

Triangulation and the Beasts

Dorit Bar-On

Matthew Priselac

1. Introduction

Philosophical debates about the mental life of non-human animals provide an especially vivid illustration of how radically philosophers' intuitions concerning other minds can diverge. Do animals have mental states? Of what sort? Do any of the beasts have minds that overlap with ours? Is there any significant continuity between their minds and ours? Davidson is well known for arguing that, for conceptual reasons, at least when it comes to beliefs and other propositional attitudes, non-human animals differ from us in having none. For example, he has argued that having beliefs requires having the concept of belief, which in turn requires language (Davidson (2001a), (2001b)). He has also argued that possession of any propositional attitude presupposes possession of belief, and that attributing any propositional attitude to a creature requires crediting them with the concepts that figure in the specification of the attitude's content (Davidson (2001a), (2001b) (2004)). Davidson's arguments are tantalizing, but also puzzling, and far from explicit; and they have been subjected to sharp scrutiny and powerful objections from a number of authors in recent years.

Animal mentality, as such, is not our direct concern in this paper. Thus, we will here set aside those of Davidson's arguments that try to establish directly the dependence of propositional thought on language. Instead, we are interested in a theme that became prominent in Davidson's more recent discussions of the subject, namely: *triangulation*. This is the idea that contentful thought about an objective world, as well as meaningful linguistic communication, require "the existence of a triangle, one apex of which is oneself, another a creature similar to oneself, and the third an object ... located in a space thus made common" (2001a: 121). In Davidson's hands, triangulation culminates in a specific kind of skepticism regarding the possibility of a philosophical account of the emergence of propositional thought and linguistic communication among creatures like us, with a certain natural history, capacities, and setting.

If Davidson is right, the intersubjective relations that are necessary for the very possibility of objective thought could never be sufficient for its emergence. To be sufficient, Davidson claims, the line connecting the two subjects at the base of his envisaged triangle would itself have to involve mutual linguistic interpretation. Since linguistic interpretation, in turn, presupposes objective thought, this means that there is no hope for an illuminating philosophical story about the emergence of objective thought in the natural world. Davidson takes this skepticism to be of a piece with his general anti-reductionism in the philosophy of mind and language. He finds an unbridgeable chasm separating the intentional, rational, rule- or norm- governed behavior of human agents as manifested in language use, on the one hand, from the merely responsive, passion-driven, pattern-governed, discriminatory behavior of the beasts, on the other. As we shall see, Davidson recognizes 'pure' triangulation among the brutes, which he takes to be insufficient for objective thought, and he recognizes 'reflective' triangulation among linguistic creatures like us, which already presupposes objective thought; but he finds no conceptual middle-ground between the two. We will argue that this sort of anti-reductionist 'continuity skepticism' is more radical than the claim (mentioned at the outset) that non-linguistic animals cannot be said to have any propositional thought. Thus one might naively be more sanguine about the possibility of explaining the gradual emergence of objective thought than about claiming that non-linguistic animals are *already* endowed with propositional thought, or communicate in ways that *already* resemble human language in all significant respects.¹

¹ Davidson therefore aligns himself historically with a rationalist tradition including Aristotle, Descartes, Leibniz and Kant that, in its most extreme form treats animals as mere mechanical automata. With regard to more contemporary figures, Davidson's view is a kin to those of Sellars, Rosenberg, McDowell and Brandom for whom genuine thought requires operating within the linguistically structured space of reasons. Our attempt to forge an intermediate form of triangulation between reflective, linguistic triangulation and pure

In what follows, we will accept the claim that triangulation of some sort is indeed necessary for the emergence of language and propositional thought. We will also accept that triangulation ‘in its pure state’ as found among non-linguistic beasts is not sufficient to ground the sort of objectivity required for (and exemplified by) propositional thought and linguistic communication. Our aim will be a fairly modest one: to give sense to the idea of an *intermediate triangulation* that can be interposed between the pure and linguistic triangulations Davidson contrasts so sharply. The possibility of such intermediate triangulation, we will suggest, can be appreciated by attending to a distinct form of behavior that we humans share with the beasts – namely, *expressive behavior*.

In Section 2, we offer a sympathetic interpretation of Davidson’s appeal to triangulation; we briefly explain how we understand his non-reductive naturalism and articulate his continuity skepticism. In section 3, we present expressive behavior as a special sub-category of intersubjective communicative behavior, which is not readily describable in purely causal, non-intentional terms. In Section 4, we explain how the expressive behavior of non-linguistic animals gives rise to the possibility of intermediate triangulation sufficient to support at least a sort of *proto-objectivity*. By itself this possibility may not suffice to rebut the direct Davidsonian arguments against animal thought, or forestall wholesale other-minds skepticism. But we believe it can help undermine Davidson’s triangulation-based continuity skepticism.

2. Triangulation, Non-Reductive Naturalism and Davidson’s Continuity Skepticism

The idea of triangulation is invoked by Davidson to help account for what he takes to be essential characteristics of thought. First, thought has *objective content*, and second, thought can have *determinate empirical content*. Our focus here will be on the role Davidson takes triangulation to play in providing a foundation for the objectivity of thought. Our thought is objective, according to Davidson, in the sense that “it has a content which is true or false independent (with rare exceptions) of the existence of the thought or the thinker” (Davidson (2001a: 130)). The discriminative behavior prevalent in the animal world, Davidson thinks, is importantly different from linguistic behavior, which is informed by genuine conceptualization. The former is behavior that is merely in accord with rules; the latter involves *following* rules. Merely acting in accord with a rule, or exhibiting distinctive reactions to things of a certain kind is not sufficient for genuine objectivity, whereas following a rule, or *classifying* objects as of a specific kind is. This is because only the latter sort of case allows for genuine error. (This point often comes also under the rubric of the *normativity* of thought.²) In addition, Davidson thinks that a subject capable of genuine error must herself be *aware of* the possibility of error. In other words, objectivity requires an awareness or grasp of objectivity. Not only, then, is thought objective, but “this is a fact of which a thinker must be aware; one cannot believe something, or doubt it, without knowing that what one believes or doubts may be either true or false and that one may be wrong” (Davidson (2001a: 130)). This requirement of *reflective awareness* is not one that Davidson always pauses to defend. When he does, the defense typically takes the form of giving reasons for his well-known claim that to have a belief one must have the concept of belief.³ Notably, then, triangulation enters the picture *not* to support the claim that objectivity requires reflective awareness of objectivity, but rather to explain *what could make it possible* for a creature to be aware of or grasp objectivity, by showing what must be in place for the concept of error (or belief) to arise.

2.1 Triangulation as Necessary But Not Sufficient for Thought

Davidson’s triangulation obtains between (at least) two subjects (S1 and S2) and some object (O) in the world around them. These subjects interact with one another as well as with the world;

triangulation, then, is an attempt to show how a Davidsonian view is reconcilable with views which locate thought in the continuous natural world.

² Davidson also frequently references Wittgenstein in support of this point (Davidson (2001a: 130), (2001c: 2-5).

³ See Davidson (2001a: 103-105) and (2001b: 170-171).

there are various causal connections between S1 and O, S2 and O, and S1 and S2. In the pure (non-linguistic) case of triangulation, each subject is somewhat sophisticated in the sense that they can ‘classify’ and ‘generalize’. That is, “each of the creatures is carrying out its habitual inductions whether learned or inherited. This means that for each creature there are stimuli which can be classed together by virtue of the similarity of the responses.” (Davidson (2001c: 5)). Of course, this ‘classification’, ‘generalization’ and ‘induction’ are not here the genuine articles, as they do not constitute judgments that deploy concepts; they amount to nothing more than similar reactions to similar objects, which responses are, in turn, grounded in nothing more than bare discriminatory dispositions, even if acquired and modifiable. The final component completing the pure triangular setup is the subjects’ coming to associate each other’s responses to O with O in the following way. S1 may be said to associate S2’s reaction to O with O when S1 responds to S2’s O-reaction as S1 responds to O (and vice-versa for S2 associating S1’s O-reactions with O). Davidson’s claim is that this picture, and this picture alone, is capable of providing a conceptual foundation for the objectivity of thought (assuming commitment to the requirements of normativity and reflective awareness mentioned earlier).

Once each subject has associated the other subject’s O-behavior with O, that is, once a subject has come to form *expectations* about O, or about the other subject’s behavior, on the basis of perceiving the other subject’s behavior, or O, a certain *discrepancy* becomes possible. When the other subject’s behavior and the presence of O fail to match, expectations go unfulfilled. And where expectations can be established and go unfulfilled, ‘space is created’ (as Davidson puts it) for the concept of error to develop (see 2001d: 12). Now, whether Davidson is correct that *only* a triangular situation could open this space is a matter that we wish to set aside.⁴ What we want to emphasize here is that, even if it is correct that triangulation is necessary for objective thought, by Davidson’s lights, it is *not* sufficient. As Davidson sees things, triangulation as described so far allows us to see the general structure of situations in which the concepts of error, belief, truth, etc. could come to have application. Earlier we saw that for the concepts actually to apply, the subjects must have reflective grasp of those very concepts. Yet nothing in the intersubjective relations described so far, it seems, supports the attribution of such reflective grasp. From each subject’s point of view, the other subject’s behavior is simply part of the surrounding ‘passing show’ – 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 nearby presence of deer. Nothing so far supports the idea, crucial to objectivity (as Davidson sees it) of the two subjects treating each other *as subjects* who have *takes* on the world, which take can fit or fail to fit with the way things are.⁵

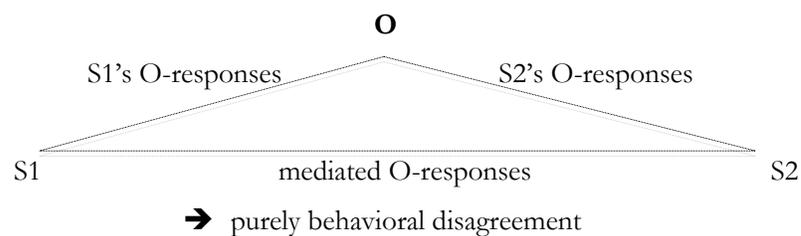


Figure 1 intersubjective object-directed relations in ‘pure’ triangulation

But if triangulation as so far described is insufficient to account for objectivity, one may wonder, as Davidson himself does, what *would* suffice. Davidson’s answer is that nothing short of

⁴ For a critical assessment of this claim, see Pagin (2001) and Gluer (2006); for a defense, see Verheggen (2007).

⁵ See Davidson (2001c: 11-13), (2001a: 121), and See Eilan (2005: 9) for a helpful interpretation of this point.

the presence of linguistic communication between the two subjects in the triangular setup will do.⁶ As Davidson explains:

[U]nless the base line of the triangle...is strengthened to the point where it can implement communication of propositional contents, there is no way the agents can make use of the triangular situation to form judgments about the world. Only when language is in place can creatures appreciate the concept of objective truth... (Davidson (2001a: 131)

As Davidson is aware, to invoke linguistic communication in an account of the objectivity of thought is unhelpful, since linguistic communication is itself what paradigmatically exemplifies those features.⁷ Yet he thinks that any enhancement of the basic triangular situation short of linguistic communication will fail to suffice for thought. His ground for that claim, however, is *not* a dualistic view about the nature of the mental. (Davidson, for example, does not have much doubt as to whether a thinking machine could be constructed.⁸) Rather, his resistance is rooted in his commitment to the irreducibility of intentionality:

The triangular arrangement is a necessary, but not sufficient condition, of thought. What must be added to make the conditions sufficient? If we could answer this question we *would have an analysis of thought*. It is hard to think what would satisfy us which did not amount to *a reduction* of the intentional to the extensional, and this, in my opinion, is not to be expected.” (Davidson (2001d: 13); *emphases added*)

Thus Davidson thinks that any addition to pure triangulation that would carry us closer to genuinely objective thought, short of intersubjective linguistic communication, would commit us, implausibly, to the possibility of a reduction of the intentionality of thought to extensional – i.e., purely causal—relations between thought and its objects.⁹

What is it that language adds so as to make the interrelations between the subjects and the worldly object sufficient for objectivity? When S1 and S2 are *language* speakers, capable of responding to objects with meaningful, true or false utterances, we can straightforwardly find a difference between what is believed and what is the case. For Davidson, meaning is but one node of a(nother) triangle that has beliefs and holdings-true of sentences as its other nodes.¹⁰ If you fix which sentences the subject holds-true and fix a subject’s beliefs, you will have thereby determined the meanings of sentences for that subject; and the same relationship holds for each node with respect to the other two. Intersubjective disagreements can then manifest themselves as differences in the sentences held-true by the two subjects.¹¹ On a given occasion, S1 may produce a sentence (say, “There’s an O nearby”) which S2 presumes S1 to hold-true, and yet which he (S2) takes to be false. Genuine objectivity is straightforwardly provided for via the possibility of each subject recognizing a potential gap between what is held to be true (=believed) and what *is* the case.¹²

⁶ Also see, Davidson (2001a: 105-106; 131), (2001d: 13), (2004: 140-141).

⁷ Davidson (2001d: 13).

⁸ “We are just machines that are complex in ways flies are not, so the problem isn’t one of transcending mere physical devices. I do not doubt that an artificer could, at least in principle, manufacture a thinking machine. The problem, for philosophy anyway, is what to aim for; what would show that the artificer had succeeded? ... I think in this respect, Turing had the right idea, though his test was not conclusive for a variety of reasons.” (Davidson (2004: 136).)

⁹ Though this goes beyond our scope here, the implausibility of such a reduction in Davidson’s mind can no doubt be traced to—perhaps just is—his anomalous monism. See Davidson (2005: 183-220).

¹⁰ See Davidson (2001b: 142-155; 161-166).

¹¹ Note that the attitude of holding a sentence true is publicly observable, according to Davidson, and can be determined independently of knowing a subject’s beliefs and the sentence’s meaning for the subject.

¹² For more on the role language plays, see especially, ‘The Second Person’ (111ff., and 119ff.)

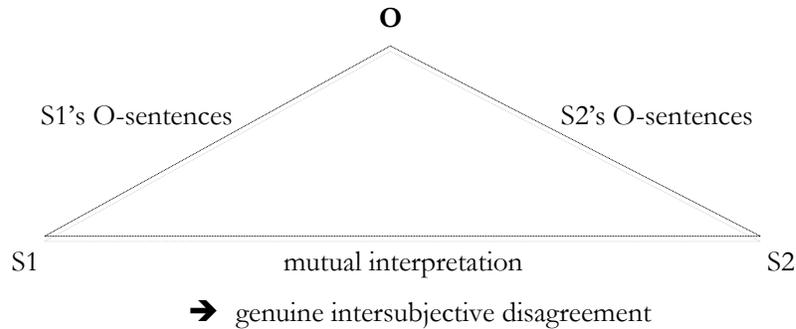


Figure 2 intersubjective object-directed relations in 'reflective' triangulation

2.2 Davidson's Non-Reductive Naturalism and 'Continuity Skepticism'

Davidson's approach to thought as characterized so far is both naturalistic and non-reductive.¹³ It is naturalistic in that it locates the foundations of thought in the natural dispositions of creatures to discriminate and respond to parts of the world, including other subjects' responses to common objects. It is non-reductive in that it insists that the intentional is irreducible to the non-intentional – there can be no specification of conceptually necessary and sufficient conditions of thought in non-intentional terms. As we saw, Davidson thinks that the only way to 'upgrade' the basic, pure triangle from a mere necessary to a sufficient condition is to enhance the connection between subjects so it includes intersubjective linguistic communication. Absent mutual linguistic interpretation, even when (as in the pure scenario described above) one subject reacts to another's reactions to some object, or anticipates the other's reaction upon seeing the object, this can amount to nothing more than mere discriminative behavior, which cannot satisfy the normativity requirement. To suppose otherwise, Davidson thinks, is to commit to the reducibility of rule-following linguistic interactions to other forms of non-linguistic interactions.

In Davidson's hands, the irreducibility claim is transposed into a deep skepticism concerning *not only* the mindedness of non-linguistic creatures *but also* the very possibility of any sort of *continuity* between the minded and the non-minded parts of the world. By insisting that the only way to move significantly beyond the pure triangular scenarios found among non-linguistic animals is to get linguistic communication into the picture, Davidson is clearly giving up on the possibility of an illuminating explanation of how objective thought could emerge. If Davidson is right, there is a deep, unbridgeable divide between the reflective/linguistic and the pure/non-linguistic triangles, which is rooted in a deep, unbridgeable divide between linguistic communication and other forms of interaction between subjects. We can locate in nature creatures with discriminatory responses and we can locate agents with the full package of interdependent thought and language. But we can find nothing in between through which the emergence of objective thought could be understood. Or, putting it in a 'formal' mode (in terms of constraints on our vocabulary and concepts): "We have many vocabularies for describing nature when we regard it as mindless, and we have a mentalistic vocabulary for describing thought and intentional action; what we lack is a way of describing what is in between." (Davidson (2001a: 129)) Indeed, the gap between mental and non-mental vocabularies "is particularly evident when we speak of the 'intentions' and 'desires' of simple animals. We have no better way to explain what they do. It is not that we have a clear idea what sort of language we could use to describe half-formed minds; there may be a very deep conceptual difficulty or impossibility involved" (*ibid.*).

It is important to recognize that this continuity skepticism represents a more radical position than the view that, as a conceptual matter, animals do not have *our* kind of mind, since they lack propositionally contentful states that are caught up in sufficiently intricate inferential networks and

¹³ The themes of naturalism and non-reductionism in Davidson's understanding of triangulation are explored in Sinclair (2002) and (2005) and Ramberg (2001).

properly governed by norms of semantic correctness. It is one thing to maintain that non-linguistic animals are incapable of reflective intersubjectivity, and that (therefore) their interactions cannot support genuine objectivity. It is quite another to maintain that there is no philosophically intelligible, significant middle-ground between merely responsive-discriminatory behavior and fully conceptualized thought and speech, and thus between pure and reflective intersubjectivity. We may suppose (with Davidson) that no sense can be made of languageless animals having any propositional attitudes. Still, it may be possible to identify specific forms of non-linguistic behavior that are legitimate natural precursors of the sorts of behavior that (on Davidson's view) do implicate objective thought. By 'legitimate natural precursors' we here mean behavioral interactions that:

- a. can be found in the natural world,
- b. are described both by commonsense and by our best theories using familiar, intentional vocabulary,
- c. go beyond the merely discriminative behaviors of pure triangulation
- d. do not require us to presuppose the presence of propositional thought or language, and
- e. are genuinely intersubjective,¹⁴
- f. support (or implicate) *proto-objectivity*

Intersubjective interactions that have these characteristics will be richer than those found in pure triangulation, on the one hand, but will not yet amount to the linguistic interactions found in reflective triangulation, on the other hand. If such a middle-ground can be found, then even if no extant animal interactions (already) exhibit the sort of intersubjectivity Davidson takes to be essential for objective thought, Davidson's continuity skepticism can still be undermined.

What we'll be calling below *intermediate triangulation* is designed to fit this bill. As a preemptive measure, we want to acknowledge that a committed continuity skeptic *could* insist that the interactions to be described in our intermediate triangulation only merit purely behavioristic, non-intentional characterizations, just like its pure predecessor.¹⁵ The obvious response to this, we think, will be to point out that *the same is true of reflective triangulation*. There is nothing to prevent a committed skeptic from redescribing intersubjective *linguistic* interactions in terms that leave it open whether the subjects involved are really minded, or really *treat* each other as minded subjects. Simply to invoke the possibility of redescription is to land in yet another kind of skepticism (a version of other minds skepticism) which is *also* more radical than continuity skepticism. (It would require not only denying that the 'light' of mindedness 'gradually dawns over the whole' – to borrow Wittgenstein's famous dictum – but also accepting that the lights are out everywhere, so to speak.)¹⁶ Insisting that the animal case is entirely different from the linguistic case would either be question-begging, or would require a separate, substantial defense.

¹⁴ 'Genuine intersubjectivity', as we'll see below, has to do with the way subjects treat *each other*. While it's true that *we* sometimes talk about mechanical devices using intentional vocabulary, we're not similarly tempted to think of the 'behavior' of mechanical devices as betraying their *treating each other* as subjects with a 'take' on the world.

¹⁵ Davidson sometimes suggests that there is merely a veil of ignorance preventing us from explaining the behavior of non-linguistic creatures in non-intentional vocabulary, implying that the full story does not require anything more: "it is only necessary to reflect that someone might easily have no better or alternative way of explaining the movements of a heat-seeking missile than to suppose the missile wanted to destroy an airplane and believed it could by moving in the way it was observed to move." (2001a, 102).

¹⁶ Other minds skepticism would, in any event, seem anathema to Davidsonian philosophy of mind, with its rejection of Cartesianism and his externalism. These themes are especially evident in a number of essays under the headings of 'subjective' and 'intersubjective' in Davidson (2001a). See also Ramberg (2001) for an interpretation of Davidson as anti-skeptical regarding the external world and other minds.

3. Expressive Behavior

We concede that genuine, object-directed intersubjectivity of the sort envisaged in Davidson's triangles is essential for objective thought and linguistic communication. We also agree that pure triangulation fails to put animals on their way to full-blown objective thought. But we believe that certain *expressive behaviors* that we readily attribute to many non-human animals exhibit crucial features that Davidson claims to be absent from triangulation in its pure state – features that are relevant to the emergence of objective thought. Expressive behavior, we will suggest, can provide a linking bridge between merely passively discriminative animal responses apt only for avoiding extinction in an uncooperative world, on the one hand, and the reflective interactions among human agents that are subject to rational norms of correctness, on the other hand. But before explaining the relevance of expressive behavior to Davidsonian objectivity, we examine briefly the commonsense understanding of the notion of expression and expressive behavior.¹⁷

3.1 Expressive Behavior: 'Showing vs. Telling'

The class of behaviors we ordinarily describe as 'expressive' spans a wide range. Though there may be no sharp lines to be drawn, at one end of the spectrum, we have so-called *natural expressions* (e.g., yelps, growls, grimaces, gasps, frowns & smiles), where both the behavior and its connection to the expressed states are supposed to be inculcated by nature. There are also mimicked or acquired facial expressions or gestures that become 'second nature' (e.g., shrugging, tutting, but also a 'shake' paw in dogs). Then we have *conventional nonverbal expressions* (e.g., tipping one's hat, sticking out one's tongue). Still in the conventional realm, we have *expressive verbal utterances* such as "Ouch!", "Damn it!", "Sorry!" and so on. We also find in the verbal domain sincere utterances of e.g. "There's a crow on the telephone pole" expressing the speaker's present belief, or "Let it rain" expressing the speaker's wish for rain. Finally, at the extreme end of the conventional side of the spectrum, we have *speech acts*, such as assertion, or promising, which are often claimed to have the expression of certain mental states as part of their felicity conditions. In all these cases, *what* is said to be expressed (the 'relata' of the relevant expression relation) are *states of minds*. Intuitively speaking, the expression relation concerned here – what we may call mental-state expression, or *m-expression*, for short – is different from what Sellars (1969) refers to as 'expression in the semantic sense' (*s-expression*, for short).¹⁸ S-expression is a *semantic*, representational relation between linguistic strings or other representations and what they stand for (e.g., between the word 'liberty', as well as its translations, and the concept liberty, or a tokening – verbal or mental – of 'It's raining' and the proposition that it's raining at time *t* near the speaker). By contrast, m-expression is a *psychological* relation. In the realm of m-expression, we speak both of bits of behavior as expressing the states of mind that caused them (e.g., your trembling voice expressing – 'betraying' as we might put it – nervousness), and of *agents* expressing their states of mind through intentional acts (e.g., a child expressing her joy at seeing you by giving you a hug, or your saying "It's so great to see you").

A given state of mind can be expressed in any number of ways. On various occasions, upon being presented with a new fluffy teddy bear, little Jenny's face may light up; or she may let out an excited gasp, reaching for the toy; or she may emit a distinctive sound ("Oh!"), or call out: "Teddy!" as she reaches for the toy; she may exclaim: "I want Teddy!" perhaps with no reaching. Jenny's facial expression and her sigh may be purely 'natural expressions' of her desire for Teddy; her reaching and subsequent utterances are things she voluntarily or perhaps intentionally *does* as she m-expresses her

¹⁷ Our discussion below draws on Bar-On (2004), especially Ch.s VII and VIII, and on Green (2007). Bar-On and Green (forthcoming), and (in progress), suggest that expressive behavior could figure in a *natural reconstruction* of the emergence of linguistic communication, where a 'natural reconstruction' aims to show how each stage in a continuum develops from an earlier one in some intelligible way, given what we know about the natural abilities and history of the relevant creatures.

¹⁸ Bar-On (2004, *passim*) makes use of Sellars' *three-fold* distinction distinguishes the semantic from the causal and the action senses. For present purposes, the distinction between m- and s- expression will suffice.

desire. On the other hand, Jenny's utterances include English sentences, which s-express propositions or concepts. What renders all these instances of *expressive* behavior, it seems, has to do with similarities among the *performances* or acts (whether voluntary or not). These similarities obtain despite significant differences that can be discerned among the different expressive *vehicles* used (or the various 'products' of the acts).¹⁹ One can m-express joy at seeing a friend through a beaming facial expression or a spontaneous hug (neither of which stands in a semantic representational relation to the joy), or by uttering a sentence such as "It's so great to see you!" (which s-expresses the proposition that it's great to see the expresser's addressee).²⁰ Similar expressive performances, different vehicles of expression.

Since our aim is to identify a middle-ground between non-linguistic and linguistic behavior, we have a special interest in a specific sub-category of expressive behaviors, namely *natural expressions*. Paradigm cases of natural expressions – yelps, growls, yawns, grimaces, teeth-barrings, tail-wagging, and so on – are often assumed by philosophers to be simply a subset of natural signs (such as clouds, deer tracks, tree trunk rings). They are often lumped together with physiological symptoms, such as red spots on the skin, sneezes, or galvanic skin response, and portrayed as simply *reliable indicators* of the internal states that regularly cause them.²¹ But a purely causal construal would fail to capture our ordinary notion of a natural expression. That notion seems designed to capture a different range of behaviors than the notion of indicative or symptomatic behavior.

Following Hauser (1996: 9), we may distinguish natural *signs* from *cues* and *signals*. A natural sign is a symptom, a behavioral manifestation or a trace that provides information. A cue is a natural sign that has been biologically selected for its capacity to convey information (e.g., bright coloration in frogs, designed to warn away potential predators). And a signal is a cue that can be produced in response to changes in the environment (e.g., sexual swellings).²² In addition, there may be good reasons to separate off a sub-class of signals: *communicative signals*. These have the natural purpose of conveying information to (or producing certain reactions in) some *designated audience* (which is *not* to say that they are intentionally produced with that purpose by each expresser). A reasonable hypothesis concerning natural expressions is that they belong in the sub-category of communicative signals. If so, then this would already support the intuition that the notion of a natural expression has a much narrower application than that of a natural behavioral symptom or indicator.²³

But natural expressions don't just serve to communicate information or provide evidence about an individual's states of mind; they also exhibit or display them. Correlatively, suitably attuned witnesses to expressive behavior don't just infer or learn *that* the expresser is in the expressed state; they directly recognize it.²⁴ So another attractive suggestion is that natural expressions are communicative signals that *show* the expressed states; they don't just *tell* of them.²⁵ Winces, growls, cowering

¹⁹ Bar-On (2004) distinguishes between an *act* of expressing and its *product*, on the one hand, and between the *process* and *vehicle* of expressing.

²⁰ For a defense of a 'neo-expressivist' construal, according to which the avowal: "I'm so glad to see you!" m-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 Bar-On (2004), especially Ch.s VI-VIII.

²¹ See, for example, Grice (1957), Alston (1965), Bennett (1976).

²² For an alternative delineation of the relevant notions, offered by evolutionary game theory, see Maynard Smith (2003).

²³ Relevantly, while Davidson denies that non-linguistic creatures can genuinely communicate, he does allow for signaling among such creatures. See Davidson (2005: 294) and (2001c: 12).

²⁴ So-called natural expressions also contrast with bee dances, which, unlike deer tracks and wounds, are presumably designed to convey information to designated consumers.

²⁵ For the claim that natural expressions show or display expressed states, see, e.g. Ayer (1936) and Alston (1965). Bar-On (2004, esp. Ch.s VII, VIII and X) and Green (2007, esp. Ch.s 3-5) discuss the

demeanors, squeals of delight, gasps of fear, and so on, directly reveal the expressed state of mind. We often speak of *seeing* someone's anger, *hearing* the nervousness in someone's uneven voice and *feeling* the tension in someone's body, and so on. Now one may hesitate to accept that naturally expressive behavior shows an individual's state by literally *making it perceptible*. Still, it seems reasonable to suggest that expressive behavior enables observers who are suitably attuned (by nature, habituation, or experience) *directly to recognize through* the behavior – as opposed to just inferring from it – the expressed state of mind.²⁶ Naturally expressive behavior has a specific, social role to play in the lives of creatures capable of it. Arguably, such behavior is effective when it meets immediate and appropriate reactions on the part of the designated audience, often toward the expresser or the environment; and these are likelier to ensue if the behavior enables direct recognition, as opposed to merely providing evidence about its hidden causes.²⁷

3.2 The Complexity and Intentionality of Expressive Behavior

The expressive performances of nonhuman animals do not employ expressive vehicles that have articulate semantic (or syntactic) structure; to use earlier terminology, they do not have powers of s-expression. Still, it seems that the capacity of nonhuman animals to engage in expressive behavior is a key factor behind the barely resistible practice we have of applying our mentalistic vocabulary to them (as well as to prelinguistic children). We think that this has to do with the fact that naturally expressive behavior possesses structure and character that go well beyond those of mere natural signs or symptoms. It also has to do with the fact that creatures capable of such behavior exhibit more than complex discriminative responses to their environment (including other creaturely bits of it). An expressive creature is one capable of engaging in certain reciprocal intersubjective interactions. Its behavior can display severe pain and its location, a moderate as opposed to intense agitation, rage as opposed to panic, great excitement as opposed to mild curiosity, and so on. In addition, many naturally expressive acts reveal the state's *object*: we recognize an infant's excitement at the sight of *something in particular*, or a pet's fear of *some specific threat*, and so on; and they are designed to enjoin suitably endowed observers to act in certain ways (toward the expresser or the object of her expressed state).

Consider, for example, human facial expressions such as those associated with anger, fear and sadness. These typically show to observers not only the presence of the relevant affective state, but also the object of that state—its source or target (perhaps through an accompanying overt gaze direction; see Eilan, *et al*, 2005). This is supported by ethological studies of nonhuman animal expressive communication (Miklósi, *et al*, 1998). A vervet monkey's alarm call shows to other monkeys the *caller's* fear of, say an aerial predator, thereby enjoining other vervet monkeys to hide from the danger (Cheney and Seyfarth (2007: Ch. 10)). Even a dog's cowering demeanor upon encountering another dog will show to a suitably endowed recipient not only the dog's fear (kind of state), *how* afraid he is (quality/degree of state), but also *of* whom he's afraid (the state's intentional object), and how he is prepared to act – slink away from the threat, or hide from it behind his owner's leg (the state's dispositional 'profile'). Expressive performances thus have a janus-faced character, pointing inwards and outward at the same time. In contrast with automatic physiological

connection between expression and showing. Green (2007, Ch. 3) includes *showing-that* (i.e., establishing the proposition *that* such & such) under expression. In (forthcoming), Bar-On argues that Green's 'epistemic' understanding of expressing-as-showing threatens to blur the desired line between showing and telling.

²⁶ A theory of expressive behavior will need to spell out what direct recognition amounts to (if it isn't perception), so as to support the contrast between showing and telling. For relevant discussion, see Bar-On (2004) and (forthcoming), Green (2010) and Martin (2010).

²⁷ The need for a construal of intersubjective interactions, not only among animals and prelinguistic children but also among adult human beings, in perception-like terms (as opposed to the terms of so-called 'theory of mind') is increasingly acknowledged by psychologists. See, e.g. Bermudez (2005), Gomez (2005), Hobson (2005).

reactions, or symptoms, they can exhibit *aboutness*. However, in contrast with purely perceptual representational states, expressive behavior also embodies *action* by showing what the animal is *disposed to do*, thereby enjoining appropriate responses on the part of the ‘consumers’ of the behavior.

How should the aboutness of expressive behavior be understood? Discussing alarm calls produced by certain birds under the rubric of ‘emotional displays’, the ethologist Peter Marler remarks:

With careful study, we find that communication by emotional displays can be very complex, especially when prevarication is involved. . . . Furthermore, if a bird couples a call with some kind of indexing behavior, such as head-pointing or gaze direction, a certain object or point in space or particular group member can be precisely specified: the combination adds significantly to the communicative potential of emotion-based signals. (2004: 176)

The suggestion is that a bird’s alarm is not to be simply understood as an instinctive or reflexive bit of behavior – a mere behavioral signal transmitting information about the presence of a predator. Rather, when producing an alarm call a bird m-expresses – *and its intended audience can recognize* – a complex state of mind: an affective state of a certain degree and quality (mild/extreme agitation, distress, or fear) directed at a predator of a particular type. But the state’s complexity need not be construed along the lines of the complexity of propositional attitudes (*viz.*, having a particular psychological attitude – e.g. being afraid – toward a propositional representation of a worldly state of affairs, e.g. *that a bird from above is about to attack*). Instead it could be understood as a *non-propositional, yet still intentional* affective state.²⁸ Just as we recognize some psychological states – fatigue, hunger, thirst, general malaise – that have no intentional objects, so we may sensibly recognize that there are more purely affective states that do not have propositions as their intentional objects. Such states may, of course, have propositional analogues/relatives. One may be afraid that x is about to pounce, angry that y is coming too close, excited by the fact that z is about to give one a treat. But it doesn’t seem plausible to suppose that all affective states (even in creatures like us, who *are* capable of entertaining propositions) must *au fond* be propositional attitudes.²⁹ (In some places Davidson suggests that having *any* intentional state requires conceptualization: to be afraid *of the cat*, for example, requires the creature harboring the fear to have the concept of a cat, which, in turn, presupposes having lots of beliefs about cats.³⁰ This argument belongs with the arguments designed directly to discredit the idea that non-linguistic animals can have thought, which we mentioned earlier and proposed to set aside, as they do not bear directly on continuity skepticism. Suffice it to say, however, that the argument from conceptualization rests on a rather specific view of concepts (*viz.*, as devices of *classification* that must be backed up by general beliefs), which is not without more plausible alternatives, even in the case of linguistic beings.³¹)

²⁸ To say that a state is complex is *not* to say that it has *parts* or components that correspond to the dimensions or aspects of complexity. Similarly, a bit of behavior – e.g., an alarm call – that expresses a complex affective state may also lack composite structure. For some discussion which draws on useful distinctions by Sellars, see Bar-On and Green (forthcoming). And see fn 31 below.

²⁹ The contrary supposition (apparently endorsed by Davidson) hardly seems sustainable. Even in the case of linguistic creatures, can we accept that, e.g., John’s *fear of spiders* must be understood in terms of John’s fear *that ...* ? The supposition also goes against recent findings in emotion research. See, e.g., Griffiths (1998).

³⁰ Davidson says: “To have the concept of a cat, you must have the concept of an animal, or at least of a continuing physical object, the concept of an object that moves in certain ways, something that can move freely in its environment, something that has sensations. There is no fixed list of things you have to know about, or associate with, felinity; but unless you have a lot of beliefs about what a cat is, you don’t have the concept of a cat” (2001: 124) And compare Brandom (2000) *passim*.

³¹ For a sample of alternative views of concepts, see Margolis and Laurence (eds.) (1999). Millikan (2000) offers a critique of the ‘concepts-as-classifiers’ view. Due to limitations of space, we have had to gloss over a number of important issues concerning the content of non-propositional states/attitudes, such as the

An alarm call, we've said, can be seen as an act that m-expresses an animal's affective state, using a vehicle that does *not* s-express an articulate proposition (such as "There's a hawk above"). But alarm calls (and other vocalizations) can be dissociated from the affective states that are m-expressed in acts of producing the calls,³² as well as from the presence of the intentional object they are designed to point to. And this, as we'll see in the next section, may open up space for a variety of mismatches between expectations and action that seem to prefigure objectivity as Davidson conceives of it. At the same time, however, it is notable that the production and uptake of expressive behavior place much weaker demands on the cognitive capacities of both producers and consumers than does linguistic communication. On the expresser's side there's no need for the sort of sophisticated communicative intentions required even for (what Grice has called) speaker meaning. So less demand is put on the communicative capacities of the expresser. And on the observer's side there's no need for complicated 'theory of mind', or metarepresentational inferences. So less demand is put on the interpretive 'mindreading' capacities of the observer.³³

4. From Expressive Behavior to Linguistic Communication?

In the previous section, we situated expressive behavior between the mere signaling behaviors of the animals that figure in Davidson's *pure*, nonreflective triangulation, on the one hand, and the full-on linguistic communication that he takes to be required for interpretive, or fully *reflective*, triangulation, on the other hand. In this final section, we'd like to explain how expressive behavior can figure in intermediate – or '*affective*' – triangulation.

Among the expressive behaviors mentioned so far, many are *egocentric*: they show an animal's affective state that lacks a sharable cause, target, or object, or else they show it without pointing to a worldly object, event, or state of affairs that can provide a common focus for the expresser and his audience. By contrast, '*world-centric*' expressive behaviors *do* show the expressed state's object, target, or source, as well as foreshadowing the expresser's impending behavior. Thus, whereas a distress call may not reveal the source of the distress, an alarm call may show both the caller's fear or agitation and what type of threat it's afraid of. A dog's playbow may only show to fellow dogs its desire or readiness to play, whereas a growl accompanied by a tilt of the head may reveal both the growler's angry state of mind and *at* whom the anger is directed. And whereas a chick's hunger peep only draws attention to the chick and its state, a hen's food call draws attention to food that's around.

Now, we have accepted (at least for present purposes) Davidson's claim that world-directed intersubjectivity is required for objectivity. What we wish to reject is the idea that there are no legitimate natural precursors of objective thought – no 'proto-objectivity' prior to *linguistic* communication. What we oppose is the idea that the subjects occupying the base nodes in the triangles must already interact linguistically, before they could even be on their path to objective thought. For it is *this* idea that fuels Davidson's continuity skepticism as we've articulated it. Using the above distinction, our anti-skeptical proposal is that *world-centric m-expressive behavior* can put creatures on the way to objective thought, *even before* they possess s-expressive vehicles.

It's important to emphasize the modesty of the claim we want to defend by appeal to (world-centric) expressive behavior, and distinguish it from several more ambitious anti-Davidsonian

possibility that affective states only possess 'nonconceptual content' (see Gunther, ed. (2003)) and the question whether they obey the Generality Constraint (see Carruthers, Camp, and McAninch *et. al.* in Lurz (2009)). For a very congenial 'intermediate' view of animal *intentional action*, see Hurley (2003). Furthermore, note that the problem according to Davidson is not one of specifying an object, but rather one of the creature's response to the object being a thinking, classificatory response. Even pure triangulation can specify an object. See especially Davidson (2001d12-13).

³² Indeed, the vocal patterns can be reproduced in the absence of the original expresser. Relevant here is Cheney and Seyfarth discussion in (2007) of playback experiments with Vervet monkeys.

³³ See fn. 27 above for some references.

claims defended in recent literature. For example, we are not committed to the claim (defended by e.g. Carruthers (2004), (2009)) that non-human animals (including insects!) have propositional thought and a range of other propositional attitudes. We are also not committed to the claim that non-human animals *already* possess the central abilities underlying language and linguistic communication (which is sometimes defended by appeal to experiments designed to teach language to animals). More relevantly, we do not wish to claim that animal non-linguistic communication *already* shares key essential features of linguistic communication. In particular, we are not claiming (as do McAninch *et. al.* (2009)) that, e.g., episodes of animal alarm calls not only m-express the caller's affective state, but also have products (or use vehicles) that *already* s-express propositions. Instead, we want to sketch an intermediate triangular scenario that exploits distinctive characteristics of the world-centric expressive behavior found among non-linguistic animals, with the aim of making sense of a legitimate natural precursor of objectivity as Davidson understands it.

4.1 Expressive Behavior and Intermediate Triangulation

For Davidson, the coordinated movements exhibited by schools of fish, the information transmission achieved by bee-dances, and the communication effected through the food calls of hens and the alarm calls of vervet monkeys, etc., all belong to a single, undifferentiated type of behavior when it comes to triangulation and objectivity.³⁴ However, expressive behavior as we have portrayed it forms a significant sub-category within the sorts of behavior that Davidson lumps together under the umbrella of pure triangulation. The intermediate triangulation we describe below takes advantage of the special 'affective intersubjectivity' characteristic of creatures engaged in the production and uptake of expressive behavior. And this may allow us to break through the barrier put up by Davidson's continuity skepticism.

Pure triangulation scenarios are marked by the fact that they involve interactions between two (or more) subjects and an object, such that each subject reacts to the object *by way* of reacting to the other subject. Intermediate triangulation scenarios, we think, are richer in a specific, objectivity-relevant way. As noted earlier, world-centric expressive behavior is Janus-faced: it show the expresser's state of mind to a suitably endowed audience, foreshadowing the expresser's impending behavior; it also directs attention towards the object/state of affairs to which the expressive behavior is responsive or at which it is directed, and enjoins appropriate behavior on the observer's part. Thus, suppose that S1 engages in expressive behavior E. In so doing, S1 is showing to S2 (a suitably endowed audience) how he, S1, is about to behave – that is, do something A (pounce, slink away, hide) that is appropriate to the presence of O. Having observed E, S2 is in a position to respond to E in some way B that is not merely responsive to the presence of O (as indicated by E) but is also anticipatory of S1 doing A. Now we can consider whether S2's doing B is itself appropriate to the presence of O. Suppose it is not. Suppose, for example, that E is an alarm call, that A is fleeing, and that O is a predator.³⁵ 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 her impending flight, the possibility opens for S2's response to the behavior to agree or disagree with it, depending on whether or not S2's response is *itself* a bit of behavior appropriate to the presence of O. But in a case (as just described) where S2's behavior (B) departs *both* from S1's (anticipated) behavior (A) and from the behavior enjoined by E, S2's behavior 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 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 recognizing S1 as having

³⁴ Davidson (2001a: 129).

³⁵ In saying "O is a predator" we're not implying that either S1 or S2 themselves have the *concept* of a predator. All we're assuming is that they have whatever discriminatory dispositions vis-à-vis O that Davidson allows subjects to have in pure triangulation. See again, e.g., Davidson (2001c: 12-13), (2001a: 117ff.).

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).

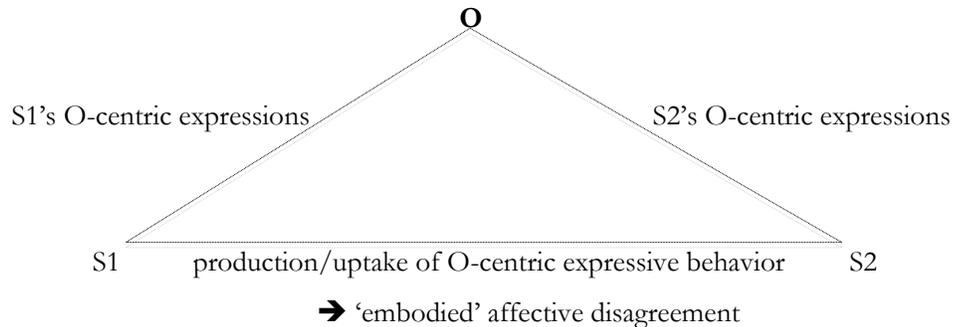


Figure 3 intersubjective object-directed relations in 'intermediate' triangulation

This sort of 'affective interlocking' is poised between the 'thin' case, in which S2 simply fails to respond to S1's O-behavior with her own O-behavior, on the one hand, and the 'thick' 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. The thin case is certainly possible within Davidson's pre-linguistic triangulation. It is possible, for example, that, despite the associative connection set up between S1 and S2, such that each responds to the other's O-behavior with their own O-behavior, and despite perceiving S1's O-behavior, S2 fails on some particular occasion to respond to S1's O-behavior as if to O. Indeed, either subject may on any particular occasion fail to respond to O with their own O-behavior. As Davidson emphasizes, however, the possibility of such failures in regularities does not support any objectivity (even if such regularities do provide a necessary condition for objectivity by providing a background against which the grasp of the concept could develop).³⁶ What is missing is something that carries us beyond purely behavioral discord to genuine intersubjective disagreement. As explained earlier, once language is on the scene, such genuine disagreement becomes straightforwardly possible. But, of course, that takes us all the way to the thick, reflective case.

What we're calling 'intermediate triangulation', with its affective interactions, allows for a kind of intersubjective disagreement that does not presuppose the reflective grasp of objectivity or intentional concepts that require language (on Davidson's view, at least). So it's clearly different from the thick, reflective case. But it's also different from the thin, or pure case. To see the crucial difference, recall that, on the expresser's side, expressive behavior shows the affective state the expresser is in by revealing how he, S1, is prepared to react in light of O's presence. 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 is foreshadowed by that performance. Moreover, since expressive behavior also has the function of enjoining appropriate behavior on the part of suitably attuned observers, proper uptake of S1's expressive behavior requires a certain O-related reaction on S2's part. By foreshadowing impending O-related behavior on S1's part, and enjoining appropriate O-related behavior on S2's part, the O-directed affective interactions in which the expresser and her audience are interlocked make room for a broader set of intersubjective mismatches/disagreement than Davidson allows in the pure case. Having been enjoined to some behavior, S2's responses to S1 are no longer limited to her own O-related responses (appropriate or not). S2's responses can differ not only from S1's own O-behavior, but also from the behavior enjoined by S1's expressive behavior. Moreover, faced with S1's O-centric expressive behavior, S2 may anticipate not only O's presence (treating S1's

³⁶ Davidson (2004: 141-143), (2001c: 5-7).

behavior simply as a natural indicator of O), but also S1's impending (O-related) behavior, which may or may not match her own. S2's responsive behavior can thus be said to be addressed to S1's O-centric expressive behavior itself (say, the alarm call), as separable from the presence of O (say, the threat); it embodies disagreement with it. In this relatively noncommittal sense, S2 can be seen as treating S1 as an entity with a subjective take on the world, rather than merely as a bit of the world that simply naturally indicates the presence of another bit (that is, something whose behavior is a natural sign of O's presence).

4.2 Some Concluding Remarks

In "What Thought Requires", Davidson says: "Triangulation also creates the space needed for error, not by deciding what is true in any particular case, but by making objectivity dependent on intersubjectivity." (Davidson (2004: 144)). And in "The Emergence of Thought", he says "Where do we get the idea that we may be mistaken, that things may not be as we think they are? Wittgenstein has suggested, or at least I take him to have suggested, that we would not have the concept of getting things wrong or right if it were not for our interactions with other people." (Davidson (2001a: 130)). It is clear that, for Davidson, genuine objectivity is founded on (the right sort of world-directed) intersubjectivity. We think that intermediate triangulation with its world-centric affective intersubjectivity opens up space for (at least) *proto-objectivity*. Though we do not yet have truth/falsity in the picture, since there are no vehicles that s-express truth-evaluable propositions, we *do* have a set of interlocking appropriate reactions and actions on the part of the two subjects at the base of our intermediate triangle. And, although we may accept that the subjects in intermediate triangulation lack the full reflective awareness that's involved in applying the *concept* of error, we have the right set up for the idea of a distance between a 'subjective take' and the way things are to emerge.

Adding expressive behavior to the pure triangular scenario does not threaten to *reduce* intentionality to mere causal relations between subjects and objects. Even if expressive behavior, like everything else in the universe, can be 'described in the physical vocabulary',³⁷ we have rejected the idea that it can be fully understood in terms of purely causal regularities. Moreover, we have deliberately left it open that the O-behavior of each subject as well as O itself are inter-defined. Thus, S1's O-behavior may be, in part, defined in terms of its impact on S2 (i.e., enjoining O-appropriate behavior on S2's part). *Qua* communicative signal, then, expressive behavior may well be the behavior that it is partly by virtue of its (naturally intended) effect on its (naturally designated) audience. Proto-objectivity is thus not bought at the price of reducibility. At the same time, the intermediate triangulation we have described is significantly richer than Davidson's pure triangulation. As we saw, Davidson holds that the concept of error is required (and sufficient) for objectivity but that pure triangulation merely provides a situation in which the concept of error could *come* to – but *does not* yet – have application, since it does not make room for intersubjective agreement or disagreement. However, we have tried to show that interactions involving expressive behavior do. Even though the expressers and their audience do not (by hypothesis) possess the *concept* of error, and have no reflective *awareness* of objectivity, their interlocking world-directed acts and responses *embody* a contrast between subjective and objective, which seems to prefigure objectivity as Davidson conceives of it. Thus, we think that, by assimilating animals' expressive behaviors to other sorts of non-linguistic merely discriminatory behaviors, Davidson misses the significance of expressive behavior for establishing continuity between the non-linguistic and the linguistic.

The expressive behavior scenario we have envisaged is clearly at some distance from ones involving linguistic subjects. But a Davidsonian opponent might reject the triangular scenario we offered on the grounds that it is still in some indirect way 'linguistically-infected'.³⁸ The opponent

³⁷ See (Davidson (2001a: 128)).

³⁸ This is a charge that can be legitimately raised, we think, against the pre-reflective triangulation envisaged by Eilan (in Eilan *et. al.* (2005)), which is inspired by the phenomenon of joint attention between prelinguistic infants and caregivers.

may again call on Davidson's claim that intentional states of mind of the sort we have supposed to be m-expressible by animals in our intermediate triangulation would require powers of conceptualization and propositional thought of a sort that only language users can be credited with. Our discussion of the intentionality of expressive behavior (see 3.3 above) has gone some way toward addressing this objection. Moreover, as explained at the outset, our aim has not been to rebut those arguments of Davidson's that try to establish directly the dependence of all thought and conceptualization on language, or to support skepticism about animal mentality. Nor, as suggested earlier, do we take ourselves to have rebutted a skeptic who insisted that the affective interactions we describe *could* be redescribed in non-intentional terms. For that, we take it, is true of the linguistic interactions that feature in Davidson's reflective triangulation. Rather, our goal has been to break through the specific barrier put up by Davidson's *continuity* skepticism, by showing that we *can* make sense of an intermediate case of triangulation in nature that can carry non-linguistic creatures beyond the merely passive, bare discriminatory behavior of pure triangulation, and bring them closer to reflective triangulation.

We've accepted Davidson's anti-reductionist naturalist view of intentionality, as well as the significance of triangulation for our understanding of it. But we have rejected Davidson's continuity skepticism, with its attendant claim that there is an unbridgeable chasm between linguistic humans and nonlinguistic beasts. We appealed to a commonsense understanding of expressive behavior, as a type of behavior we share with non-linguistic animals, as well as prelinguistic children. Commonsense descriptions of expressive behaviors (and the theoretical descriptions inspired by them) are well suited to characterizing 'what is in between' descriptions of 'nature when we regard it as mindless' and full-blown mentalistic descriptions of propositional thought and intentional action. And the category of expressive behavior may well form a significant 'joint' at which to carve a natural world that contains both us and the beasts. At the very least, we hope to have shown that expressive behavior should command the attention of anyone interested in a 'triangulation-friendly' yet non-skeptical answer to the question: What, other than language itself, could put non-linguistic creatures on their way to objective thought?³⁹

³⁹ For comments on an earlier draft of this paper, we'd like to thank Mitchell Green, Alan Nelson, Dean Pettit, and Keith Simmons.

Works Cited

- Alston, W. (1965) 'Expressing', in Max Black (ed.), *Philosophy in America* (Ithaca, NY: Cornell University Press), 15-34
- Ayer, A. J. (1936/1946) *Language, Truth and Logic*, London: V. Gollancz ltd.
- Bar-On, D. (2004) *Speaking My Mind: Expression and Self-Knowledge* (Oxford: Clarendon Press).
- Bar-On, D. (2010) 'Avowals: Expression, Security, and Knowledge: Reply to Matthew Boyle, David Rosenthal, and Maura Tumulty', *Acta Analytica*, vo. 25 no.1, 47-63.
- Bar-On D., and M. Green. (forthcoming) "Lionspeak: Communication, Expression, and Meaning", in J. O'Seah and E. Rubenstein, (eds.), *Self, Language, and World: Problems from Kant, Sellars, and Rosenberg: in Memory of Jay F. Rosenberg* (Atascadero, CA: Ridgeview Publishing Company)
- Bennett, J. (1976) *Linguistic Behavior* (Cambridge: Cambridge University Press)
- Bermudez, J. L. (2009) 'Mindreading in the animal kingdom', in R. Lurz (ed), *The Philosophy of Animal Minds* (Cambridge: Cambridge University Press), 145-164.,
- Brandom, R. (2000) *Articulating Reasons: An Introduction to Inferentialism*, (Harvard)
- Bruner, J. (1977) 'Early social interaction and language acquisition', in H.R. Schaffer (ed.), *Studies in Mother-Infant Interaction* (New York: Academic Press)
- Buchen, L. (2009) 'Culture May Be Encoded in DNA', *Wired Science*, (available at <http://www.wired.com/wiredscience/2009/05/songbirdculture/>)
- Camp, E. (2009) 'A language of baboon thought', in R. Lurz (ed.), *The Philosophy of Animal Minds* (Cambridge: Cambridge University Press), 108-127.
- Carruthers, P. (2009) 'Invertebrate concepts confront the generality constraint (and win)', in R. Lurz (ed.), *The Philosophy of Animal Minds* (Cambridge: Cambridge University Press), 89-107.
- (2004) 'On Being Simple Minded', *American Philosophical Quarterly*, Vol. 41, No. 3 (July), pp. 205-220.
- Cheney, D. and R. Seyfarth. (2007) *Baboon Metaphysics* (Chicago)
- Davidson, D. (1999) 'Reply to Evnine', in L. Hahn (ed.), *The Philosophy of Donald Davidson* (Chicago and La Salle, Ill: Open Court), 305-310.
- (2001a) *Subjective, Intersubjective, Objective 2nd Edition* (Oxford: Clarendon Press)
- (2001b) *Inquiries Into Truth and Interpretation 2nd Edition* (Oxford: Clarendon Press)
- (2001c) 'Externalisms', in P. Kotatko *et al* (eds.), *Interpreting Davidson: Selected papers from the 1996 Karlovy Vary symposium on analytic philosophy* (Palo Alto: CSLI Press), 1-16.
- (2001d) 'Comments on Karlovy Vary papers' in P. Kotatko *et al* (eds.), *Interpreting Davidson: Selected papers from the 1996 Karlovy Vary symposium on analytic philosophy* (Palo Alto: CSLI Press), 285-308.
- (2004) *Problems of Rationality* (Oxford: Clarendon Press)
- (2005) *Truth, Language and History*, (Oxford: Clarendon Press)
- Eilan, N., C. Hoerl, T. McCormack, and J. Roessler (eds). (2005) *Joint attention: communication and other minds* (Oxford: Clarendon Press)
- Eilan, N. (2005) 'Joint attention, communication and mind', in Eilan *et al* (eds.), *Joint attention: communication and other minds* (Oxford: Clarendon Press), 1-33.

- Gluer, K. (2006) 'Triangulation', in E. LePore and B. Smith (eds.), *Oxford Handbook of the Philosophy of Language* (Oxford: Oxford University Press), 1006-1019.
- Green, M. (2007) *Self-Expression* (Oxford: Clarendon Press).
- Green M. (2010) 'Replies to Eriksson, Martin, and Moore' *Acta Analytica*, vo. 25 no. 1, 105-117.
- Grice, H.P. (1957) 'Meaning', *Philosophical Review*, 66, 377-388.
- Griffiths, P.E. (1998) 'Emotions', in W. Bechtel and G Graham (eds.), *A Companion to cognitive science* (Oxford: Blackwell Publishing Ltd.), 197-203.
- Gomez, J. (2005) 'Joint attention and the notion of subject: insights from apes, normal children, and children with autism', in Eilan *et al* (eds.), *Joint attention: communication and other minds* (Oxford: Clarendon Press), 65-84.
- Gunther, Y. (2003) *Essays on Nonconceptual Content* (Cambridge, MA and London: MIT Press)
- Hauser, M. (1996) *The evolution of communication* (Cambridge, MA: MIT Press)
- Heal, J. (2005) 'Joint attention and understanding the mind', in Eilan *et al* (eds) *Joint attention: communication and other minds* (Oxford)
- Hobson, P. (2005) Hobson, P. (2005) 'What puts the jointness into joint attention?', in Eilan *et al* (eds.), *Joint attention: communication and other minds* (Oxford: Clarendon Press), 185-204.
- Hurley, S. (2003) 'Animal Action in the space of reasons', *Mind & Language*, vo. 18 no. 3, 231-256.
- Lurz, R. (2009) *The Philosophy of Animal Minds* (Cambridge: Cambridge University Press)
- Margolis E., and S. Laurence. (1999) *Concepts: Core Readings* (Cambridge, MA: MIT Press)
- Marler, P. (2004) 'Bird calls: a cornucopia for communication,' in P. Marler and H. Slabbekoorn (eds.), *Nature's Music: The Science of Birdsong* (London: Elsevier), 132-177.
- Martin M. (2010) "Getting On Top of Oneself: Comments on *Self-Expression*, *Acta Analytica*, vo. 25 no. 1, 81-88.
- Maynard Smith, J. and D. Harper. (2004) *Animal Signals* (Oxford).
- McAninch, A. G. Goodrich and C. Allen. (2009) 'Animal Communication and Neo-Expressivism', in R. Lurz (ed.), *The Philosophy of Animal Minds* (Cambridge: Cambridge University Press), 128-144.
- McDowell, J. (1994) *Mind and World* (Cambridge, MA: Harvard University Press)
- Miklosi, A., Polgardi, R., Topal, J. and Csanyi, V. (1998) 'Use of experimenter-given cues in dogs', *Animal Cognition*, 1, 113-121.
- Millikan, R. (2000) *On Clear and Confused Ideas* (Cambridge: Cambridge University Press)
- Moore, C. and P.J. Dunham (eds.). (1995) *Joint Attention, its origins and role in development* (Hillsdale, N.J.: Erlbaum)
- Pagin, P. (2001) 'Semantic Triangulation', in P. Kotatko *et al* (eds.), *Interpreting Davidson: Selected papers from the 1996 Karlory Vary symposium on analytic philosophy*, (Palo Alto: CSLI Press), 199-212.
- Ramberg, B. (2001) 'What Davidson Said to the Sceptic', in P. Kotatko *et al* (eds.), *Interpreting Davidson: Selected papers from the 1996 Karlory Vary symposium on analytic philosophy* (Palo Alto: CSLI Press), 213-236.
- Reddy, V. (2005) 'Before the 'third element': understanding attention to self', in Eilan *et al* (eds.), *Joint attention: communication and other minds* (Oxford: Clarendon Press), 85-109.

- Roessler (2005), 'Joint attention and the problem of other minds', in Eilan *et al* (eds.), *Joint attention: communication and other minds* (Oxford: Clarendon Press), 230-259.
- Rosenberg, J. (2007) *Wilfrid Sellars: Fusing the Images* (Oxford: Oxford University Press)
- (1985) *The Thinking Self* (Philadelphia: Temple University Press)
- Sellars, W. (1981) 'Mental Events', *Philosophical Studies*, 39: 325-45.
- (1969) 'Language as Thought and as Communication', *Philosophy and Phenomenological Research* 29: 506-527.
- (1956) "Empiricism and the Philosophy of Mind" in Herbert Feigl and Michael S. (eds.), *Minnesota Studies in the Philosophy of Science, Volume I* (University of Minnesota Press), 253-329.
- Sinclair, R. (2002) 'What is Radical Interpretation? Davidson, Fodor and the Naturalization of Philosophy', *Inquiry*, 45, 161-184.
- Sinclair, R. (2005) 'The Philosophical significance of triangulation: Locating Davidson's non-reductive naturalism', *Metaphilosophy* vo. 36, no. 5, p708-728
- Verheggen, C. (2007) 'Triangulating with Davidson', *The Philosophical Quarterly*, v. 57, n. 226, 97-103.
- Werner, H. and B. Kaplan. (1963) *Symbol Formation* (Hillsdale, NJ: Erlbaum)