Interpreting autism: a critique of Davidson on thought and language

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Abstract

Donald Davidson’s account of interpretation purports to be a priori, though I argue that the empirical facts about interpretation, theory of mind, and autism must be considered when examining the merits of Davidson’s view. Developmental psychologists have made plausible claims about the existence of some people with autism who use language but who are unable to interpret the minds of others. This empirical claim undermines Davidson’s theoretical claims that all speakers must be interpreters of other speakers and that one need not be a speaker in order to be a thinker. The falsity of these theses has consequences for other parts of Davidson’s world-view; for example, it undermines his argument against animal thought.

Donald Davidson’s work on thought and language strikes me as a paradigm example of the limitations of an exclusively conceptual approach to the philosophy of mind. A lack of concern for the claims of experimental psychology can lead one down a path towards developing a philosophical theory of the mind which, though coherent, is disconnected from the world as understood through the sciences. In order to defend the claim that one’s theory corresponds to the actual state of affairs in the world, there must be at least some evidence that the world is the way presupposed by the theory. Merely showing that a theory is consistent is not sufficient justification. My concern is that Davidson does not have the strings needed to attach his theory to the real world. Specifically, I will argue that Davidson’s theses regarding thought and language are undermined by the fact that there are people with autism. A person who is able to use language but who cannot interpret others’ minds would serve as a counterexample to Davidson’s claim that having language and propositional content are coextensive.

My criticism will focus on two propositions defended by Davidson:

(A) All speakers must be interpreters of other speakers.
(B) All believers must be speakers.

My strategy will be to argue that (A) is false by appealing to empirical evidence from developmental psychology and autism. At this point I must make clear that

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though I will be appealing to psychological studies in order to debunk Davidson’s (A), I will not make the mistake of assuming that these studies yield definitive conclusions. I am well aware of the inherent difficulty of interpreting the results of such studies, and recognize the fact that empirical science is itself based on philosophical assumptions and conceptualizations that make definitive conclusions impossible. My goal is to undermine the truth of (A) through appeal to current work in psychology. Once the negation of (A) is defended, I will assume not-(A) and use that proposition in an argument for the negation of (B). The rejection of (A) and (B) has serious consequences for Davidson’s view of truth, radical interpretation, and communication. In addition, this conclusion undermines Davidson’s commitment to the impossibility of animal belief.

1. Davidson’s account of language and belief

Membership in a language community depends on the ability to interpret the utterance of members of the group, and a method is at hand if one has, and knows one has, a theory which provides truth conditions, more or less in Tarski’s style, for all sentences (relativized, as always, to time and speaker). (Davidson, 1975, p. 20)

Before introducing the arguments against (A) and (B), it will be helpful to examine why Davidson accepts the two propositions. I’ll start by defining the terms. For Davidson, a speaker is one who expresses thoughts, and in order to express thoughts one must mean something by her utterance. An interpreter must understand the utterance of another. Thus, both speakers and interpreters must be able to grasp the meaning of utterances by assigning to them propositional content (Davidson, 1975, 1991).

To see why Davidson takes this position, we must turn to his theory of meaning, given Davidson’s commitment that a language user “must be able to specify, in a way that depends effectively and solely on formal considerations, what every sentence means” (Davidson, 1984, p. 8). For Davidson, meaning is not based on thought or other mental states, because he sees thought and language as interdependent, so an attempt to explicate meaning based on a Gricean account would result in a circular thesis. Instead, Davidson’s theory of meaning relies on specifying conditions under which a sentence is true. Thus, the meaning of a sentence can be analyzed as:

\[ s \text{ is true iff } p \]

where \( s \) is a sentence in the object language, and \( p \) is a sentence in the meta-language which gives the meaning of \( s \), or translates \( s \), or provides the conditions under which \( s \) is true. In this account of meaning, the notion of truth is specified by Tarski’s Convention T. Tarski developed Convention T as a method of analyzing truth in formal languages, but Davidson expands its use to natural languages. Briefly, Tarski’s account of the truth of the sentence “\( s \) is true” can be analyzed as “\( s \) is true (in language L) iff \( p \)” where \( p \) is a metalinguistic translation of \( s \). Davidson thus takes
a theory of meaning as able to generate a T sentence in the meta-language for every sentence of the object language (Davidson, 1967).

However, it is possible to generate these T sentences only if "An interpreter knows the conditions under which utterances of sentences are true, and often knows that if certain sentences are true, others must be" (Davidson, 1975, p. 10). This reflects Davidson’s commitment to the holism of language, which in turn relates to his notion of radical interpretation.

The goal of radical interpretation is to take behavioral evidence of an alien language community and give an account of meaning for the sentences of this community. In order to achieve this goal one must adopt the Principle of Charity (which Davidson also calls the Principle of Coherence), and assume that speakers of the language are for the most part rational and will not hold contradictory beliefs. The Principle of Charity is so central to this account of interpretation that if there is no consistent interpretation of a speaker’s sentences, then the account holds that the speaker is not speaking a language (Davidson, 1991).

Thus, beliefs can be attributed to a speaker only if there are at least two rational agents and the external world. These three objects make up the triangle necessary not only for communication, but also for the speaker to have thought. For if the verbal behavior is not interpretable by an observer, then the verbal behavior would not have meaning and the utterer would therefore have no thoughts. On the issue of triangulation, Davidson writes “Without this sharing of reactions to common stimuli, thought and speech would have no particular content—that is, no content at all” (Davidson, 1991, p. 159). Both speakers in the triangle must utilize the Principle of Charity, by attributing rationality as well as meaningful thoughts to one another.

Davidson denies that language can be explained in terms of thought, or vice versa (Davidson, 1975). What he does say about the relation is that “a creature cannot have thoughts unless it is an interpreter of the speech of another” (Davidson, 1975, p. 9). One cannot have thoughts outside of a linguistic community, because thoughts are either true or false and the meaning of those thoughts must be understood by the thinker. In order to understand the meaning of a sentence, a speaker must know the truth conditions of the sentence: “what ultimately ties language to the world is that the conditions that typically cause us to hold sentences true constitute the truth conditions, and hence the meaning, of our sentences” (Davidson, 1996, p. 275). The goal Davidson has in mind for a theory of meaning is to explain how speakers are able to determine the meaning of utterances (Davidson, 1967). Thus, the appeal to Convention T is Davidson’s attempt to show how speakers understand the meaning of a sentence. If he is right, then we understand the meaning of our and others’ utterances through the recognition of the sentence’s truth conditions. Correspondingly, if one is to understand the meaning of her thought, she must also be able to recognize its truth conditions, and to do that it must be possible for the thinker to construct a T sentence for that thought. However, since a T sentence can only be constructed by someone who uses language, there is no T sentence without a linguistic community, and hence there are no thoughts either. If there are no communicative beings, there is no such thing
as truth, because truth is a property of sentences (or, in the case of indexicals, truth is a relation between the sentence, the person, and the time; Davidson, 1967).

The notion of error is fundamental to these points. When we interpret others, we assume that they are rational, and that they have a large number of true beliefs. However, we do not assume that they have only true beliefs. As Davidson says, “Error is what gives belief its point” (Davidson, 1975, p. 20). Thus, to have a belief is to have the concept of a belief, for one will not have a belief unless he understands that it is possible for the belief to be mistaken. And one will not have this notion of being mistaken until he has seen a discrepancy between his belief and the belief of another.

According to Davidson’s position, in order to know what a speaker means by her words, the speaker must have a holistic and rational connection between her various beliefs, and her beliefs must correspond to the external world. Essentially, Davidson’s theory of communication rests on triangulation; both thought and communication arise when one speaker is able to attribute a belief to another regarding some state of affairs. Given these considerations, it becomes clear why Davidson is committed to both (A) and (B). The arguments for these two theses can be stated as follows:

Thesis (A):

1. All speakers have beliefs.
2. In order to have a belief, one must have the concept of belief.
3. In order to have the concept of belief, one must have the concept of a false belief.
4. In order to have the concept of false belief, one must be an interpreter of other speakers.
5. All speakers are interpreters of other speakers.

Thesis (B):

1. In order to have a belief, one must have the concept of a false belief.
2. In order to have a concept of false belief, one must be an interpreter of other speakers.
3. In order to interpret the utterances of others, one must be a speaker.
4. In order to have a belief, one must be a speaker.

These two theses are fundamental to Davidson’s larger projects. Thesis (A) is needed for his argument about radical interpretation, and it is one of the central claims of Davidson’s theory of meaning and communication. Thesis (B) is the primary reason Davidson rejects the claim that animals have beliefs (Davidson, 1982, 1975).

Though Davidson provides arguments for (A) and (B), I believe he neglects to provide the empirical support that a thorough defense requires. In the next section I will argue that not only can the truth of thesis (A) be investigated empirically, but
that it runs counter to an overwhelming amount of data in the literature on autism and social development.

2. Criticism of thesis (A)

At first blush, the claim that all speakers attribute beliefs and rationality to others seems uncontroversial. Our folk understanding of human linguistic interaction assumes that those we speak to have beliefs about other minds. In most of my conversations, I assume the person with whom I am speaking is sane, and I generally believe the things she says, unless I have good reason to think otherwise. Even when interacting with people with whom I do not share a common language, I assume that we share a folk psychology, and this assumption assists in our attempts to communicate. I have found myself in many situations, usually at train stations, where I have tried and succeeded in interpreting sentences uttered in Czech, Italian, Turkish, and other languages I don’t speak. I am able to accomplish my goals in such situations because I know that the woman behind the counter at the Prague train station expects that I am interested in train travel. I use such assumptions to communicate.

However, according to Davidson, all speakers are interpreters. Because interpreters attribute rationality, beliefs, and desires to those they are interpreting, all speakers, as interpreters, must be able to attribute beliefs to others. In the current jargon of the day, thesis (A) can be understood as the claim that all speakers have a theory of mind. A theory of mind is the ability to predict and explain what other agents will do by attributing to them the appropriate beliefs and desires. When an individual has a theory of mind, she understands that others may have thoughts that differ from her own, given the representational nature of the mind. Like Davidson’s interpreter, one who has a theory of mind must have a holistic understanding of how beliefs and desires relate to one another in order to cause an agent to act, and she must believe that others are fundamentally rational.

The purported requirement that language users have a theory of mind is something that can be investigated empirically. That is, we can study people who appear to be competent speakers of a language, and then test their ability to interpret others. Psychologists could disconfirm (A) by finding a person who uses language but who does not have a theory of mind.

However, determining whether there exists such a person is not as simple as it might seem. The psychological literature suggests that the ability to interpret develops over time, and that there is a period of several years in the normal development of a child in which she has an incomplete theory of mind. It seems that there are degrees of competence at interpreting.

Of course, competence in language is also on a continuum. Generally, by the age of two, children use two-word sentences to communicate (Pinker, 1994), though until about the age of four, children seem to have difficulty in realizing the representational nature of other minds (Wellman, 1990). That is, these young children don’t seem to understand how seeing leads to believing, and they don’t seem to understand that people who have had different experiences may believe different things.
The standard test used to defend this claim is known as the false belief task, developed by Wimmer and Perner (1983) and modified by Baron-Cohen et al. (1985). The subject is told a story about Sally, a girl who places a bar of chocolate in a basket and then leaves the room. While Sally is away, Anne comes into the room, moves the chocolate to a box, and then leaves. When Sally returns to the room, the subject is asked where Sally will look for her chocolate. Children younger than four generally say that Sally will look for the chocolate in the box (its actual location), whereas older children will indicate the basket (where Sally put the chocolate). The failure on the part of the younger children to indicate the location where Sally last saw the object has been thought to indicate that they lack a theory of mind. At four, a child has been considered a competent speaker for at least six months, and has been able to comprehend spoken language for at least a year (Pinker, 1994).

However, using the false belief task as a criterion for having a theory of mind has come under attack, thus undermining the suggestion that three-year-old children are a counterexample to Davidson’s thesis (A). There are two sorts of objections to taking the false belief task as the criterion for theory of mind. One set of criticisms relies on the claim that the development of a theory of mind is best understood as being on a continuum. Given this view, children who fail the task could still have a simple theory of mind (Fodor, 1992) or a partial theory of mind (Wellman, 1990). The other set of criticisms focus on the additional skills children need to pass the false belief task. These critics stress that though competence on the false belief task is sufficient for having a theory of mind, it is not necessary. Let us examine these criticisms in order to determine whether three-year-old children would serve as a counterexample.

Looking at the first set of criticisms, we see that Fodor suggests that children younger than four attribute both beliefs and desires, but have a very simple theory of mind (Fodor, 1992). On Fodor’s model, three-year-olds are able to attribute both beliefs and desires, but they don’t recognize any other intentional objects such as hopes, suspicions, cravings, etc. Between the ages of three and four, there is a change in the heuristic children use to attribute beliefs. The three-year-old will generally predict that a person acts to satisfy her desires. The four-year-old, on the other hand, is more sensitive to the truth of the agent’s belief, and he will use the three-year-old’s heuristic only when he thinks the agent’s belief is true. If he thinks the belief is false, he will act on another heuristic, and predict that the agent will act to satisfy her desire as if her belief were true. Would this very simple theory of mind be sufficient to fulfill Davidson’s requirements that a speaker be an interpreter? It might seem that this view would suffice, for the child attributes rationality to the agent by predicting that the agent will act to fulfill her desires. The child also attributes beliefs and desires to the agent, and the words and behavior of the agent are interpreted. Perhaps the problem arises when he attributes super-rationality to an agent; the child expects that Sally knows something that she cannot know.

If Fodor’s model is correct, there may remain some problems for Davidson’s commitment that all speakers are interpreters. Davidson claims that interpreting involves attributing to agents the beliefs they should have, given their environment.
For example, if an agent is in a rainstorm, an interpreter would attribute to him the belief that it is raining. And if an agent leaves a bar of chocolate in a basket, and has no reason to think the chocolate was moved in her absence, then the interpreter should attribute to the agent the belief that the chocolate is in the basket, even if it isn’t. And this is just the problem that three-year-olds have with belief attribution. These children don’t attribute to agents the beliefs they should have; instead they attribute to agents the beliefs that they themselves have. Davidson may deal with this by saying that such children are interpreters who are nonetheless inept at interpreting in some situations, and that the ability to interpret and the ability to use language does come in degrees. This possibility will be examined later.

Another reason to think that children have some degree of a theory of mind even before they pass the false belief task comes from Wellman. He argues that children may have some limited understanding of mental representation in the case of desires, but they do not understand the notion of belief (Wellman, 1990). This is evidenced by children’s competence in producing and responding to attributions of desire before their fourth birthday.

Even if Wellman is correct to claim that children have some rudiments of a theory of mind before they pass the false belief task, his particular explanation may not be very helpful for Davidson. This is because Davidson maintains that one must have the notion of belief and objective truth in order to be a speaker. Three-year-old children certainly appear to use language to communicate. However, if they do not understand what a belief is, then it follows from Davidson’s view that these children, though seeming to speak, are not really using language. Such a position strikes many as counterintuitive, and if Davidson were forced to take such a position, thesis (A) may be reduced to absurdity. Fortunately for Davidson’s position, Wellman’s strong claim about the young child’s lack of understanding of belief isn’t warranted. Though Wellman shows that children are much more adept at recognizing and manipulating desire claims than they are belief claims, nothing he has presented allows for the conclusion that children do not have the notion of belief or objective truth. Wellman’s general point, that children have some of the abilities associated with a theory of mind before the age of four, is consistent with Davidson’s thesis (A), and is another criticism of the view that passing the standard false belief task is necessary for one to have a theory of mind.

There are a number of other criticisms of the false belief task as the criterion for theory of mind that focus on the complexity of the task. Such critics insist that there is more involved in passing the test than merely having a theory of mind. The false belief task is seen by many investigators as quite difficult even for those who have an understanding of belief. For example, Bloom and German write: “To solve it, the child has to follow the actions of two characters in a narrative, has to appreciate that Sally could not have observed the switching of the chocolate, has to remember both where the chocolate used to be and where it is at the time of the test, and has to appreciate the precise meaning of the question (for instance, that it means where will Sally look, not where she should look)” (Bloom & German, 2000, p. B27).

Specific difficulties with the false belief task include the act of making a prediction (Moses & Flavell, 1990; Robinson & Mitchell, 1995), counterfactual
reasoning (Riggs et al., 1998), the necessity of controlling one’s inclination to refer to reality (Carlson & Moses, 2001; Mitchell, 1994; Robinson, 1994; Robinson & Mitchell, 1995), and the need to ignore heuristics that have been successful in the past, such as the rule that people will generally act so as to fulfill their desires (Fodor, 1992; Roth & Leslie, 1998; Saltmarsh et al., 1995).

In order to predict the behavior of someone with a false belief the child must disregard the actual state of affairs. Children must be able to refrain from indicating where the object actually is, and young children are notoriously bad at inhibitory control. Carlson and Moses argue that the false belief task requires children to “inhibit their own prepotent knowledge of current reality to respond in terms of less salient representations of reality” (Carlson & Moses, 2001, p. 1034) and they go on to state that very young children with poor inhibitory control may find referring to the chocolate in the story irresistible. Other studies suggest that children are more likely to refer to the actual state of affairs unless the character’s false belief has been given a physical instantiation (Mitchell & Lacohee, 1991; Saltmarsh et al., 1995).

Given these criticisms, it may be that many children younger than four have at least some of the skills associated with a theory of mind. Simpler tests for theory of mind have been devised which avoid some of the difficulties discussed above, and these modified false belief tasks are often passed by three-year-olds. This has suggested to some that children younger than four have an understanding of mental states and some ability to attribute beliefs to others (Bloom & German, 2000; German & Leslie, 2000; Mitchell & Lacohee, 1991; Siegal & Beattie, 1991). Therefore, though Davidson is admittedly puzzled by what exactly to say about the development of language and interpretation in children, it seems unlikely that we will find a counterexample to Davidson’s thesis (A) among normally developing children.

On the other hand, not all children have enjoyed improved performance on simpler versions of the false belief task. Famously, children with autism do not show improved performance when tested using these alternative methods, and their different patterns of development suggest that there is something unique about their case (Roth & Leslie, 1998; Surian & Leslie, 1999). Thus, rather than looking for a counterexample to (A) among normally developing children, it will be more useful for our purposes to explore the case of children with autism.

Autism is a psychiatric condition characterized by impairments in social interaction, communication, and an exceptional restriction of activities and interests, usually manifested by an unusual interest in objects or distress over trivial environmental changes (American Psychiatric Association, 1994). Though early investigation into autism in the 1940s by Leo Kanner included only mute children, it is now accepted that many verbal children also have the characteristic symptoms of autism.

Autism is a challenge to Davidson’s theory because of the variety of evidence that some autistic children lack a full understanding of mental states and others’ rational agency. Even verbal children with autism show this deficiency. If this description of autism is correct, then there is a clear counterexample to Davidson’s view: a person who speaks but who does not understand belief, and does not interpret the vocalizations of others by attributing mental states or rationality. If it
turns out that autistic children do not interpret even though they use language, then Davidson has two choices. He can deny that autistic children actually use language, or he can significantly revise his theory of interpretation, theory of communication, and other aspects of his world-view that rest on the assumption that all speakers are interpreters.

There is a variety of evidence for the claim that people with autism are not Davidsonian interpreters. One piece of evidence is that the majority of people with autism are unable to pass the false belief task; when asked to predict the behavior of an actor who has a false belief, an autistic child is significantly more likely to base his prediction of the behavior on his own knowledge, rather than on the false belief of the actor (Baron-Cohen, 1995; Harris, 1991). Between 65 and 80% of autistic children with a mental age greater than four fail the task.

This inability appears to be unique to people with autism; children of the appropriate age with Down’s Syndrome or a low IQ do not have the same problem with the false belief task. In addition, whereas the simpler versions of the false belief task become increasingly straightforward for most young children, those with autism do not find the simplified versions any easier.

Another reason for suspecting that people with autism do not think other people have mental lives comes from observations of typical autistic behavior. For example, some children with autism never look at people’s faces, even when they are speaking. Body parts are often treated as unattached objects. As quoted by Baren-Cohen, Kanner describes one autistic child:

… on a crowded beach he would walk straight toward his goal irrespective of whether this involved walking over newspapers, hands, feet or torsos, much to the discomfort of their owners. His mother was careful to point out that he did not intentionally deviate from his course in order to walk on others, but neither did he make the slightest attempt to avoid them. It was as if he did not distinguish people from things, or at least did not concern himself about the distinction. (Baron-Cohen, 1995, p. 61)

There are still other indications that some people with autism do not have the ability to interpret. The earliest evidence of communication in normal children is seen around nine months of age, as demonstrated by joint attention and the use of gestures and sounds to communicate desires. Autistic children’s communicative development during this period is markedly different from this norm. Unlike typical children, those with autism almost never use protodeclaratives to indicate objects. They do not point or use single-word utterances to direct attention to an object. It has been argued that the use of protodeclaratives is the first indication of triangulation between a child, an adult, and the external world (Tager-Flusberg, 1993). Children generally begin to monitor eye gaze around the same time, and will shift their gaze between a desired object and the eyes of another person. The majority of children with autism do not engage in gaze monitoring (Baron-Cohen, 1995), which provides further evidence that their joint attention is impaired.

The lack of joint attention in those with autism does little to support Davidson’s view of triangulation as necessary for language acquisition. One theory regarding the
specific difficulties demonstrated by children with autism is that they lack the mechanism or module for joint attention (Baron-Cohen, 1995). As described above, joint attention typically occurs very early in a child’s development, and it is accurately described as an instance of triangulation that is often initiated by the child. If Baron-Cohen is correct, then the way autistic children gain language skills would be necessarily quite different from the story suggested by Davidson.

Engaging in pretend play is thought to be evidence that a child is developing an ability to interpret the minds of others. A variety of studies show that children with autism don’t tend to spontaneously engage in pretend play, and when they do the play is severely impoverished (Baron-Cohen, 1995). Whereas with normal children pretense facilitates counterfactual reasoning, that is not the case for children with autism, even though they show no general impairment in counterfactual reasoning (Scott et al., 1999).

Among those people with autism who gain linguistic skills, there is no difficulty with the syntactic aspect of language. However, they do demonstrate significant problems with the semantic and pragmatic aspects of language. For example, normal children understand the relationship between the stress, pitch, timing, rhythm, and melodic tones of language and the meaning of the words and sentences uttered using these different prosodic features. Autistic children, however, do not show sensitivity to prosodic features at this age, and their ability in this realm does not improve significantly over time (Tager-Flusberg, 1993). Children with autism also show a marked difficulty associated with article use, in that they do not show sensitivity to the difference between, for example, “a chair” and “the chair.” Adults with autism will often respond literally to indirect requests (e.g. “Can you color the circle blue?”) by answering the question rather than performing the requested behavior. Perhaps most interesting is the difficulty with understanding the referents of pronouns. A common error in autistic speech is pronoun-reversal. This problem involves referring to oneself as “you” and to others as “I.”

Though there has been little formal study of linguistic development in autistic populations, one longitudinal study has compared the development of autistic and Down’s syndrome children (Tager-Flusberg, 1993). The main differences between these two populations are that autistic children use utterances calling for joint attention and refer to cognitive mental states much less frequently than do children with Down's Syndrome. The study suggests that there is no significant difference in the use of perception and the mental states of desire and emotion. Because autistic children do talk about desire, yet do not speak of belief, the author of this study concludes that though “verbal autistic children are not strict behaviorists... it may be that most autistic children never even come to a basic understanding of belief” (Tager-Flusberg, 1993, pp. 149–150). This hypothesis is in direct conflict with Davidson’s conviction that one uses language just in case one has the concept of belief. Davidson’s insistence on this point is the core of his argument against animal beliefs, because if animals were to have beliefs, they would need to have the concept of belief. Given that animals do not use language, they do not have this concept. From all evidence, the autistic children in this study do use language, but it is unclear whether they have a concept of belief.
The best counterexample to Davidson’s thesis (A) might come in the form of a single individual who uses language fairly well, but who shows no evidence of a theory of mind. Clearly, more research needs to be done looking at the relationship between language competence and theory of mind. Some researches argue that there is a significant language component to theory of mind abilities (De Villers & De Villers, 2000; Garfield et al., 2001). However, the arguments privilege language over theory of mind, taking competence in language to be prior to the development of a theory of mind, whereas Davidson would have the two abilities develop in tandem.

It isn’t only children with autism who have impaired theory of mind abilities. High functioning adults with autism also show impairment in their ability to demonstrate their understanding of context-sensitivity (Jolliffe & Baron-Cohen, 1999a), and they have difficulty with interpreting non-literal statements dealing with mental states (Jolliffe & Baron-Cohen, 1999b). They also have a much more difficult time inferring a person’s mental state by looking at her eyes than do normal adults of the same age (Baron-Cohen et al., 1997).

Even the small percentage of adults with autism who learn to deal with their disability and function independently rarely marry or develop personal relationships of the kind that normal adults take to be an essential part of a fulfilling life. This may be due to a problem with reading the emotions of others. Temple Grandin, a woman with autism whose books provide a rare window into autism, describes her ability to have personal relationships at some length in her book *Thinking in pictures*:

My emotions are simpler than those of most people. I don’t know what complex emotion in a human relationship is. I only understand simple emotions, such as fear, anger, happiness, and sadness. I cry during sad movies, and sometimes I cry when I see something that really moves me. But complex emotional relationships are beyond my comprehension. I don’t understand how a person can love someone one minute and then want to kill him in a jealous rage the next. I don’t understand being happy and sad at the same time … I still have some difficulty understanding and having a relationship with people whose primary motivation in life is governed by complex emotions, as my actions are guided by intellect. This has caused friction between me and some family members when I have failed to read subtle emotional cues … During the last couple of years I have become more aware of a kind of electricity that goes on between people which is much subtler than overt anger, happiness, or fear. I have observed that when several people are together and having a good time, their speech and laughter follow a rhythm. They will all laugh together and then talk quietly until the next laughing cycle. I have always had a hard time fitting in with this rhythm, and I usually interrupt conversations without realizing my mistake. The problem is I can’t follow the rhythm. (Grandin, 1996, pp. 89–92)

Grandin has learned to cope with her disability to a degree once thought impossible. She received a PhD in animal science, and is world-renowned for her designs of
livestock-handling facilities. Grandin’s self-description, though, shows that her understanding of others’ minds is much more limited than the typical adult’s, given that her ability to attribute accurate beliefs and desires with regard to emotion and personal relationships is impaired. Her descriptions of human social interaction are highly abstracted, and focus on formal characteristics like rhythm rather than the emotional terms I might use to describe a banter session among friends.

Grandin does not appear to be a counterexample to Davidson’s theory. She is able to attribute beliefs and rationality to others, as demonstrated by her successes in academia and agriculture. Autism, however, is a disease on a continuum. Most people with autism are not able to reach the degree of social success and independence that Grandin has. The question, then, is whether those people with severe autism who are also able to use language serve as a real-life counterexample to Davidson’s theory.

A Davidsonian interpreter will be able to attribute beliefs, desires, and rationality to another. She will have the concept of truth, and she will understand that beliefs can be false. She must also be able to engage in joint attention with another person. As we have seen, the majority of children with autism do not seem to understand triangulation with another person, and this may be due to a fundamental misunderstanding about the nature of others as rational agents with unique sets of mental representations.

How might Davidson attempt to respond to the sort of empirical evidence we have been discussing? Davidson has discussed the issue of children’s linguistic development in a response to Simone Evnine’s essay “On the way to language” (Evnine, 1999). With regard to children’s acquisition of language and interpretive skills, Davidson admits that “there is a serious problem in knowing how to describe the states of mind of a child who is partly into language and the kind of thought that goes with it” (Davidson, 1999, p. 305). Given his commitment to holism, he cannot accept that view that children learn the meaning of words one by one. However, he suggests that the fewer possible interpretations we can make of a child’s utterance, the more information that utterance will convey, and the more meaningful it will be. According to Davidson, when the possible interpretations of an utterance become constrained, the utterer is then seen as an accomplished speaker (Davidson, 1999). This suggestion does indicate that Davidson might be willing to concede that language and interpretive skills come in a continuum, and that degrees of skill in interpretation corresponds to degrees of language competence.

However, if he were to take this route, he would also have to admit that thought also comes as a continuum, given his commitment to the connection between speech and thought. So, if a child’s utterance of “mama” can be interpreted as referring to the child’s mother, a desire for food or attention, etc., then the child would be seen as having a low degree of thought, interpretive skills, and speech. This method of ascribing degrees of thought, it seems, could also be used in the case of a non-human animals. When the cat meows at the door, that utterance can be interpreted as expressing a desire to go outside, to chase mice, etc. And it would follow then that the cat has a degree of thought, albeit a small one. Or consider the case of Kanzi, a bonobo chimpanzee, who uses a lexicon system to communicate. Kanzi can use a
voice synthesizer to utter single words such as “chase” or “peaches” (Savage-Rumbaugh et al., 1993). Though Davidson acknowledges that “it is hard to explain a great many things even quite simple animals do without assigning thoughts and intentions to them” (Davidson, 1999, p. 305), he also claims that “an animal does not have beliefs, it does not reason, it does not have concepts, and cannot have a language” (Davidson, 1999, p. 309). What is the distinction between the small child and the non-human animal that compels Davidson to accept a degree of belief for one but not the other?

Davidson writes:

My recent emphasis on the triangle that connects the radical interpreter, her interprète, and the world is … a somewhat recent conviction not only that this triangle is essential to understanding others, but that it is also essential to the awareness of objectivity, the fact that error is possible, and that there is a distinction between what is believed and what is the case. If this is right, it is a powerful argument for the view that language and thought are interdependent, and that thought originated in a social setting. (Davidson, 1999, p. 310)

Perhaps the difference between children and non-human animals is that children are the kind of creature that will generally come to fully participate in the triangle, whereas animals are not. This potentiality argument is consistent with the emphasis Davidson places on interpretation; we interpret the child’s utterances as meaningful, even when we cannot ground the content, yet we do not interpret the parrot’s utterance as meaningful, because we believe that the child will at some point become a full participant in the triangle, but the parrot will not.

However, the potentiality argument wouldn’t bode well for children with autism. If the potentiality argument is what Davidson relies on in order to distinguish between animals and children, then it seems that the children with severe autism would go the way of the animals. Given that they will never fully participate in the triangle, such children lack what Davidson sees as the essential skill for language and thought. However, some children with autism do use language, and their utterances are easily interpreted by accomplished speakers.

If Davidson does not accept the potentiality argument, then it is unclear to me how he can consistently accept that children have a degree of thought when they are just beginning to learn a language, and yet animals completely lack thought. As it stands, Davidson’s attempt to account for children’s development of language, and the acceptance that language, thought, and interpretive skills all develop in degrees, does not help Davidson account for the existence of people who appear to use language, yet who do not appear to be fully competent Davidsonian interpreters. Davidson’s thesis (A), that all speakers are also interpreters of speech, is inconsistent with the evidence from autism, and unless evidence that verbal children with autism have a theory of mind is uncovered, (A) should not be accepted as true.
3. Criticism of thesis (B)

Given that children with severe autism undermine the truth of (A), there is good reason to reject thesis (B), that the set of thinkers and speakers are coextensive. If (A) is false, the following argument can be constructed to show that people can have beliefs without having the ability to attribute beliefs:

1. Not all speakers are interpreters of other speakers (the negation of thesis (A)).
2. Therefore, some speakers do not attribute beliefs, since to interpret is to attribute beliefs.
3. All speakers have thoughts (an assumption that both Davidson and I would accept).
4. Therefore, some thinkers don’t attribute beliefs (from 2 and 3).

Once (4) is established, we are only a few steps away from the negation of Davidson’s thesis (B):

5. All and only those who attribute beliefs have language (according to Davidson’s theory of meaning).
6. Therefore, one can have thoughts without language (from 4 and 5).

Thus, if Davidson’s thesis that all speakers have a theory of mind can be rejected based on the existence of counterexamples, then it follows that the set of speakers need not be coextensive with the set of thinkers.

4. Conclusion

The theoretical possibility of thought without language is damaging to Davidson’s views on meaning, interpretation, and the impossibility of animal thought. Language and thought could no longer be seen as interdependent, and his rejection of the Grician view that meaning can be supplied through appeal to mental states would no longer be justified. The idea that content is fixed through the triangulation of the world, an interpreter, and an interpretatee is also undermined, leaving open the question of what would provide content for thoughts.

If thoughts and concepts can exist in creatures that do not use language, then Davidson’s argument that animals cannot have thoughts because they lack language is unsound. Thought, for Davidson, requires the acknowledgement that error is possible, the understanding of others’ minds, the understanding of belief, and having utterances that are interpretable by other agents. The empirical evidence I have discussed suggests that it is a mistake for Davidson to group these properties together, and that the truth may be more fine-grained than Davidson acknowledges. Each of these properties is properly seen as coming in degrees. Even the understanding of the possibility of error can plausibly be seen as a skill that comes in degrees. One may recognize that someone can be in error in a particular case without understanding the nature of error, and the different varieties of error. A child may recognize the possibility that her friend may be in error without realizing that her parents can also be in error. It seems that children are often surprised by their
parents’ or a teacher’s fallibility, and this surprise comes well after the child is a competent speaker and interpreter. An understanding of belief also seems to come in degrees, for reasons discussed above, but also because children seem to have difficulty realizing the opacity of propositional attitudes well after they are able to pass a false belief task (Apperly & Robinson, 1998). Though Davidson does recognize that when interpretations of a child’s utterances become more constrained they have more meaning, he also needs to recognize the continuum involved in the other properties he takes to be essential for thought and language.

In order to draw conclusions about the nature of thought and language, empirical work needs to be continued in order to determine what distinctions do exist, and in which order certain abilities arise. Only then can we hope to discover the more complicated story about the nature of thought, and the nature of language.

References


