch, *Evolution of Language*, section 4.9.3; Charles T. Snowdon, "Contextually Flexible Communication in Non-human Primates," in *Evolution of Communicative Flexibility: Complexity, Creativity, and Adaptability in Human and Animal Communication*, eds. D. Kimbrough Oller et al. (Cambridge: MIT Press, 2008), 71–93; and see Bar-On "Origins of Meaning," Section 4 for discussion (and additional references).

59 See Bar-On, "Origins of Meaning," and "Expressive Communication".

This should help give a sense of ways naturally expressive behavior can foreshadow linguistic behavior. But more can be said. Unlike linguistic utterances, episodes of naturally expressive behavior do not deploy structured vehicles; the vehicles they deploy (facial contortions, vocalizations, bodily postures, etc.) do not seem to have recombinable *parts* or components. Even so, natural expressive vehicles (as well as acquired nonverbal vehicles) have various dimensions of complexity. They inherit their complexity from the complexity of expressed psychological states. As Sellars helpfully observes, a single state, which may not have any distinct parts or components corresponding to referential or predicative parts of speech, may nevertheless have both a predicative and a characterizing function by virtue of its multiple *aspects* rather than its distinct *parts*.⁶⁰ The relevant psychological states could be understood as *non-propositional* affective and action-guiding states that are *directed at* (or are “about”) certain environmental objects: fear of *x*, anger/excitement at *y*, attending to *z*. Moreover, these *prepositional* attitudes (as I refer to them) can be usefully thought as prefiguring the propositional attitudes.⁶¹ And, importantly, to the extent that expressive signals transparently reveal aspects of the complex states they express, their use in communication can be seen as foreshadowing the use of *articulate, linguistic* vehicles, despite the fact that they, like the states they are used to express, lack composite structure.

2.3 Animals' Expressive Behavior as Communicative, Overt, and Social

Continuity skeptics often mention animals' expressive behaviors only to dismiss them as candidate forerunners of the symbolic utterances used in linguistic communication.⁶² Yet I argue that, properly understood, expressive communication ~~can be seen to possess~~ significant features that can be seen to represent natural precursors of certain psychological, semantic

60 To illustrate, suppose “a” refers to a, “b” to b, italicization represents something as red, bold font represents something as blue and one symbol being to the left of the other represents its being larger than the other. On Sellars suggestion, the complex symbol “ab” shares the *propositional* but not the *logical* (compositional) form of the sentence “Red *a* is larger than blue *b*.” For more on this, see Jay Rosenberg, *Wilfrid Sellars: Fusing the Images* (Oxford: Oxford University Press, 2007), 105ff.

61 See Tormey, *Concept of Expression*, 10f.

62 See, e.g., John McDowell, “Meaning, Communication, and Knowledge,” in *Philosophical Subjects: Essays on the Work of P. F. Strawson*, ed. Zak van Straaten (Oxford: Clarendon Press, 1983), 117–139; Bennett, *Linguistic Behavior*, §62; and Davidson, *Subjective, Intersubjective, Objective*, 129; Anderson, *Dolittle's Delusion*, Chapters 2, 7, and *passim*; James Hurford, *The Origins of Meaning: Language in the Light of Evolution* (Oxford: Oxford University Press, 2007), Chapter 6 and *passim*; and Fitch, *Evolution of Language*, Chapters 4 and 13.

and pragmatic aspects of linguistic communication. Elsewhere, I have argued that animals' expressive communication is best thought of as a form of *world-directed, overt, intersubjective, and social* communicative behavior that is designed by *nature* (as opposed to being designed through individual intention or culture) to show, or exhibit the presence and character of expressers' states of mind to suitably endowed observers, so as to move them to act in appropriate ways (toward the expresser or the object of her expressed state), in part by foretelling the expresser's impending behavior.⁶³ If I am right, expressive communicative interactions go beyond the merely discriminative, responsive behaviors of pure triangulation, yet they do not require propositional thought (on the part of expressers) or reflective interpretation (on the part of the audience).

3. Expressive Communication and Intermediate Triangulation⁶⁴

3.1 Intermediate Triangulation

Going back to Davidson's triangles, suppose, briefly, that S1 produces an alarm call, which is naturally designed to show conspecifics, S2 included, his imminent flight from some specific type of nearby threat (some predator O), so as to move S2 to do the same.⁶⁵ Having observed the behavior, S2 is in a position to respond to it in some way that is not merely responsive to the presence of O (as indicated by the behavior) but is also anticipatory of S1's subsequent behavior. Instead of also fleeing, for example, S2 may, upon hearing the alarm call and spying no predator, respond to S1's alarm call by, say, moving toward S1 to consume S1's soon-to-be-abandoned meal. When S1's O-behavior betrays his impending flight, the possibility opens for S2's response to the behavior to match it or not, depending on whether or not S2's response is *itself* a bit of behavior appropriate to the presence of O. S2's behavior departs *both* from S1's (anticipated) behavior and from the appropriate responsive behavior; and it can be said to *embody* O-related disagreement with S1's behavior. Here it looks as though S2 is treating S1's O-related behavior as *separable from* the (imminent) presence of O (as assessed by S2). S2 is keeping two

63 See Bar-On and Green, "Lionspeak"; Bar-On, "Origins of Meaning"; and Dorit Bar-On, "Communicative Intentions, Expressive Communication, and Origins of Meaning," in *Routledge Companion to the Philosophy of Animal Minds*, eds. Kristin Andrews and Jacob Beck (New York and Oxford: Routledge, 2018), 301–312.

64 For fuller discussion, see Bar-On and Priselac, "Triangulation and the Beasts."

65 For present purposes, we need not attribute to S1 and S2 the *concept* PREDATOR, but only whatever discriminatory dispositions vis-à-vis O that Davidson allows subjects to have in pure triangulation. See again, e.g., Davidson, "Externalisms," 12–13; and Davidson, *Subjective, Intersubjective, Objective*, 117ff.

distinct but simultaneous tabs, as it were, on the world and on S1's reaction to it. The right space seems to be open for crediting S2 with *treating S1 as having his own take* on the situation. For O is no longer merely an external cause serving as a point of intersection of S1 and S2's discriminatory responses; nor is S1's behavior treated merely as a natural O-indicator by S2. Instead, S2's responsive behavior is one that takes account of what amounts to S1's getting things wrong (from S2's perspective). S2, if you will, *minds a gap* between S1's take and how things are.

We have here what we may call "intermediate triangulation", which a proponent of continuity can interpose *diachronically* between Davidson's pure and reflective triangulations. Intermediate triangulation is poised between the "thin", pure case, in which S2 simply responds or fails to respond to S1's O-behavior with her own O-behavior, on the one hand, and the "thick," reflective case in which S2 *judges that* S1's O-behavior is incorrect (specifically, that S1 has uttered a false sentence, betraying a false belief), on the other hand. Intermediate triangulation features object-centered intersubjective interactions that allow for disagreement but do not presuppose reflective grasp of objectivity or even possession of propositional thought on the part of the relevant subjects. So it is clearly different from the thick, reflective case. But it is also different from the thin case. To see the crucial difference, recall that, on the expresser's side, expressive behavior shows the affective state the expresser is in partly by revealing how he, S1, is prepared to react in light of O's presence.

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Intersubjective Object-Directed Relations in
"Intermediate" Triangulation

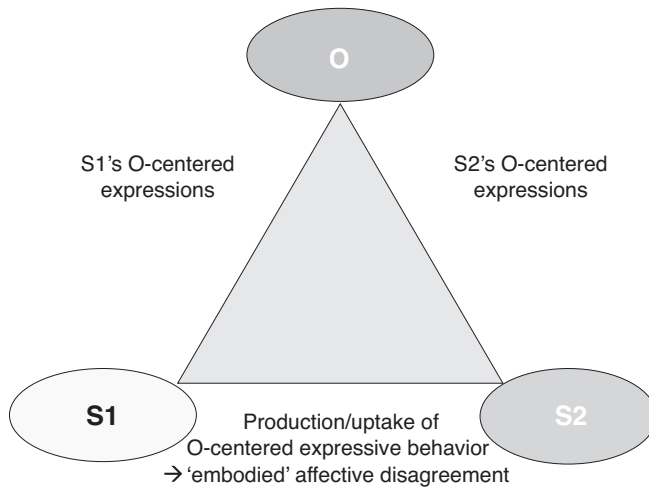


Figure 8.3 "Intermediate" Triangulation

Faced with S1's expressive performance, the observer, S2, can anticipate not only O's presence, but *also* the behavior on S1's part that the performance foretells. In that sense, S2 is responding to S1's expressive performance *as* O-centered behavior. Moreover, since expressive behavior also has the function of moving suitably attuned observers to behave in certain ways, proper uptake of S1's expressive behavior requires a certain O-related reaction on S2's part. This interlocking of O-centered intersubjective interactions makes room for a broader range of intersubjective mismatches/disagreements than Davidson allows in the pure case.

3.2 Some Synchronic Evidence?

The above scenario (like the Davidsonian ones after which it is modeled) is an imaginary one. But recent observations of animals' intersubjective interactions in the wild, as well as in captivity, and controlled experiments comparing the behaviors of higher primates and prelinguistic children, suggest that intermediate triangulation is more than mere fiction.⁶⁶ And, although there is much disagreement among researchers regarding the *degree* to which the relevant interactions resemble adult human transactions, it is uniformly agreed that the interactions do not admit of any simple explanation in terms of conditioned reflexes, innate or rigidly determined species-wide signaling, or learning history. Just for one example, Crockford *et al.*⁶⁷ report recent triangulation-relevant experiments with chimpanzees in the wild, who emit snake calls highly selectively, exhibiting fine-tuned sensitivity to whether or not the call receivers have themselves seen the snake, whether they have previously been within earshot of the call, how far away they are relative to the caller, and how affiliated they are with the caller. While it may be debatable whether the callers are mindreaders who "assess the state of knowledge" of the receivers (as the authors suggest), it seems undeniable that the callers are highly attuned, specifically, to other subjects' attention to—as well as impending behavior toward—a salient object of potential mutual interest or significance, as evidenced by the intricate pattern of their call production. And the call receivers are moved to take specific actions to avoid a threat that is perceived by the caller but invisible to them and of which the call informs them, carefully skirting the path where the threat (and the caller) is located. Also relevant are experiments showing that Capuchin monkeys, for example, "when shown a grasping hand disappear behind a screen without having been shown if there is or not anything behind the screen" are "[surprised] if upon lifting the screen, no object was found

66 For relevant references, see Bar-On, "Origins of Meaning."

67 Catherine Crockford et al., "Wild Chimpanzees Inform Ignorant Group Members of Danger," *Current Biology* 22 (2011): 142–146.

behind” (where surprise is measured using standard criteria applied to pre-verbal infants).⁶⁸

3.2 A “Diachronic Bridge”

While I have accepted the continuity skeptic’s claim of synchronic discontinuity, I have rejected the skeptic’s claim of *diachronic* discontinuity. In response to the skeptic’s challenge, I have explained how we could begin to draw the outlines of a bridge across the diachronic gap between us and our non-human ancestors.

The response I have offered is intended to represent a middle-ground between representationalists and anti-representationalists responses to continuity skeptics. In contrast to representationalists, I have not assumed that creatures engaged in what Davidson describes as “pure triangulation” *already* have the wherewithal for the kind of objective thought that intersubjectively engaged language speakers are capable of. Intermediate triangulation, as I have characterized it, is the prerogative of creatures capable of a special kind of minded, intersubjective, world-directed engagements and interactions that, however, do not yet *exemplify* all the key trappings of human objective, propositional thought. At the same time, in contrast to anti-representationalists, I have argued that, properly construed, expressive communication of the sort we share with existing non-human animals does possess characteristics that *foreshadow* the sort of linguistic communication of which creatures like us are capable. It is thus apt to aid us in our search for a diachronic bridge of the sort the continuity skeptic claims to be impossible.⁶⁹

4. Continuity Skepticism and Mind-Mind Dualism

In outlining a “straight” response to the continuity skeptic, my strategy has been to try to explain how the diachronic gap between us and our non-human ancestors could have been bridged, *even given* the palpable synchronic distance separating us from existing non-human animals. But what would be the significance of such a diachronic bridge for our philosophical understanding of the relationship between the minds of reflective beings like us and the minds of non-human animals? By way of conclusion, I would like to offer a few suggestive remarks.⁷⁰

68 Juan Carlos Gómez, “Embodying Meaning: Insights From Primates, Autism, and Brentano,” *Neural Networks* 22(2) (2009): 195.

69 For relevant discussion of the need for an intermediary stage involving capacities that foreshadow without exemplifying the capacities present in the reflective case, see Bar-On, “Crude Meaning.”

70 In earlier work, I was concerned to argue that it is wrong to think that explaining (as opposed to explaining *away*) certain puzzling phenomena—notably, so-called

Continuity skeptics often support their view by marshalling considerations concerning the distinctive nature of our own Mind—notably, its essentially normative, reason-responsive, self-conscious, and “self-governed”, reflective character. Given that character, they invite us to recognize that *our* Mental states (properly so described) have essential, constitutive connections to the possession and exercise of certain distinctive capacities that non-human animals (and even pre-reflective humans, NB) clearly lack.⁷¹ Different proponents emphasize different constitutive capacities; but they share the idea that the appearance of a genuinely *mental common ground* between human and non-human minds is illusory. So the reality to which our mental attributions point is bifurcated: our minds and the minds (such as they are) of non-human animals constitute substantially distinct *kinds*. At best, the so-called minds of non-human animals simply *belong to a different species of mind*, so that any attributions of mental states to non-human animals must be made “in a different register”. The result is (what I have elsewhere dubbed) *Mind-mind dualism*.⁷²

A familiar complaint against Mind-mind dualism is that it circumscribes the realm of the Mental too artificially narrowly. No (properly) Mental states can be attributed to nonreflective non-humans, except

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first-person authority—requires embracing ~~so-called~~ *constitutivism* regarding mentality, with its attendant Mind-mind dualism. My interest here has been different, though I come by it via the positive “neo-expressivist” view of first-person authority that I favor. For relevant discussion, see Bar-On, *Speaking My Mind*, Ch. 7.

- 71 I will here set aside the case of *prereflective* humans, which may require a separate treatment. Clearly, however, anyone who (like Davidson) takes *language* to be coeval with mindedness owes us a story about what sets apart the *prereflective* from the *unreflective*, so that we could at least make sense of emergence *within* our own species (i.e., in ontogeny), even if we become convinced by skepticism concerning evolutionary emergence.
- 72 The general view is articulated in, *inter alia*, Brandom, *Making It Explicit*; Robert Brandom, *Articulating Reasons* (Cambridge: Harvard University Press, 2000); McDowell, *Mind and World*; John McDowell, *Having the World in View: Essays on Kant, Hegel, and Sellars* (Cambridge: Harvard University Press, 2013); Christine Korsgaard, *Self-Constitution: Agency, Identity, and Integrity* (Oxford: Oxford University Press, 2009); Matthew Boyle, “Essentially Rational Animals,” in *Rethinking Epistemology*, vol. 2, eds. Günter Abel and James Conant (Berlin: Walter de Gruyter Verlag, 2012), 295–428; and Eric Marcus, *Rational Causation* (Cambridge, MA: Harvard University Press, 2012). Relevant are also discussions in, e.g., Sydney Shoemaker, *The First-Person Perspective and Other Essays* (Cambridge: Cambridge University Press, 1996); Paul Boghossian, “What the Externalist Can Know A Priori,” *Proceedings of the Aristotelian Society* 97 (1997): 161–175; Crispin Wright, “Self-Knowledge: The Wittgensteinian Legacy,” *Royal Institute of Philosophy Supplement* 43 (1998): 13–45; Akeel Bilgrami, *Self-Knowledge and Resentment* (Cambridge: Harvard University Press, 2012); Richard A. Moran, *Authority and Estrangement: An Essay on Self-Knowledge* (Princeton: Princeton University Press, 2001); and Jane Heal, “On First Person Authority,” *The Aristotelian Society* 102(1) (2002): 1–19.

“in a different register”. (And it is far from clear how such states could be attributed to *prereflective* humans in the same register as they are attributed to us.) But even as regards fully formed reflective humans, we must exclude unconscious emotions, wishes, and thoughts, feelings that are unnoticed or not attended to, and so on. Worse, it would seem that many of the *conscious* states of adult humans—brute sensations, irritations, passing thoughts and perceptions, non-specific anxieties, intrusive cravings and impulsive wants and whims, irrational judgments, beliefs and desires, and so on—would all need to be relegated to a second class, “lower case” mental status. Indeed, some Mind-mind dualists explicitly restrict their mind-related theses to what they term *rational* beliefs and intentions, “*judgment-sensitive*” wishes, desires, and preferences, intentional states understood as *commitments*, and so on.⁷³ But, to the extent that they take *only* such states of mind to belong in the category of the Mental properly so-called, they still seem committed to a rather extreme bifurcation within the mental lives of even adult human beings. For, they still require separating human psychology into two distinct realms: the “merely psychological” realm, the denizens of which are at best dispositions, or passive-responsive occurrences that only have powers to move us *causally* (or perhaps teleologically), on the one hand, and the genuinely Mental realm, the denizens of which all lie within “the space of reasons”, which is normatively governed and reflective, on the other.⁷⁴

- 73 See, e.g., Moran, *Authority and Estrangement*, xxxiii, and Bilgrami, *Self-Knowledge and Resentment*, p. 1. Alternatively, one can insist on judgment-sensitivity and reason-responsiveness as necessary conditions on a state *being* one of *belief, intention, desire*, etc.
- 74 Kevin Cahill has suggested to me that since McDowell, in particular, is *not* committed to an overly intellectualized view of what it is to be in the space of reasons, this may exempt him (and other Mind-mind dualists, so called) from the charge of introducing a bifurcation within our own mentality. However, whether or not this is so will obviously depend on McDowell’s account of what it takes to *get into* (or get “caught in”) the space of reasons. This is a complicated issue that cannot be taken up here. Also, several of the authors mentioned here *are* explicitly committed to a separation between e.g. “judgment-sensitive” mental states and passive states of mind that we find ourselves in, reserving the epithet “(genuinely) mental” for the former. (See above, footnotes 73, and 74.) Furthermore, even if being in the space of reasons does not require *actively reflecting on* or explicitly considering relevant reasons, it remains the case that (on the view in question) states that are within the space of reasons must be at least *responsive to* reasons. And this would seem to exclude a wide range of psychological states (notably, ones we appear to share with prereflective and non-reflective creatures, as well as reflectively challenged adult humans). Proponents of the view could, in turn, play down what is involved in being responsive to reasons. (At one extreme would lie the idea that being responsive to reasons is just a matter of being disposed to act—or being liable to change—in ways that accord with such reasons.) This may help forestall the charge of Mind-mind dualism; but by the same token, it risks undermining the claim that there is a genuine gulf between our minds and those of (even existing) non-human animals. Needless to say, the issue merits additional and more careful discussion.

If Mind-mind dualism is to fare better than its half-namesake—Mind-Body dualism—it seems that it would need to tell us what to make of the following sort of seemingly intelligible questions: How could Minded creatures come to be in nature? Or (as one might put it): How could “rational souls” emerge in a natural world populated only with animal souls? How, within our species, can/do incipient Minds emerge? And how, within each of us, can the “merely psychological” part of our soul co-exist and be integrated (causally, as well as rationally) with our reflective mind?⁷⁵ My attempt to meet the continuity skeptic’s challenge was offered in the spirit of trying to make philosophical space for raising, and answering, these questions.

Thus, recall Davidson’s claim that the question of “the emergence of mental phenomena” is the “conceptual problem . . . of describing the early stages in the maturing of reason . . . that precede the situation in which [mentalist] concepts have clear application”.⁷⁶ Davidson, we saw, argues that “[t]here cannot be a sequence of emerging features of the mental”, since “we lack . . . a satisfactory vocabulary for *describing* the intermediate steps”.⁷⁷ Unlike other “straight” responses to continuity skepticism, my response did not depend on appealing to relevant sciences that purportedly show creatures engaged in pure triangulation *already* to have the wherewithal for the kind of objective thought of which reflective interpreters are capable.⁷⁸ But I have also not simply taken our uncritical commonsense attributions of mentality to non-human animals at face value. Instead, I have accepted the skeptic’s understanding of the crucial differences between pure and reflective triangulation, and tried to engage him by offering a potential candidate for an intermediate case.

If I am right, the domain in which to look for Mind-mind continuity is *not* that of animals’ intelligent problem solving, or self-initiated pursuit of individual goals, or strategic manipulation of the world around them (other individuals included). I have instead proposed, on the one hand, that we should focus on the specific character, distinctive texture, and natural significance of expressive behavior, and the kind of communication it affords: its intersubjective world-directedness, overtness, essential sociality, and connection to action. And, on the other hand, I

75 Where this question is to be read on analogy with the question: how can an animal’s “nutritive soul” co-exist and be absorbed into its “animal soul?” It’s worth noting that contemporary Mind-mind dualists have in fact acknowledged the need to articulate their view in ways that could potentially allow responses to these questions. See especially Korsgaard, *Self-Constitution*; Boyle, “Essentially Rational Animals”; and Marcus, *Rational Causation*.

76 Davidson, *Subjective, Intersubjective, Objective*, 127.

77 Ibid.

78 See, e.g., Burge, *Origins of Objectivity*; and Peter Carruthers, “Invertebrate Concepts Confront the Generality Constraint (and Win),” in *The Philosophy of Animal Minds*, ed. Robert W. Lurz (Cambridge: Cambridge University Press, 2009).

have emphasized the significance of the fact that such behavior (unlike informative signaling) is not ubiquitous in the animal kingdom, but is characteristic of only some non-human animal species. And, moreover, it provides a common ground between non-human animals and the young members of our species, as well as our own fully formed selves.

It is the overt showing and direct uptake of states of mind distinctive of social-expressive animals that, I have argued, underwrites a capacity for non-reflective grasp of others' "subjective take," and thus, *despite* being non-reflective, marks the dawn of a different kind of orientation. It is an orientation that involves a more active, correctible, even incipiently critical, stance toward the world, others, and oneself. No doubt, *social-expressive souls* still lack features thought to be the hallmarks of rational souls. But, for all that, they may possess what it would have taken to cross one significant threshold that separates parts of the non-reflective animal world from the reflective parts that we adult humans occupy.

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