An Intentional Interpretive Perspective

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To the extent that the concept of intention has been addressed within behavior analysis, descriptions of intention have been general and have not specifically included important distinctions that differentiate a behavior-analytic approach from vernacular definitions of intention. A fundamental difference between a behavior-analytic approach and most other psychological approaches is that other approaches focus on the necessity of intentions to explain behavior, whereas a behavior-analytic approach is directed at understanding the interplay between behavior and environment. Behavior-analytic interpretations include the relations between the observer's behavior and the environment. From a behavior-analytic perspective, an analysis of the observer's interpretations of an individual's behavior is inherent in the subsequent attribution of intention. The present agenda is to provide a behavior-analytic account of attributing intention that identifies the establishing conditions for speaking of intention. Also addressed is the extent to which we speak of intentions when the observed individual's behavior is contingency shaped or under instructional control.

Key words: intention, intentional perspective, interpretive perspective, observer perspective

The definition of *intention* and its role as causal entity have been debated in psychology (Wann, 1964). More traditional approaches to intentionality treat it as essential to explanation due to its pragmatic, predictive utility (Dennett, 1988; Lacey, 1998; Landgrebe, 1981; Merleau-Ponty, 1962; Searle, 1980, 1990). From a behavior-analytic perspective, however, everything an organism does, including verbal activity, is suitable for analysis (Skinner, 1945). When psychologists attribute the cause of behavior to mind, consciousness, unconsciousness, and intention, the stimulus conditions that occasion this sort of talk, including the relations to which they refer, are of interest to the behavior analyst, even though the constructs are not part of the explanation of behavior. There is a large class of phenomena that occasion attributing intention as a cause of behavior even though intention, like anxiety, is not part of behavior-analytic ex-

planation (Friman, Wilson, & Hayes, 1998).

Because behavior analysis does not consider intention a reified entity, the current interpretation is about the stimulus conditions that occasion attributing intention in the vernacular, with the focus on the observer or interpreter. It is true that stimuli cannot consistently control operant behavior without effective consequences, but identifying those contingencies is beyond the scope of this paper. Suffice it to say that all verbal behavior, including attributing intention, develops and is maintained through contingencies supplied by a verbal community.¹ That is, the pragmatic and predictive utility of attributions of intention cannot maintain intention as an explanatory entity without the contingencies supplied by a verbal community.

The purpose of this paper is to spec-

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¹ We say "red" in the presence of light of a particular wavelength and others agree, and others disagree with the utterance "blue" in the presence of that same wavelength. Agreement by the verbal community is a consequence that helps to maintain verbal behavior with respect to color. The same sorts of contingencies supplied by the verbal community maintain the attribution of intention. For instance, people say (agree) that when an individual plans a lunch date and then follows through with the plan, the individual intended to go to the lunch date.

ify the conditions under which people speak of intention as a cause of behavior, and to identify the circumstances that function as discriminanda for attributing intention. Although the current approach is not unique in its inclusion of the observer within the analysis (Wilkerson, 1999), it is unique in its emphasis on the events that set the occasion for talking of intention. First, the ordinary language of intention and its problems are identified. Then, traditional behavior-analytic approaches to cause and intention are examined. Third, attributing intention in the presence of contingency-shaped behavior, some of which is verbal, is explored. Finally, attributing intention when observing behavior under instructional control is examined. Some concluding remarks follow.

ORDINARY LANGUAGE OF INTENTION

There are several circumstances that give rise to talking of intention, one of which involves the observation of one's own behavior. A person may predict the consequences of his ongoing behavior (e.g., I intend to have this house clean by 3:00 p.m.). In addition, a person may predict future behavior and the consequences of that behavior (e.g., I intend to clean house on Saturday). These sorts of statements regarding self-action prompt attributions of intention, regardless of whether the individual engages in the action. According to Lana (1994), this is different from predicting one's own behavior in future circumstances, as when an individual states that he or she will be nervous tomorrow during a job interview. In the former example, one might attribute purpose, and the occasion for speaking of intention is set. In the latter example, one rarely makes this attribution. One might argue that the main features of behavior in the latter example are visceral, which are usually controlled by respondent conditioning, and that the former example involves operant behavior, which is in-

herently intentional. To be sure, respondents may not occasion attributing intention and operants often do occasion attributions of intention. In addition, behavior (respondents) influenced by prior events that are more obvious are less likely to occasion attributes of intention than those that are selected by consequences (operants), because the extraneous influences are less obvious. However, people may speak of priorities rather than attribute intention when the observed operant is a choice primarily influenced by aversive contingencies (e.g., a tooth extraction vs. a root canal).

An observer may attribute intention to another person as well, and speak of intention when observing one of the following: An observer hears a person speak of his or her intentions, and the observer simply repeats what was said (e.g., person X says "I intend to go to college" and the observer says "he intends to go to college"). Next, a person observes another person engaging in behavior, and the observer predicts the consequences of the behavior and states that the person "intends" to produce those consequences (e.g., a person observes another pounding on someone's chest and under certain conditions says "the person being pounded is having a heart attack and she intends to save the person's life" or, in another context, the person doing the pounding runs away and the observer says "she intends to hurt him"). Further, an individual observes another's behavior (or the products of past behavior) and then predicts future behavior based on current behavior (e.g., a person observes another person picking up travel brochures or sees the brochures on the person's desk and says "that person is intending to take a vacation").

Other times, intentions are ascribed after individuals have engaged in an activity. Then, attributions of intentions are based on whether the activity was planned prior to its occurrence, regardless of whether the action is viewed as desirable or undesirable or

who is engaging in it. The assumption, in accord with the dictionary definitions of intention, is that planned, purposeful activities are those that result from intentions. An action is deemed planned and purposeful based on activities prior to the action (e.g., purchasing an airplane ticket months in advance) and the verbal response after the action (e.g., "I have been planning a vacation for months").

Two problems with ordinary language are the lack of specificity regarding intention (i.e., observed relations that produce talk of intentions are not provided), and the reification of intentions as the cause of behavior. The circumstances that prompt talk of intentions usually have not been explicitly stated, and whether and how the influence or inferred influence of verbal behavior on other behavior produces this talk has not been established. The second problem involves the issue of "cause" with respect to intention. To say that any event influences behavior raises questions of causality, regardless of its temporal relation to the relevant act. Skinner (1974, pp. 16–18, 248–249), and more recently, Friman et al. (1998) wrote of events typically regarded as explanations of behavior that actually are, from a behavior-analytic perspective, instances of behavior that require explaining. This calls into question the relations involved in the interpretation of behavior. Little has been said about the behavior of the individual who is doing the observing and inferring intention and the circumstances and behavior that occasion attributions of intentions. The ensuing analysis focuses on the behavior of the individual who makes attributions.

BEHAVIOR ANALYSIS AND INTENTION

Early accounts of intention within behavior analysis examined the nature of cause (Day, 1975; Skinner, 1974). If intention (or purpose) could be distinguished from behavior, it still could not be regarded as causal because causes

must be a sufficient condition for what is being explained; intentions are not, because the cause of intentions themselves as a part of overall behavior requires explaining. According to Skinner, "A person disposed to act because he has been reinforced for acting may feel the condition of his body at such a time and call it felt purpose, but what behaviorism rejects is the causal efficacy of that feeling" (1974, p. 224). According to Day, persons may be aware of their "purpose," but this condition is a product of reinforcement history rather than a cause of behavior.

Day (1975) presented his interpretation of Skinner's position on intention. Trying to do something is not causal; trying is the product of reinforcement and is something the individual does (behavior, which is caused). To quote Skinner again, "but motives and purposes are at best the effects of reinforcement" (1974, pp. 55–57). When people describe reasons for their actions, according to Day, they often describe contingencies. Obviously, however, this is not always the case, for individuals often refer to internal events or states to explain their actions. The implication is that statements of intentions occur under specific circumstances and are maintained by the verbal community, and that intentions are not explanations or causes of behavior but rather are an aspect of behavior that requires explanation.

Lana (1991, 1994) provided a detailed definition of cause and maintained that intentions are not causes because they are not necessary to produce behavior. Although events that enter into a causal sequence need not be present all of the time for something to occur, we typically invoke general principles to aid in explanation. For instance, one may make a ping-pong ball on a table roll by pushing it with a finger or blowing on it, but in both cases we speak of the application of force. Lana described how intentions come to be, stating that intentions are behaviors in context that are shaped and maintained by contiguous or contingent

events supplied by a verbal community. His analysis of intentions as other than causal entities makes his account consistent with Skinner's and Day's. What is lacking is an analysis of talk of intentions, and the focus should not be on intention as a thing, but on the behavior of those who attribute intention.

ATTRIBUTING INTENTION AND CONTINGENCY-SHAPED BEHAVIOR

There is evidence that preschool children can discriminate movements that are "intentional" from those that are not (Dasser, Ulbaek, & Premack, 1989). However, the observations in these experiments were of moving objects rather than the behavior of live organisms, thereby eliminating verbal activity of the observed individual as a requirement for the attribution of intention. It is likely that attributions of intention are occasioned by both verbal behavior and nonverbal behavior. That is, verbal behavior accompanied by other contingency-shaped behavior occasions talk of intentions.

Skinner (1957) defined verbal behavior as "behavior reinforced through the mediation of other persons" (p. 2). Such a general definition would include linguistic behavior that is not spoken as well as nonlinguistic behavior. The units of a speaker's behavior delineated by Skinner are useful for understanding the relation between the actor and observer in the attribution of intention. Three of these units—tacts, mands, and autoclitics—seem to play independent roles. A tact is a verbal discriminative response in the presence of or closely after an event. Mands, on the other hand, are verbal responses in which the reinforcer is specified; they are reinforced by a particular action on the part of the listener. Sometimes, mands are concealed in tact form; they are stated as tacts but function as mands. Finally, autoclitics are verbal responses that depend on other verbal responses for their occurrence and

change the listener's response to those other verbal responses. It is important to note, of course, that individuals often engage in actions without making overt statements about them, and observers often infer self-talk, or speak "as if" verbalizations were occurring at the time of action, and attribute intention. Although beyond the scope of this paper, it should be noted that people make inferences about verbalizations for the same reasons that they engage in attributing intentions. That is, inferring verbalizations to explain nonverbal behavior has historically produced reinforcement supplied by a verbal community.

Consider inferring the compound tact, "I am grooming the cat because her hair is matted," as one of a number of possible inferred statements when observing someone brushing a cat's hair. This group of tacts (and several autoclitics) by someone seeing another person brushing a cat could prompt an attribution of intention to untangle the hair. That is, simply grooming the cat without comment may prompt an observer, when explaining the action, to attribute intention, or speak as if the tact occurred. The inferred tacts are different from other tacts by virtue of their reference to the actor's behavior rather than to objects or other events or the behavior of others. Such verbalizations need not be made publicly by the actor or at all for an observer to attribute intention, as in this case nonverbal behaviors are the discriminanda that occasion the attribution. Observers may explain behavior with tacts that never occurred, but are descriptive of the observed action and potential consequences of the action.

In the case of mands, attributions of intention may be occasioned by a verbalization. Consider an example presented earlier. Suppose one individual is performing cardio-pulmonary resuscitation (CPR) on another. To an onlooker, it may appear that one person is beating another in the absence of talking. In such a case, the individual performing CPR might say, "This per-

son has no pulse. Can you help?" Or the person may say, "This person has no pulse and I'm trying to help." Both statements may function as mands (the second being a concealed mand, a mand in tact form) because they may keep onlookers from interfering or they may solicit help. Mands need to be spoken aloud, written, or gestured to be reinforced by the listener (a defining characteristic of mands). In the absence of the verbalization in the example above, an observer might assume the helper was inflicting harm, setting the occasion for a quite different intentional attribute.

Sometimes listeners treat tacts as if they were concealed mands due to a history with others who frequently presented concealed mands (Glenn, 1983). For example, suppose an individual has a history of exposure to the concealed mand, "It is cold in here." The phrase is in tact form, but it is actually a mand for the heat to be raised. This type of interaction may be regarded as manipulative behavior and is likely to produce conflict (Glenn, 1983). Later, the individual may treat many tacts as mands, even when they are not. That is, listeners may attribute intentions that are a function of their history with the speaker rather than of the speaker's behavior.

As noted, autoclitics may set the occasion for observers to attribute intention. In the examples that follow, the verbalizations may be in tact form, but they are treated as autoclitics because they are separated in time from the events that they are about, and because they change the way the listener or observer responds to other verbalizations. Relational autoclitics, like other autoclitics, are words or phrases that cannot stand alone, such as grammatical tenses that depend on temporal features, like future (or past) events. In the example presented earlier involving weekend plans (house cleaning), the statement "this weekend, I am going to clean my house" includes a relational autoclitic because it refers to a future event. Relational autoclitics like

this one, in which an individual speaks of his future behavior, set the occasion for speaking of intention. Again, the verbalization does not need to be made public or at all for it to be inferred, or for an observer to assume that an action was planned ahead of time, and for an attribution of intention to be made.

Sometimes, individuals are called on to explain their behavior after the situation in which it occurred has passed. When this occurs, the individual is both actor and observer and is called on to attribute intention with respect to his or her own behavior. For instance, a professional athlete who has just performed spectacularly might be called on to explain the performance. Here, the mand characteristics of the situation call for qualifying autoclitics with respect to the individual's action (e.g., expressions of modesty or arrogance). Such autoclitics are occasioned by remote events such as the athlete's performance as well as the mand characteristics of the interview. The statements are unlikely to identify the actual contingencies that influenced the behavior, but this is not of primary interest here.² The point is that the situation occasions the autoclitic, which in this case is an attribution of intention.

What is interesting in this particular example are aspects of the current environment (local events) such as the interviewer's questions, media personnel, the millions of people who may watch the interview that have a strong influence on the athlete's statements. For example, questions like "Was that

² The functional relations that behavior is a part of are distinct from the functional relations that influence the verbalizations about that behavior. For instance, an athlete may perform well from years of practice during which consequences have shaped the effective performance. However, the social contingencies characteristic of an interview on national television may produce verbalizations about the performance that have nothing to do with the functional relations that produced the performance. That is, the athlete is unlikely to identify the actual contingencies responsible for the performance, even if he or she knew what they were.

what you were trying to do?" are not usually answered, "No, I just got lucky," even if that were the case. More likely, the response will be of the form, "That was the plan, and it worked perfectly." What may have involved a tact (or no verbalization) at the time of the action is followed by an autoclitic (the listener's response to a mand) in the face of a mand (the question) that has been provided by the interviewer, in addition to other mand characteristics of the situation. Situations like this one prompt observers to attribute intention, even when the observer is also the actor. In addition, this type of situation, where statements of intention are prompted and reinforced by a verbal community, are likely partially responsible for shaping attributes of intention.

As stated previously, the actor may also make statements after the behavior has occurred when the behavior can be described as socially undesirable. For example, consider an individual facing drug charges being asked to explain his or her behavior. A statement such as "Drugs help me to relax" is unlikely under these conditions due to the likely aversive consequences. The situation calls for autoclitics like, "Times are rough," "I was abused as a child," "I just lost my job," or "My spouse just left me," which are likely to attenuate aversive consequences. Statements like these influence listeners to make inferences about the lack of intentions of the actor making the statements. It is important to note that observers can make inferences about private verbal behavior when the actor does not make such statements out loud, or when the actor responds accordingly without awareness (the verbal repertoire to specify).³ In addition, attributing intention may occur or be stated only after

observers attempt to explain behavior or are questioned about the actions of others, and individuals may do the same when explaining their own behavior.

Legal trials are situations that involve strong mand characteristics that may result in statements with one or more autoclitics preceding or included in a response. One might hear something like "I have never done anything like this before." Such statements may not be accurate, but the current contingencies make them likely to occur (Blackman, 1979). People hearing such statements may be less likely to attribute intention and advocate relatively less aversive consequences than they would in the absence of such statements.

ATTRIBUTING INTENTION AND INSTRUCTIONAL CONTROL

This section addresses attributing intention when observers assume that verbal activity is functionally related to other behavior (instructional control). Verbal behavior is a prerequisite for instructional control because verbal antecedents are a defining feature of behavior of this kind. Instructional control is often referred to as rule-governed behavior because the verbal behavior said to be functionally related to other behavior often takes the form of a rule, specifying the circumstances and consequences of that behavior. In addition, observers may infer the presence of verbal behavior and its entrance into functional relations with other behavior, even when it does not occur or when it is difficult to determine if a functional relation exists. What distinguishes this section from the previous one, which also addressed the relation between verbal behavior (and other contingency-shaped behavior) and attributing intention, is that this section identifies potential instances of instructional control that may prompt attributions of intention.

Skinner (1966) offered a definition

³ Responding to the statements of others is like other operants in the sense that people may respond to contingencies without a repertoire to describe those contingencies (Hefferline, Keenon, & Harford, 1959; Hineline & Wanchisen, 1989).

of rules as contingency-specifying stimuli, and he made an important point regarding the origins of rule-governed behavior. First, all behavior is ultimately shaped by environmental contingencies (including rule stating and following); second, rule-governed behavior is an important subset of behavior shaped by environmental contingencies. In a later formulation, Skinner (1971, pp. 189–190) identified rules with the contingencies that maintain conformity to them, distinguishing rule following from the verbalization of rules. This distinction is important because it highlights two different perspectives, that of speaker and listener. In addition, a rule need not be stated for an individual's behavior to conform to the rule. Skinner identified a dual set of contingencies when he wrote, "A rule or law includes a statement of prevailing contingencies, natural or social. One may follow a rule or obey a law simply because of the contingencies to which the rule or law refers, but those who formulate rules and laws usually supply additional contingencies" (1971, pp. 114–115).

According to this formulation, individuals may conform to norms before these norms are formulated verbally. Skinner wrote,

Long before anyone formulated the norm people attacked those who stole from them. At some point stealing came to be called wrong and as such was punished even by those who had not been robbed. Someone familiar with these contingencies, possibly from having been exposed to them, could then advise another person: "Don't steal." Therefore, the pattern of behavior identified with conformity to a rule may or may not be initiated by a verbalization. (1971, p. 114)

It follows that observers may attribute intention when behavior conforms to a rule, even when that behavior is not functionally related to verbalizations.

In their analysis of rule-governed behavior, Zettle and Hayes (1982) provided an alternative definition similar to Baum's (1995) and a later formulation of Skinner's. In their account, "Rule-governed behavior is behavior in contact with two sets of contingencies, one of which includes a verbal antecedent. These verbal antecedents are rules" (p. 78). The two sets of contingencies characteristic of rule-governed behavior are usually quite distinct. The first set of contingencies is related directly to the behavior to which the rule refers, which Baum refers to as the long-term contingency between behavior and fitness. The second set of contingencies involves rule following in general, and, thus, is mediated by a verbal community, which Baum refers to as the short-term, socially mediated contingency. One way to distinguish between these dual sets of contingencies is to distinguish between the mand and tact characteristics of rule stating, as well as the tracking (the listener's response to a tact) and pliance (the listener's response to a mand) characteristics of rule following. The set of contingencies related directly to the behavior to which the rule refers can be said to have tact characteristics as they involve long-term fitness in the world; behaving according to this contingency may be regarded as tracking. The contingencies involving the consequences of following a rule are socially mediated in the short run and can be said to have mand characteristics; behaving in accord with these contingencies can be regarded as pliance.

Cerutti (1989) provided a similar description of rule-governed behavior, including a detailed description of its origins. According to his account, previously acquired simple discriminations are combined in complex instructions, resulting in complex behavior. An interesting feature of this kind of behavior is that responding may occur in the presence of stimuli that are temporally and situationally removed from the conditions under which the instruction was presented. For instance, one might read a train schedule at home, and then leave work the following day and arrive at the train station at the appropriate time. When this happens, observers often attribute intention to behavior.

People sometimes attribute intention when the observed individual is both speaker and listener, which is often the case with instructional control. The notion of speaker as listener is not new. Skinner introduced it in two places in *Verbal Behavior* (1957). According to him, "People frequently talk to themselves" (p. 179). When this occurs, the vocal musculature may not be in operation. So, the "speech" may not be publicly observable. In such cases, "the speaker reacts as listener to his own behavior. Insofar as he automatically reinforces himself, he must be regarded as an audience affecting the strength of relevant parts of his behavior" (pp. 179–180). One must be cautious when attributing verbal influence to behavior because, as noted earlier, many situations in which observers attribute intention do not involve any verbal activity or the influence of verbal behavior on other behavior. It should be stressed that instances of contingency-shaped behavior and behavior under instructional control are difficult to discriminate. Verbally competent humans often engage in private running commentaries while engaged in nonverbal behavior, and when these verbalizations enter into functional relations with other behavior is not always clear.

Skinner (1957) also wrote of self-mands and self-tacts. An example was of a cold morning on which an individual provides a self-mand, "get up." This verbal response is easier to execute than actually getting out of bed because it is less likely to be followed by the aversive consequences of exposure to cold air. Yet, the mand may increase the likelihood of the person's actually getting out of bed. Skinner wrote, "It may be strong by induction from instances in which we have induced people to get up, and it may be effective if it increases the likelihood of our getting out of bed by induction from behavior with respect to other speakers" (p. 440). Whether or not this sort of self-manding is successful in influencing other behavior, it may occa-

sion the attribute of intention by an observer. Clearly, when individuals engage in behavior where the proximal consequences are aversive but the remote ones are appetitive, as in the example above, observers tend to attribute intention.

People may also respond to their own (or others') intraverbal behaviors, which are specific verbal responses occasioned by specific verbal stimuli. That is, intraverbals are verbal behavior chains in which the words comprising the chain are links (e.g., the reciting of a poem). Skinner gave an example of an individual's reciting the combination of a lock and then responding to the stimulation when opening the lock. This may be what is involved when individuals dial telephone numbers or recite the steps in starting a computer application. Intraverbals of this sort may occasion attributions of intention, and observers infer purpose, conforming to vernacular definitions of intentions.

Individuals may respond to tacts and autoclitics that they provide themselves. This may be what is involved when an individual composes a text (e.g., a reminder note) and then responds to it at a later date. However, such verbal behavior need not be transcribed, and the duration of the temporal gap may vary. For instance, an individual may self-tact (as well as self-mand) when planning business interactions that are to follow in weeks or months.

Only mands, tacts, intraverbals, and autoclitics have been mentioned with respect to the speaker as listener, but people speak to themselves in the same complex fashion that they speak with others, and this complex self-talk can influence behavior at a later time. For instance, much of a writer's prose may have developed earlier, or may be a response to verbal behavior that occurred while engaged in activities other than writing (e.g., raking leaves) and written later. This verbal behavior may influence subsequent behavior, and as members of a verbal community, we often

assume that it does, occasioning an attribution of intention.

Another example of attributing intention in instances of instructional control is goal setting, which is addressed in research on self-reinforcement. Much of the research on self-reinforcement included confounding variables such as demand characteristics, experimenter-set goals or contingencies, feedback, monitoring, and limitations on the subjects' control of all relevant aspects of the procedures (Gross & Wojnilower, 1984; Jones, Nelson, & Kazdin, 1977; Martin, 1979, 1980; Sohn & Lamal, 1982). However, Hayes et al. (1985) identified circumstances in which self-reinforcement is effective. Briefly, they found that self-reinforcement procedures are not effective when they are private, but goal setting alone is effective in modifying behavior when the goals are made public. Setting goals is a circumstance in which observers attribute intention.

The various consequences of behavior may determine whether an attribution of intention is occasioned. For example, consider a quarterback who throws a pass. A reception might occasion an attribution of intention. However, an interception is unlikely to occasion an attribution of intention to throw an interception. That is, most would say the pass was "intended," and there was an "intended receiver," but the interception was not "intended." As noted earlier, the individual may not verbalize at the time of action, but the consequences of the action may determine whether an attribution of intention is occasioned. That is, an attribution of intention may be occasioned when there are relevant verbal rules, but the consequences of the actions rather than the rules occasion the attribution.

CONCLUDING REMARKS

This paper is an attempt to provide a behavior-analytic account of the circumstances in which people speak of intentions, focusing on the behavior of

those doing the observing and speaking and the events that set the occasion for their behavior. Although the account falls short of revealing the contingencies that influence the talk of intentions, it describes a variety of circumstances in which individuals speak in this way, which is the first step toward contingency identification. In addition, this account of intentions hinges on a behavior-analytic view of the inferred relation between verbal behavior and other behavior, even when the relation does not exist or when no verbal behavior occurs. What distinguishes this approach from other approaches to intention is that the focus is on the interpreter rather than the individual whose behavior is in question. An advantage of this account is that this analysis may be helpful with respect to legal matters. That is, rather than focusing on the behavior and intentions of the accused, the focus may be directed to the situation and the verbal behavior of the observers to determine whether the events are like those in which people attribute intentions.

Consider the following nonlegal example, but one in which the observers attributed intention in one situation but not in another. In a recent National Association for Stock Car Racing (NASCAR) race, a particular driver caused two different accidents. In both cases, the driver in question clearly turned his wheels towards the right, tapping cars to his right and forcing them high on the track, in one case causing an accident involving two other cars. From the video footage, the actions of the driver were identical in both crashes, and NASCAR officials did not attribute intention from viewing the footage. In addition, the driver in question had a history of bumping cars, but NASCAR officials determined that that was insufficient to attribute intention because bumping can happen at any time, accidentally. The following statement made by the driver to his pit chief immediately after bumping in one instance was critical in making an attribution of intention by

NASCAR officials in that instance, but not the other: "I am not very good at being bad. I meant to crush the fender of the 7 car and I crushed my own fender." The verbalization (or others on the part of the driver) may or may not have had any influence on the driver's other behavior, but it is likely that it influenced the behavior of the NASCAR officials. This example highlights how aspects of the situation (verbalizations of the driver) were critical in setting the occasion for observers to make particular verbalizations (attributions of intention) in one situation and not in another, and helps to elucidate the critical features that enable discrimination between situations that occasion attributing intention and those that do not.

In general, including or focusing on the interpreter in this analysis is not new (Skinner, 1945). Hineline (1992) has written of the behavior of observers more recently. In his account of intentions, the emphasis is on the attribution of intention by interpreters, which is primarily influenced by the verbal community. Hineline concluded by stating that the locus of the interpreter is the locus of process that is sometimes difficult to pin down; he provided the following two conceptions, which are difficult to combine yet equally accurate, to illustrate the difficulty in pinpointing the perspective of interpreter as the locus of process: "Behavior is the interaction between organism and environment," and "The organism is a locus where behavior and environment interact" (p. 1284). I offer the following statement to help to clarify the locus of the interpreter without violating either of the above conceptions: Organism-behavior-environment is a network of relations, and speaking of them separately is a characteristic of verbal behavior.

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