Ordinary Language: The Contributions of Gilbert Ryle and John Austin to the Experimental Analysis of Behavior

T. R. Miles

University College of North Wales

The aim of this paper is to show how “conceptual analysis”—the philosophical method used by Gilbert Ryle and John Austin—can contribute to behavior analysis in general and in particular to the elucidation and development of views put forward by B. F. Skinner. One of the key requirements is a sensitivity to the precise circumstances in which particular combinations of words are uttered. Without such sensitivity, it is difficult to make informed decisions as to when ways of talking should be changed and when they should be left as they are.

Key words: verbal behavior, conceptual analysis, linguistic phenomenology, folk psychology, mentalistic words, sunrise words, logical syntax

The relationship of B. F. Skinner, Gilbert Ryle, and John Austin is a curious one. There is only one reference to Ryle in the whole of Skinner's writings (Skinner, 1957, p. 141); and it is clear in this passage that Skinner was unaware of the ways in which Ryle's philosophizing might be relevant to his own work. Similarly, there is no reference to Skinner in any of the writings of Ryle or Austin, although this is not altogether surprising because Ryle in particular (and to a lesser extent Austin) seldom referred to any of his contemporaries by name. In contrast, Ryle and Austin were colleagues at Oxford University; they continually met at philosophical discussion groups, and were entirely familiar with each other's views. Both, moreover, were part of what has been termed a “revolution in philosophy.” This is the title of a book edited by Ayer (1956), and there are many other writings (e.g., the two volumes of essays edited by Flew, 1951, 1953) that demonstrate the insights to be found in this particular genre of philosophy. Just how revolutionary they were must await the verdict of history.

What many people regarded as new—although its novelty may have been overemphasized—was the interest that phi-

losophers from the 1930s onwards started to take in the various functions of language. Ryle and Austin have sometimes been described as “linguistic” philosophers, although the label is not an altogether satisfactory one. Ryle's own account of his relationship to Austin includes the following:

I doubt if there would have been very much overlap between his thoughts and mine—or much conflict either. My chief, though not sole, interest in linguistic matters focused on such dictions as were (or else by contrast were not) in breach of “logical syntax.” . . . Austin's main interests, however, were in the dictions which constitute communications between persons. . . . An examiner might pose two questions: (1) Why cannot a traveller reach London gradually? (2) Why is “I warn you” the beginning of a warning, but “I insult you” not the beginning of an insult? On six days out of seven question 1 would be Ryle's favourite; question 2 Austin's. Each of us would think—wrongly—that there is not much meat in the unfavoured question. But their meats are of such entirely disparate kinds that the epithet “linguistic” would apply in totally different ways (1) to the answer-sketch “Adverbs like ‘gradually’ won't go with verbs like ‘reach’ for the following reason . . .”; (2) to the answer-sketch “To insult is to say to someone else pejorative things with such and such an intention, while to warn is to say . . .” Anti-nonsense rules govern impartially sayings of all types. (Ryle, 1978, pp. 14–15)

Rather than speaking of “linguistic philosophy,” it is perhaps more helpful to speak of “conceptual analysis.” Philosophy on this showing is concerned with the logical behavior of concepts—with the rules for operating with particular concepts and with situations in which these

Address correspondence to T. R. Miles, Department of Psychology, University College of North Wales, Bangor, Gwynedd LL57 20G, U.K.

rules are breached. If rules are verbalized, then there may be "rule-governed" behavior in Skinner's sense (Skinner, 1969, pp. 146–152); but in Ryle's sense of "rule" it is possible to "obey" the rules of logic, grammar, chess, and so on, without being able to formulate them explicitly.

The following is a characteristically modest account by Ryle that describes how his initial feeling was that he and his colleagues were onto something "revolutionary" and how this feeling came to be modified:

Without our noticing it at the time, hustings words ending in "ism" or "ist" faded out of our use. In this and other ways we were outgrowing some then prevalent attitudes towards philosophical issues. . . . The conviction that the Viennese dichotomy [that of the logical positivists] "either science or nonsense" had too few "ors" in it led some of us, including myself, to harbour and to work on a derivative suspicion. If, after all, logicians and even philosophers can say significant things, then perhaps some logicians and philosophers of the past, even the remote past, had, despite their unenlightenment, sometimes said significant things. "Conceptual analysis" seems to denote a permissible, even meritorious exercise. . . . Naturally we began, in a patronising mood, by looking for and finding in the Stoics, say, or Locke, primitive adumbrations of our most prized thoughts. But before long some of them seemed to move more like pioneers than toddlers, and to talk to us across the ages more like colleagues than like pupils; and then we forgot our pails of whitewash. (Ryle, 1978, p. 6 and pp. 10–11)

Examples of Conceptual Analysis

Before passing to the central theme of this paper, it may be helpful to illustrate by means of a few examples the kinds of thing that conceptual analysis in Ryle's sense can achieve. This will be followed by a discussion of the circumstances in which verbal habits need—and do not need—to be changed.

One of the most crucial concepts in philosophy is that of "knowledge." In the terminology of conceptual analysis, therefore, what is needed is a critical examination of the logical behavior of the word "know." The following combinations of words may throw light on this: (a) "I know there is a train at 9.30 a.m." (b) "She knew it was raining but it wasn't." (c) "I have been doing some knowing."

Now it is plain that (a) is logically appropriate, whereas (b) and (c) are not. It is part of the meaning of the word "know" that when we use it we are not only saying that something is the case but are giving an undertaking that we are right. To that extent our use of the word is *performative* (compare Austin, 1961, chap. 10). In this respect, "I know" is like "I promise" or "I apologize"; in saying these words one is not describing any event (and a fortiori not describing any "mental" event) but actually *making* the promise or *making* the apology. If X tells Y that she knows that there is a train at 9.30 a.m. and it turns out that there is not, Y would have every right to take X to task ("But you said you *knew*"). Austin's warning here is salutary: "The one thing we must not suppose is that what is needed in addition to the saying of the words in such cases is the performance of some internal spiritual act, of which the words then are to be the report" (Austin, 1961, p. 236).

Both (b) and (c), unlike (a), involve breaches of logical or linguistic rules. The reason why (b) is inappropriate is that it is implicit in the meaning of the word "know" that "I know p" entails "p." For this reason it would also be inappropriate to say, "She knows it is raining, and perhaps she is right." With regard to (c), "know" is not an "activity" verb, like "walk" or "sew," and one cannot, as a matter of logic, do some knowing in the way, for instance, that one does some walking or does some sewing.

Moreover, this mistake is compounded if one then postulates a special "mental" (or "cognitive") world in which such an activity is said to take place. As Ryle (1949) has pointed out, if we consider how the various so-called "mentalist" words are actually used ("know," "sensations," "feelings," "voluntary," "deduce," "conscious," etc.), we find that it is not their function to describe events or occurrences; for example, if feelings were occurrences it would make sense to say, "I caught a quick glimpse of some feelings" (cf. Ryle, 1949, chap. 7). From this it follows that there is no need to suppose that there is a "realm of the mind" in which such occurrences are housed. In

this connection, it is interesting to note that, unlike Skinner's radical behaviorism, methodological behaviorism has actually compounded this error. Methodological behaviorism is normally understood to be the view that "mental events" do, indeed, exist but are not suitable objects for scientific study (see Skinner, 1974, p. 15). This is to speak as though certain things and events can be neglected; a claim that invites the charge of narrow-mindedness. In contrast, radical behaviorism does not deny that people know things or have feelings; its proposal is that language of this sort requires correct reinterpretation and (in effect) that we should not mislead ourselves with faulty conceptual analysis.

Insights are also possible from a careful analysis of the concepts "recognize" and "recall." Some psychology textbooks give us the impression that these words stand for two distinguishable "mental processes" that anyone interested in "the mind" must therefore study. However, it makes no logical sense to say, for example, that for the last half hour I have been doing some recognizing. "Recognize" is an "achievement" word (compare Ryle, 1949, chap. 5) and in that respect is similar, for example, to "win," "convince," and "prove," which imply that a course of action has been successfully completed, not that something is happening over a period of time. What some psychologists seem to have overlooked is that when they speak of a "recognition paradigm" or a "recall paradigm" they are talking not about "mental processes" but about stimulus conditions. That is to say, the word "recognition" is used when an organism responds appropriately in the presence of a stimulus to which it had earlier been exposed, whereas the word "recall" is used in the absence of such a stimulus when the appropriate response has to be generated.

Although Skinner does not use the expression "conceptual analysis," the similarities between his ideas and those of Ryle and Austin are remarkable, particularly in view of the fact that he reached his conclusions quite independently. He of course recognized that what he was

doing could properly be called "philosophy" ("Behaviorism is not the science of human behavior but the philosophy of that science," Skinner, 1974, p. 3), but the similarities go further than this. Here, by way of parallel, is Skinner's account of the word "know": "A man 'knows how to write' in the sense that he possesses behavior with pen and paper which will be emitted under suitable circumstances and will generate certain kinds of marks" (Skinner, 1953, p. 408). In addition, his strictures on "the inner man" and "autonomous man" (Skinner, 1972, chap. 1) are in some ways suggestive of Ryle's strictures on "the ghost in the machine" (Ryle, 1949, chap. 1). Neither Skinner nor Ryle should be interpreted as making claims as to what is or is not the case: "There is no ghost in the machine" and "There is no autonomous man" are unsatisfactory as expositions, because they suggest logical similarities with "There is no cheese in the larder" or with other issues that can be settled by evidence. It is rather that misconstruction of ordinary words leads us to postulate "entities" for inappropriate reasons. Thus, when Skinner (1972, p. 8) says, "Almost everyone attributes human behavior to intentions," he is in effect saying that there are no uses for the expression "His intentions caused him to act in that way." It follows that those who postulate the existence of "intentions" as causal agencies are generating conceptual fog—fog that can be dispersed by more careful attention to the logical behavior of the word "intend."

Not all of Skinner's attempts at conceptual analysis are satisfactory (for some criticisms, see Harzem & Miles, 1978); but it should be remembered that he was pioneering what from his point of view were new ideas and that he had no access to the sophisticated kind of philosophy that was being practiced by Ryle, Austin, and their colleagues.

When Do Verbal Habits Need to Be Changed?

Now it may be argued that Skinner differs from Ryle and Austin in one major

respect: Skinner is not content simply to *analyze* our concepts but is continually making proposals for *changing* them. In particular, he regularly urges that our ordinary expressions should be “translated” in such a way that they can be seen as cases of behavior being reinforced or disinforced (made less frequent). (For a justification for using the word “disinforce” in place of “punish,” see Harzem & Miles, 1978, chap. 11.) Typical examples are those given in *Beyond Freedom and Dignity* (Skinner, 1972, pp. 146–147), where “He is dissatisfied or discouraged” is translated as “He is seldom reinforced, and as a result his behavior undergoes extinction,” and “He has . . . no sense of accomplishment” is translated as “He is rarely reinforced for doing anything.” “I have been trying,” says Skinner, “to get the reader to behave verbally as I behave. What teacher, writer, or friend does not?” (Skinner, 1957, p. 455). In contrast, so it seems, Ryle and Austin limited themselves to the language of what is now called “folk psychology”—to expressions that in some cases reflect the mistaken ideas of a pre-scientific age. Such preoccupation, it is sometimes suggested, is at best unhelpful and may even be harmful insofar as it appears to support the linguistic status quo and to discourage change.

This argument, however, is simplistic. If changes are needed, as they sometimes are, it may be for a number of different reasons that have not always been adequately distinguished. In what follows, the issues will be discussed under four heads: (a) linguistic phenomenology, (b) sunrise words, (c) conceptual innovation, and (d) breaches of logical rules. It will be argued that in the case of (a) and (b) no change in our linguistic habits is called for, and that the reasons for change under (c) are different from those under (d).

Linguistic phenomenology. There are some situations in which we talk in certain ways and in which we are quite proper in doing so. The following is a relevant quotation from Austin:

In view of the prevalence of the slogan “ordinary language” and such names as “linguistic” or “analytic” philosophy or “the analysis of language,”

one thing needs specially emphasising to counter misunderstandings. When we examine what we should say when, what words we should use in what situations, we are looking again not *merely* at words (or “meanings,” whatever they may be) but also at the realities we use the words to talk about: we are using a sharpened awareness of words to sharpen our perception of, though not as the final arbiter of, the phenomena. For this reason I think it might be better to use, for this way of doing philosophy, some less misleading name than those given above—for instance, “linguistic phenomenology,” only that is rather a mouthful. (Austin, 1961, p. 63)

There are some interesting similarities between this passage and the general thrust of what Skinner (1957) has to say in *Verbal Behavior*. Skinner’s main concern is to point out that verbal behavior, no less than other kinds of behavior, can be described in terms of operants being reinforced by the community; what Austin is saying in the above passage is (in Skinnerian terminology) that careful examination of the words used helps to throw light on the precise circumstances in which these operants are reinforced.

Austin’s example of the two donkeys is a telling illustration of this point.

You have a donkey, so have I, and they graze in the same field. The day comes when I conceive a dislike for mine. I go to shoot it . . . the brute falls in its tracks. I inspect the victim, and find to my horror that it is *your* donkey. I appear on your doorstep with the remains and say—what? “I’ve shot your donkey *by accident*”? Or “*by mistake*”? Then again I go to shoot my donkey as before . . . [I] fire—but as I do so, the beasts move, and to my horror yours falls. Again the scene on the doorstep—what do I say? “By mistake”? Or “by accident”? (Austin, 1961, p. 133)

The point of this rather gruesome story is presumably to illustrate that particular words are appropriate when certain quite subtle *combinations* of events occur. Any experienced language user knows what these combinations are; thus the first situation was a mistake, the second an accident. Similarly if at bridge or whist someone plays the two of spades, this could in the right context be a revoke, but the playing of a given card is a revoke only if certain preconditions are satisfied (for instance if a heart was led and there was a heart in the player’s hand). In passing, it is worth noting that if the word “equivalate” becomes widely used in connection with any situation in which

an organism displays equivalence behavior, it will be seen to have a similar logic to that of "revoke." Pressing a particular panel is not in itself equating any more than playing the two of spades is revoking. Nor is either of them a "mental" activity lying behind the "physical" activity of pressing a panel or playing a card.

One of the legacies, therefore, that Ryle and Austin have bequeathed to us is a technique by which the logical behavior of any concept—whether a technical term such as "equivalate" or a familiar expression such as "make a mistake"—can be scrutinized. The role of linguistic phenomenology is to give us a sharper awareness of what is happening in contexts in which no change in our linguistic habits is called for.

Sunrise words. Despite the above, however, it is clear that there are some words in our language that are prescientific in the sense that they reflect the science (or "prescience") of bygone times. There are many familiar examples of this. One of the most often quoted is that of "sunrise." At least at first glance, this word appears to be tied to a pre-Copernican system of astronomy. Other examples of what may be called sunrise words include "jovial" (you behave in certain ways because you were born under Jove), "temperamental" (the elements—earth, air, fire, and water—that make up your body are not mixed in the right way), "schizophrenic" (your phren, or midriff, has been split), and "of two minds" (separate "bits" of your personality are pulling you in different ways).

The science is, of course, primitive. However, it does not follow that there is any strong case for revision. Such words are harmless for the simple reason that no one is misled by them. To quote Skinner (1972, p. 23), "No one looks askance at the astronomer when he says that the sun rises or that the stars come out at night." Similarly, use of the word "jovial" does not now commit us to believe that those who display jovial behavior were all born under Jove! It may be concluded that sunrise words are harmless as long as we are prepared to discount

some of their misleading theoretical implications. In this connection, many of us are happy to follow the wise advice of Bishop Berkeley when he says that we should "think with the learned and speak with the vulgar" (*Principles of Human Knowledge*, section 51).

Conceptual innovation. The important skill in this area is that of recognizing when innovations are needed and when they are not. There is also the risk that in proposing innovations we may sometimes mislead ourselves. This can happen if we do so from a position of weakness or ignorance—without having, in Ryle's phrase, the appropriate "insurance policy." As Austin has reminded us:

Our common stock of words embodies all the distinctions men have found worth drawing, and the connexions they have found worth marking, in the lifetimes of many generations: these surely are likely to be more numerous, more sound, since they have stood up to the long test of the survival of the fittest, and more subtle, at least in all ordinary and reasonably practical matters, than any you or I are likely to think up in our arm-chairs. (Austin, 1961, p. 182)

In another passage, he amplifies his position as follows:

Certainly when we have discovered how a word is in fact used, that may not be the end of the matter; there is certainly no reason why, in general, things should be left exactly as we find them; we may wish to tidy the situation up a bit, revise the map here and there, draw the boundaries and distinctions rather differently. But still, it is advisable always to bear in mind (a) that the distinctions embodied in our vast and, for the most part, relatively ancient stock of words are neither few nor always very obvious, and almost never just arbitrary; (b) that in any case, before indulging in any tampering on our own account, we need to find out what it is that we have to deal with; and (c) that tampering with words in what we take to be one little corner of the field is always *liable* to have unforeseen repercussions in the adjoining territory. Tampering, in fact, is not so easy as is often supposed, and is often thought to be necessary just because what we've got already has been misrepresented. And we must always be particularly wary of the philosophical habit of dismissing some of (if not all) the ordinary uses of a word as "unimportant," a habit which makes distortion practically unavoidable. (Austin, 1962, p. 63)

In this connection, he invites us to reflect on the word "real." In ordinary language we speak of "real cream" (as opposed to synthetic cream), "the real color

of her hair" (as opposed to the color it looks when dyed), "real diamonds" (as opposed to forgeries or paste), and "a real duck" (as opposed to a dummy, a toy, a picture, or a decoy). Certain words, according to Austin (including the word "real"), are "trouser" words:

With "real" . . . it is the *negative* use that wears the trousers. That is, a definite sense attaches to the assertion that something is real, a real such-and-such, only in the light of a specific way in which it might be, or might have been, *not* real. . . . I don't know *just* how to take the assertion that it's a real duck unless I know *just* what, on that particular occasion, the speaker has it in mind to exclude. This is, of course, why the attempt to find a characteristic common to all things that could be called "real" is doomed to failure; the function of "real" is not to contribute positively to the characterisation of anything, but to exclude possible ways of being *not* real—and these ways are both numerous for particular kinds of things, and liable to be quite different for different kinds. It is this identity of general function combined with immense diversity in specific applications which gives to the word "real" the, at first sight, baffling feature of having neither one single "meaning," nor yet ambiguity, a number of different meanings. (Austin, 1962, pp. 70–71)

Another important trouser word is "free" (compare Austin, 1961, p. 128). Thus there are many different ways of being unfree. For instance, to ask, "Are you free this afternoon?" is in effect to ask if you have any previous engagement. In a different context, however, "free" could mean "not in prison" and in yet another context "not tied up." Skinner—albeit with occasional lapses, as when he speaks of the belief in human freedom as a false *hypothesis* (Skinner, 1953, p. 447)—is in general in agreement with Austin: The word "free" is commonly used in those situations in which there is absence of coercive control, and these situations can be many and varied.

Skinner and Austin are also in agreement in their rejection of the idea that our perception of the world is somehow "indirect" (compare Skinner, 1987, p. 780). Neither wishes to say that we are aware of *copies* of things, whether ideas, sense-data, or what have you. Austin, however, is unlike Skinner in that he bases his argument on careful examination of the ordinary uses of "direct" and "indirect."

We might, for example, contrast the man who saw the procession directly with the man who saw it *through a periscope*; or we might contrast the place from which you can watch the door directly with the place from which you can see it only *in the mirror*. . . . The notion of indirect perception is not naturally at home with senses other than sight. With the other senses there is nothing quite analogous with the "line of vision." The most natural sense of "hearing indirectly," of course, is that of being *told* something by an intermediary—a quite different matter. . . . And what smelling indirectly might be I have simply no idea (Austin, 1962, pp. 15–17).

It is not that those learned folk who assert that perception is indirect happen in fact to be wrong. The error that is being exposed here is of a more subtle kind, because it involves a breach of logical rules: The words "direct" and "indirect" are being given a logic that they do not possess.

A change in verbal habits is, indeed, called for here, but it is not a change that affects the so-called ordinary person. The ordinary person can distinguish quite well between copies and originals, and has no wish to say that when we look at a table we are really looking at the copy of a table. Where the change is needed is in the verbal habits of the learned—philosophers, psychologists, and others who are interested in theorizing. In this area, Ryle and Austin have provided a technique for recognizing what may be called "philosophers' nonsense." The utterances of learned folk are sometimes inappropriate because they involve unwitting breaches of logical rules. This is a matter to which we must now turn.

Breaches of logical rules. The notion of "breaching rules" needs to be treated with caution. The basic point is that, as a matter of logic, some words do not "go" with others (compare Plato, *Sophist*, section 262). Thus it makes sense to say "Smith went for a walk" but not "Causality went for a walk." The latter is in some sense a "breach of the rules." In most cases such breaches are obvious, although disputes as to what is and is not a breach may arise from time to time. What is more important is to recognize that the "rules" of logic are in many ways unlike the rules of baseball or the rules of a club. In breaching them, one may mislead one-

self and others, but there is no equivalent to being penalized by the referee or by the club committee. Indeed, there is no reason at all why people should not violate the rules of logic as long as they do so from a position of strength; that is, as long as they understand what they are doing. There are plenty of epigrams, witticisms, etc., that involve such violation but that for that very reason are the more poignant. A good example is the claim, made in George Orwell's *Animal Farm*, that "all animals are equal but some animals are more equal than others." Similarly, many of the things in Lewis Carroll's *Through the Looking Glass* charm us precisely because they are breaches of logical rules; for instance, "I could show you hills in comparison with which you'd call that a valley." Conceptual analysis is not in the business of inhibiting witticisms or fun.

There are many places in Skinner's writings where he is in effect attacking breaches of logical rules. He speaks disparagingly, for example, of those who "assign an independent existence to meanings" (Skinner, 1957, p. 7). In the terminology of conceptual analysis, he is here saying that there is no use for the expression "I have discovered the existence of meanings," or, in his own terminology, there are no occasions when the utterance of such words would be reinforced. Austin (1961, p. 23) exposes the same error by presenting what he calls "specimens of sense" and "specimens of nonsense." Among specimens of sense are, "What-is-the-meaning-of (the word) 'rat'?" and "What-is-the-meaning-of (the word) 'word'?"; among specimens of nonsense are, "What-is-the-meaning-of a word?" and "What is the 'meaning' of a word?"

Similarly, it is philosophers' nonsense to argue, as used to be done in the opening chapter of some psychology textbooks, that psychology studies "experience and behavior" (see, e.g., Thouless, 1947, p. 1). Reflection on the ordinary uses of "experience" suggests that people may speak, for example, of "wonderful experiences in Norway" but that they never say that on Monday a researcher

studied experiences and that on Tuesday he or she studied behavior. This is not because to do so would be an unwise way for one to parcel out one's time, but because the word "experience" is unwittingly being used in a new and unexplained fashion. If it is argued, as it used to be by self-professed "antibehaviorists," that experiences exist as well as behavior, the appropriate rejoinder is to ask when anyone (other than the learned when they are conceptually confused) would ever have occasion to ask whether experiences exist. At a stretch, one can imagine the following conversation:

A: I had some wonderful experiences in Norway.
B (turning to C): I don't believe these experiences ever existed.

This kind of example seems the nearest one can get to finding a use for the expression "experiences exist," and it thereby illustrates the way in which learned folk (philosophers and psychologists) have sent us off track.

As late as this year a book has been published (Gross, 1993) entitled *Psychology: The Science of Mind and Behaviour*. Yet this title ignores the crucial points made by Ryle over 40 years earlier in the first chapter of *The Concept of Mind* (Ryle, 1949). To take one of Ryle's examples, a stranger to the game of cricket, having been told what are the jobs of the batsmen, the bowlers, and so on, then asks whose job it is to exercise team spirit. However, as Ryle points out,

Team spirit is not another cricketing operation supplementary to all of the other special tasks. It is, roughly, the keenness with which each of the special tasks is performed, and performing a task keenly is not performing two tasks. (Ryle, 1949, p. 17)

To speak of "batsman and bowler" is a logically appropriate conjunction, but to speak in the same way of "batsman and team spirit" would be to make what Ryle has called a "category mistake." Similarly, it is appropriate as a matter of logic to speak of studying birds and insects or rats and mice, but to treat "mind and behavior" as a comparable conjunction is to be guilty of the category mistake against which Ryle issued his warning.

Another example where logical rules

are sometimes broken is in the case of the word "private." Here, too, we must ask how this word was originally learned or in what circumstances the behavior of using it was reinforced. A private road is one to which the public is not admitted; a private tea party is one restricted to family and friends. The trouble is that learned folk then proceed to speak of "private experiences" and to say such things as "My toothache is private to me." Yet what might a private toothache be, and how is it different from a public toothache? What are public experiences like as opposed to private ones? At a stretch one can imagine the following conversation: "Tell me about your toothache"; "No, my toothache is private and I am not prepared to discuss it." This, however, gives no justification for speaking of a toothache as an *event*. Ryle (1949, chap. 7) has shown that words describing bodily sensations have a different logic from words describing events; indeed if this were not so, it would make sense, for example, to speak of taking a peep at one's tingle. The suggestion that when someone feels toothache he has *access* to something is a logical blunder that is compounded if the events in question are then said to be "private." What is needed in the case of the word "private" is careful attention, à la Austin, to standard usage, so that can one recognize misleading departures from it.

In general, therefore, one of the things to which Ryle and Austin have alerted us is the need to recognize what may be called "philosophers' nonsense"—things that we are tempted to say when we attempt to theorize but that can be seen on examination to involve breaches of logical rules.

One final example of the use of conceptual analysis may be given. This typifies the situation in which appeals to "ordinary usage" are illuminating without being decisive. In the experimental analysis of behavior, we are tempted in our more philosophical moments to say that no behavior is ever capricious. The reason we say this is that if in the case of any behavior we search for the contingencies that have shaped or will shape it,

we are often successful in finding them. But do we really mean that no behavior is *ever* capricious? Let us begin, as usual, by considering the circumstances in which the word "capricious" is standardly used—the circumstances in which people originally learned its meaning. A key notion is that of inconsistency. Thus, an adult who inflicts something unpleasant on a child for no apparent reason yet takes no notice of the child's serious misdemeanors can be said to be behaving capriciously; on the face of it, the statement "no behavior is ever capricious" is plainly false, because, sadly, one sometimes meets behavior of that kind.

In this case, however, appeals to ordinary usage are not necessarily the last word. As the word "capricious" functions at present, it is indeed false to say that "no behavior is ever capricious." Whether people nowadays are more consistent in the way they bring up their children than they used to be is a factual matter that need not concern us. The relevant point is the conceptual one: What is being said is that in a science of behavior the distinction between "capricious" and "not capricious" reflects our present ignorance. Once the expression "no action is ever capricious" is recognized as a proposal for conceptual revision, the issue of whether such a revision is desirable can be considered on its merits.

Concluding Remarks

Conceptual analysis of the kind pioneered by Ryle and Austin is relevant to the experimental analysis of behavior for the following reasons:

1. It reminds us of the need to consider carefully what we would say when; in Skinnerian terminology, it reminds us of the need to consider the precise circumstances in which particular verbal utterances are reinforced. As a result, it sharpens our awareness of what exactly is happening in these situations. This is the discipline that Austin calls "linguistic phenomenology." It can be used to explicate differences between humans and other animals (Miles, 1983) and to throw

light on many other situations in which familiar mentalistic concepts are correctly used.

2. It distinguishes the unease about what I have called sunrise words from dissatisfactions with existing language that have more substantial justification.

3. It allows for the possibility of conceptual revision while forcing us to consider carefully what exactly it is that we are revising.

4. It alerts us to the fact that we may sometimes mislead ourselves by failing to recognize when we are breaching logical rules.

It is therefore very much to be hoped that those who practice the experimental analysis of behavior will keep alive the techniques pioneered by Ryle and Austin. In particular, what is needed is an Austin-like sensitivity to standard uses of a word, so that unwitting departures from the standard can be recognized. Such sensitivity provides an antidote to "philosophers' nonsense" and makes possible better informed decisions as to when language should be changed and when it should be left as it is.

REFERENCES

- Austin, J. L. (1961). *Philosophical papers*. Oxford: Clarendon Press.
- Austin, J. L. (1962). *Sense and sensibilia*. Oxford: Clarendon Press.
- Ayer, A. J. (Ed.). (1956). *Revolution in philosophy*. London: Macmillan.
- Flew, A. G. N. (Ed.). (1951). *Logic and language*. Oxford: Blackwell.
- Flew, A. G. N. (Ed.). (1953). *Logic and language* (2nd series). Oxford: Blackwell.
- Gross, R. (1993). *Psychology: The science of mind and behaviour*. Sevenoaks: Hodder & Stoughton.
- Harzem, P., & Miles, T. R. (1978). *Conceptual issues in operant psychology*. Chichester, England: Wiley.
- Miles, T. R. (1983). Responsibility in the cockroach. In G. C. L. Davey (Ed.), *Animal models of human behavior* (pp. 3–13). Chichester, England: Wiley.
- Ryle, G. (1949). *The concept of mind*. London: Hutchinson.
- Ryle, G. (1978). Autobiographical. In O. P. Wood & G. Pitcher (Eds.), *Ryle* (pp. 1–15). London: Macmillan.
- Skinner, B. F. (1953). *Science and human behavior*. New York: Free Press.
- Skinner, B. F. (1957). *Verbal behavior*. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1969). *Contingencies of reinforcement: A theoretical analysis*. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1972). *Beyond freedom and dignity*. London: Jonathan Cape.
- Skinner, B. F. (1974). *About behaviorism*. London: Jonathan Cape.
- Skinner, B. F. (1987). Whatever happened to psychology as the science of behavior? *American Psychologist*, 8, 780–786.
- Thouless, R. H. (1947). *General and social psychology*. London: University Tutorial Press.