

translation rather than the other. Or so it seems to me: part of the trouble about the indeterminacy thesis is that the arguments for it stay on a level of high generality, without our being given a single concrete example.

I do not claim to be able to show that an indeterminacy of translation, of the kind suggested by Quine in his comment on my paper, cannot occur. All I claim is that the underdetermination of theory is the sole positive reason Quine has given for believing that indeterminacy of translation actually occurs, and that it is not in fact a cogent reason. I think it is possible to add that the sort of case which Quine suggested is the only kind of indeterminacy of translation which could obtain; and I do not think we have as yet a single convincing reason for thinking that it actually does.

MEANING AS FUNCTIONAL CLASSIFICATION*

(A Perspective on the Relation of Syntax to Semantics)

I

Gilbert Harman, in his admirable paper 'Three Levels of Meaning',¹ distinguishes three approaches which different groups of philosophers have taken in attempting to clarify what it is for linguistic expression to have meaning. Each of these approaches finds the area Ariadne thread to guide us through the labyrinth of semantics in a different function of language. One group takes as its central theme the idea that language is, so to speak, the very medium in which we think, at least at the distinctively human level. Another finds its clue in the fact of communication. Still another focuses its attention on the kinship between such linguistic acts as stating and promising and a broad spectrum of social practices. Harman correctly, in my opinion, points out that viewed as three attempts to answer one and the same question, these strategies involve serious confusions, and that those who take them to be such have inevitably become entangled in fruitless controversies. He also, somewhat generously, I think, recommends that we view them as attempts to answer three different questions and suggests, accordingly, that we refrain from criticizing any one of them "for failing to do what can be done only by a theory of meaning of another level."²

Harman calls approaches to meaning of these three types "theories of meaning of level 1, 2 and 3, respectively." Thus, he correctly, I think, considers the approach to meaning which construes language as the medium in which we think to be fundamental, and, accordingly, of "level 1." He argues that "a theory of level 2", i.e. a theory of communication (of thoughts) presupposes a theory of level 1 that would say what various thoughts are. Similarly, a theory of level 3 (e.g., an account of promising) must almost always presuppose a theory of level 2 (since in promising one must communicate what it is one has promised to do). He argues that "a theory of one level does not provide a good theory of another level. A theory of the meaning of thoughts does not provide a good account of

communication. A theory of meaning and communication does not provide a good account of speech acts."³

Now one need not agree that even distinctively human thinking is literally done 'in words', in order to appreciate the importance of Harman's three-tiered approach to theories of meaning. For even if, as I do, one finds a reference to 'inner conceptual episodes' which are only in an analogical sense 'verbal' to be an indispensable feature of what might be called fine-grained psychological explanations, it is nevertheless possible to construe this 'fine-grained' framework as a theoretical enrichment of a 'coarse grained' behavioristic explanatory framework which, from the former point of view, simply *equates* thinking with states which are 'verbal' – if I may so put it – in the literal sense. To be interesting for our purposes this 'coarse grained' framework would have to be methodologically autonomous in the sense that it would contain categories of sense and reference, meaning and truth which could be fully explicated without any reference to non-verbal 'inner conceptual episodes'. Thus, in this behavioristic framework linguistic episodes would be characterized *directly* in semantical terms, i.e. without a reference to the 'inner conceptual episodes' which, from the standpoint of the enriched framework, are involved in a finer grained explanation of their occurrence.

Just as micro-physical theories have typically made use of conceptually independent models at the perceptual level, so, I shall argue, the explanatory function of 'inner conceptual episodes' can be construed as resting upon an autonomous proto-psychological framework in which linguistic activity is described, explained and evaluated without reference to the framework of 'mental acts' which it supports.

With these qualifications, then, the enterprise in which I am engaged is the construction of a 'level 1 theory of meaning' in Harman's sense of this phrase. I shall refer to what he calls 'thinking in words' as thinking-out-loud. On the assumption that such a proto-psychological framework can be isolated, I shall present it in the guise of a claim that thinking at the characteristically human level simply *is* what is described by this framework. I shall refer to this claim as Verbal Behaviorism. It is not intended to be an adequate account of thinking; it is, indeed, radically oversimplified. But I believe that it will provide a useful means of clarifying certain key issues in the philosophy of language.

According to VB, thinking 'that-*p*,' where this means 'having the

thought occur to one that-*p*,' has as its *primary* sense *saying* '*p*'; and a *secondary* sense in which it stands for a short term proximate propensity to say '*p*'. Propensities tend to be actualized (a logical point about the term); when they are not, we speak of them as, for example, 'blocked'. The VB I am constructing sees the relevant inhibiting factor which blocks a saying that-*p* as that of not being in a thinking-out-loud frame of mind. If one were theorizing about it, one might use the model of a general 'on-off' switch which gets into the child's 'wiring diagram' when he learns to keep his thoughts to himself.

Again, a thinking-out-loud that-*fa* is to be construed as a candid utterance (by one who speaks a regimented PMese language) of '*fa*' which realizes a fragment of the conceptual functions of '*f*' and '*a*', and is related to their other conceptual functions, as a placing of a pawn on a chess board in the course of a game *realizes* a fragment of the function of a pawn and is related to its other chess functions.

Notice that I have been treating that-clauses as quoted expressions, thus, in the above account

the thought that $2 + 2 = 4$ occurred to Jones

becomes

Jones said (or had a short term proximate disposition to say)
' $2 + 2 = 4$ '.

For, as the verbal behaviorist sees it, if thinking is verbal activity, then ascribing a certain thought to a person by the use of 'indirect discourse' is not simply analogous to, but identical with, telling what someone has said (or was disposed to say).

The above equation of quoting with indirect discourse is, of course, not only *parochial*, in that it views the latter in the context of only one language – the speaker's. It also fails to take into account the fact that even with respect to one and the same language people can make non-trivially different utterances '*p*', '*q*', '*r*' and nevertheless be correctly described as saying that-*p*. The clarification of this fact requires an account of similarity of meaning and its relation to indirect discourse.

In any ordinary sense, of course, saying '*p*' is an action or performance. From the point of view of this paper, to characterize an utterance as a 'saying', as the verb 'to say' is ordinarily used, permits it to be either a spontaneous thinking-out-loud that-*p* or a deliberate use of words to

achieve a purpose. Here, on the other hand, the verb 'to say' is being used in a *contrived* sense in which these options are closed, and the utterance specifically construed as a spontaneous or candid thinking out loud. Mental acts in the Cartesian or Aristotelian sense are, of course, not *actions*, but rather *actualities*, and consequently the thinkings-out-loud which I am offering as a model for classical mental acts construed as elements in a finer grained explanatory framework, must not be thought of as linguistic *actions*. More accurately, they must not be construed as *other-directed* or social actions. For, even if individual mental *acts*, thus the act of thinking that-*fa* is not itself an *action*, it may well occur in a sequence of mental acts which as sequence constitutes a mental action, e.g. the action of pondering whether or not to undertake a certain course of action. Correspondingly, the act of thinking-out-loud that-*fa* may well occur in a sequence of thinkings-out-loud which constitutes the *action* of pondering-out-loud whether or not to engage in that course of action, even though that pondering-out-loud is not an *other-directed* or *social* action. Thus the Verbal Behaviorist can construe actions of pondering-out-loud as the model for the theoretical conception of what it is to ponder *in foro interno*.

If all full-fledged linguistic episodes were actions, then learning a language would be learning a repertoire of actions. This way of looking at language gives comfort to Cartesians in the following way. Obviously not all *thoughts* are actions. Indeed such central kinds of thought as perceptual takings, inferences, and volitions are not actions for the simple reason that they are not the sort of thing which can be done intentionally or that one can decide to do. One can decide *to look* in the next room, but not *to take there to be a burglar* in the next room. Of course there *are* mental actions, thus, working on a mathematical problem or pondering what to wear. But as pointed out above, they consist of chains of thoughts which are not themselves actions.

Now if all *linguistic* episodes were actions, then all conceptually meaningful non-actions would have to be non-linguistic and, hence, thoughts in something like the Cartesian sense. It would be at this *non-linguistic* level that the thinking would occur by virtue of which *linguistic* activity could realize intentions and constitute a domain of actions. It is but a step from this to construing language as essentially an instrument for 'expressing thoughts' – when one is being candid – and, in general,

for leading others to believe that one believes that-*p* (or intends that-*p*), and perhaps intends that they believe that one intends that they so believe, etc. All linguistic episodes would be actions; not just those which are statings, promisings, warnings, etc.

II

One can imagine a child to learn a rudimentary language in terms of which he can perceive, draw inferences, and act. In doing so, he begins by uttering noises which *sound like* words and sentences and ends by uttering noises which *are* words and sentences. We might use quoted words to describe what he is doing at both stages, but in the earlier stage we are classifying his utterances as *sounds* and only by courtesy and anticipation as *words*. Only when the child has got the hang of how his utterances function in the language can he be properly characterized as saying 'This is a book' or 'It is not raining' or 'Lightning, so shortly thunder'.

I offer the following as an initial or working description of the thesis I wish to defend. To say *what* a person says, or, more generally, to say *what* a kind of utterance says, is to give a functional classification of the utterance. This functional classification involves a special [illustrating] use of expressions with which the addressee is presumed to be familiar, i.e. which are, so to speak, in his background language. Some of the functions with respect to which utterances are classified are purely intra-linguistic (syntactical), and, in simple cases, are correlated with formation and transformation rules as described in classical logical syntax. Others concern language as a response to sensory stimulation by environmental objects – thus, candidly saying, or having the short term propensity to say, 'Here is a penny', or 'This table is red'. Still others concern the connection of practical thinking with behavior. All these dimensions of functioning recur at the metalinguistic level in the language in which we respond to verbal behavior, draw inferences about verbal behavior and engage in practical thinking about verbal behavior – i.e. practical thinking-out-loud (or propensities to think-out-loud) about thinking-out-loud (or propensities to think-out-loud).

Thus when we characterize a person's utterances by using a quoted expression, we imply that the utterance is an instance or certain specific ways of functioning. For example, it would be absurd to say

Tom *said* (as contrasted with 'uttered the noises') 'It is *not* raining', but, even in serious frames of mind, and in contexts in which the state of the weather is of great practical importance, can be disposed to think-out-loud 'It is raining *and* it is *not* raining'.

Thus, to characterize a person's utterance by the use of quoted sentences containing logical words is to imply that the corresponding sounds function properly in the verbal behavior in question; and hence to imply that the uniformities characteristic of these ways of functioning are present in his thinkings-out-loud and proximate propensities to think-out-loud.

It should be stressed that the uniformities involved in meaningful verbal behavior include *negative* uniformities, i.e. the avoidance of certain combinations, as well as *positive* uniformities, i.e. uniformities of concomitance. Indeed, negative uniformities play by far the more important role, and the rules which govern them are to be construed as *constraints* rather than incentives.

The functioning which gives the utterances of one who has learned a language their meaning *can* exist merely at the level of uniformities as in the case of the fledgling speaker. Those who train him, thus his parents, think about these functionings and attempts to ensure that his verbal behavior exemplifies them. In this respect, the trainer operates not only at the level of the trainee, thinking thoughts about things, but also at that higher level which is thinking thoughts about the functions by virtue of which first level language has the meanings it does. In traditional terms, the trainer knows the *rules* which govern the *correct* functioning of the language. The language learner begins by *conforming* to these rules without grasping them himself.

Only subsequently does the language learner become a full-fledged member of the linguistic community, who thinks thoughts (theoretical and practical) not only about *non-linguistic* items, but also about *linguistic* items, i.e., from the point of view of VB, about first level thoughts. He has then developed from being the object of training and criticism by others to the stage at which he can train and criticize other language users and even himself. Indeed he has now reached the level at which he can formulate new and sophisticated standards in terms of which to reshape his language and develop new modes of thought.

The key to the concept of a linguistic rule is its complex relation to pattern-governed linguistic behavior. The general concept of pattern governed behavior is a familiar one. Roughly it is the concept of behavior which exhibits a pattern, not because it is brought about by the intention that it exhibit this pattern, but because the propensity to emit behavior of the pattern has been selectively reinforced, and the propensity to emit behavior which does not conform to this pattern selectively extinguished. A useful analogy is the natural selection which results in the patterns of behavior which constitutes the so-called language of bees.⁴

If patterned governed behavior can arise by 'natural' selection, it can also arise by purposive selection on the part of trainers. They can be construed as reasoning.

Patterned-behavior of such and such a kind *ought to be* exhibited by trainees, hence we, the trainers, *ought to do* this and that, as likely to bring it about that it *is* exhibited.

The basic point to bear in mind is that a piece of patterned governed behavior is *as such* not an action (though actions can consist of sequences of pattern governed behavior), and is correct or incorrect not as *actions* are correct or incorrect, but as events which are not actions are correct or incorrect. An obvious example of the latter would be the correctness of *feeling sorrow* for someone who is bereaved.

'This is red', as a patterned governed response to red objects, is not an action. Yet it is covered by a rule and, indeed, a rule which is involved in the explanation of its occurrence. The rule which directly covers it is, however, an *ought-to-be*, and it is involved in the explanation by virtue of the fact that it was envisaged by the trainers who assisted the speaker in acquiring his linguistic ability. Trainees conform to *ought-to-be's* because trainers obey corresponding *ought-to-do's*.

Essential to any language are three types of pattern governed linguistic behavior.

- (1) Language Entry Transitions: The speaker responds to objects in perceptual situations, and in certain states of himself, with appropriate linguistic activity.
- (2) Intra-linguistic Moves: The speaker's linguistic conceptual episodes tend to occur in patterns of valid inference (theoreti-

cal and practical), and tend not to occur in patterns which violate logical principles.⁵

- (3) Language Departure Transitions: The speaker responds to such linguistic conceptual episodes as 'I will now raise my hand' with an upward motion of the hand, etc.

It is essential to note that not only are the abilities to engage in such thinkings-out-loud *acquired* as pattern governed activity, they *remain* pattern governed activity. The linguistic activities which are perceptual takings, inferences and volitions *never* become *obeyings* of *ought-to-do* rules. Thus, compare

- (A) Jones All men are mortal
So, no non-mortals are men
- (B) Smith If I am entitled to 'All men are mortal', I am entitled to 'No non-mortals are men'.
I am entitled to the former, I state it thus: All men are mortal
So, I am entitled to the latter, I state it thus: No non-mortals are men

In each case the upshot contains the sequence: 'All men are mortal', 'No non-mortals are men'. But only Jones is *inferring* the latter from the former. Smith exhibits a piece of practical reasoning about linguistic entitlements which he proceeds to exercise.

It must also be stressed that the concept of pattern should not be interpreted narrowly. Thus, one must include in one's paradigm not only acquiring a propensity to exhibit uniformities of the kind illustrated by the pattern

All --- is ...
This is ---
So, this is ...

but also propensities of the kind which Wittgenstein describes as 'knowing how to go on'. There are many dimensions of knowing how to go on; and the patterns or recursiveness stressed by structural linguistics are essential to the workings of language. They can, however, and, indeed, must be included in an adequate conception of pattern-governed behavior.

Pattern-governed behavior may involve a routine, but it need not be routine.

It is the pattern-governed activities of perception, inference and volition, themselves essentially non-actions, which underlie and make possible the domain of actions, linguistic and non-linguistic. Thus the trainee acquires not only the repertoire of pattern-governed linguistic behavior which is language about non-linguistic items, but also that extended repertoire which is language about linguistic as well as non-linguistic items. He is able to classify items in the linguistic kinds, and to engage in theoretical and practical reasoning about his linguistic behavior. Language entry transitions now include 'This is a "2 + 2 = 4"' as well as 'This is a table'. Language departure transitions include, 'I will say "2 + 2 = 4"' followed by a saying of '2 + 2 = 4', as well as 'I will raise my hand' followed by a raising of the hand.⁶ The trainee acquires the ability to language about languagings, to criticize languagings, including his own; he can become one who trains himself.

It would be a mistake to suppose that a language is learned as a layer cake is constructed: *first* the object language, *then* a meta-language, *then* a meta-meta-language, etc.,⁷ or, *first*, descriptive expressions, *then* logical words, *then* expressions of intention, etc. The language learner gropes in all these dimensions simultaneously. And each level of achievement is more accurately pictured as a falling of things belonging to different dimensions into place, rather than an addition of a new story to a building.

III

Notice that according to the VB conception of thinking, we can distinguish clearly between the *functional* role of utterances and the *phomenic* description of the linguistic materials which embody or are the 'vehicles' of these functions. It is a most significant fact that the classical conception of thought as 'inner speech' (Mentalese) draws no such clear distinction between the conceptual functions of Mentalese symbols, and the materials which serve as the *vehicle* of these functions. Yet, if the analogy between thinking, classically construed, and overt linguistic behavior is to be a reasonably positive one, the idea that there must be inner-linguistic *vehicles* (materials) would seem to be a reasonable one. It is often thought that imagery is the vehicle of Mentalese – but there doesn't seem to be

enough imagery to go around. And, indeed, the idea of imageless thought is by no means incoherent. What might the vehicle be?

From the point of view of this paper, the classical conception of thoughts as pure occurrents is motivated by the familiar attempt to relate changes in *dispositional properties* to changes in *underlying non-dispositional* states. The emptiness of the classical account of thought episodes can be explained by the fact that it uses as its model for the description of the *intrinsic* nature of mental acts (i.e. what they 'consist of') aspects of linguistic activity which are largely functional in character.⁸ Thus by and large, it is the *non-functional* aspects of the linguistic model which are, save in their most generic aspects, disregarded. After all, leaving aside functional considerations, thoughts *are* neurophysiological processes; and this is an idea which no arm-chair philosophizing could turn into cash.

IV

How does 'that-*fa*' function in 'Jones says that-*fa*' (where 'says' is used in the sense of 'thinks-out-loud')? To answer this question, we must ask a prior question:

How does "*fa*" function in "Jones says '*fa*'"?

The answer is that "*fa*" functions as an adverbial modifier of the verb 'says'. Language can be written, spoken, gesticulated, etc., and 'says' serves to pin down the modality of a languaging to utterances. If speech were the only modality, or if we abstract from a difference of modality, we could replace

Jones says '*fa*'

by

Jones '*fa*'s

i.e. use the expression-cum-quotes as a verb. Roughly, to '*fa*' would be first to '*f*' and then to '*a*'.

It is because there is a range of verbal activities involving the uttering of '*fa*' e.g. asserting, repeating, etc., that we give it the status of an adverb, and hence, in effect, require that even in the case of sheer thinking-out-loud there be a verb which it modifies. This is one source of the illusion that the concept of uttering ' $2 + 2 = 4$ ' *assertively* (where the latter does

not connote the illocutionary act of asserting) requires the neustic-phrastic distinction.

Although our immediate model for mental acts is thinking-out-loud, and consists, therefore, of linguistic activities of persons, rather than of such linguistic *objects* produced by persons as inscriptions or recordings, it will enable us to by-pass central issues in the ontology of substances, acts (events, states) and manners (adverbial entities) if we use as our primary model linguistic objects which are the direct by-products of thinking-in-writing, i.e. inscriptions.

What is it, then, to characterize an inscription as an '*fa*'? Clearly, it is to characterize it as a linear concatenation of an '*f*' with an '*a*'. Thus the following inscription

fa

is an '*f*' concatenated to the right with an '*a*'. Representing this mode of concatenation by \frown , the above inscription is an ' $f \frown a$ '.

Thus

An '*fa*' = an ' $f \frown a$ '⁹ = an '*f*' \frown an '*a*'¹⁰

The expressions "*f*", "*a*", "*fa*", " $f \frown a$ ", are sortal predicates which classify linguistic tokens. The classification is partly *descriptive*, thus in terms of shape (or sound) and arrangement. It is also and, for our purposes, more importantly *functional*. Above all, the sortal predicates are 'illustrating'. Thus

t is an '*f*'

tells us that *t*, belonging to a certain language *L*, is of a *descriptive* character falling within a certain range of which the design of the item within the single quotes is a representative sample,¹¹ and also tells us that (if *t* is in a primary sense an '*f*', i.e. is produced by a thinking-in-writing), it is functioning as do items having such designs in language *L*.

Now it is clearly possible to envisage illustrating sortals which apply to items in any language which (*vis à vis* other expressions in the language to which they belong) function as do the illustrated items in a certain base language, the ability to use which is presupposed. This language, for purposes of philosophical reconstruction, can be equated with *our* language *here* and *now*.

As far as descriptive criteria are concerned, such sortals would require only those most generic features which must be present, in some determinate form or other, in order for expressions to perform the relevant functions. Thus,

- (1) 'Oder's (in G) are 'or's

would say of 'oder's that they function along with other expressions in German as do 'or's. The criteria which an item must satisfy to be an 'or' are a matter of its functioning, in respects deemed relevant¹² as do 'or's in the illustrating language, in the present case a professional dialect of English.

Again,

- (2) 'Sokrates's (in German) are 'Socrates's

would say of proper tokens of the name 'Sokrates' in German that they are 'Socrates's, where the criterion for being a 'Socrates' is to function in thinking-out-loud contexts as do 'Socrates's in the illustrating language to which the quoting device is applied. Obviously the sense of 'name' relevant to this context is not that of 'name candidate,' i.e. the sense in which 'Sokrates' might be found in a list of eligible names for race horses. One is tempted to say that the function in question is that of being used to refer to a certain Greek philosopher. But it is a mistake to tie the semantical concept of reference too closely to referring as an illocutionary act.

It would seem a natural extension of the above to apply the above strategy first to predicates

- (3) 'rot's (in G) are 'red's

and then to propositional expressions

- (4) 'a ist rot's (in G) are 'a is red's.

Omitting the copula, as more essential to tense indication than predication, and turning to schematic forms, we might commit ourselves to the idea that

- (5) *t* is an 'fa'

tells us, by the use of the illustrating functional classification, 'fa', that token *t* is functioning in some language as would an 'f' concatenated with an 'a' in our language.

V

The above remarks have been based on the idea of an illustrating-functional classification of linguistic objects (inscriptions and the like) which are the *products* of – as I put it – thinking-in-writing. Before pressing the strategy, it is time to pay a fleeting respect to the fact that the primary mode of being of the linguistic is in the linguistic activity of persons.

Now

- (1) Jones said '2 + 2 = 4'

is obviously not to be identified with

- (2) Jones uttered '2 + 2 = 4'

where this simply tells us that Jones produced sounds of a kind conventionally associated with the shape of which *those* (the ones between the quotes) are samples. What is the difference? The answer clearly has *something* to do with 'meaning'. We are tempted to say that (1) = Jones uttered '2 + 2 = 4' *as meaning* 2 + 2 = 4. This is not incorrect but also not illuminating. Thus consider the following objection of VB:

Surely, it will be said, thinking that-*p* isn't just saying that-*p* – even candidly saying that-*p* as you have characterized it. For thinking-out-loud that-*p* involves *knowing the meaning* of what one says, and surely this is no matter of producing sound!

To this the obvious answer is that there is all the difference in the world between parroting words and thinking-out-loud in terms of words. The difference however, is not that the latter involves a non-linguistic 'knowing the meaning' of what one utters. It is rather that the utterances one makes cohere with each other and with the context in which they occur in a way which is absent in mere parroting. Furthermore, the relevant sense of 'knowing the meaning of words' (which is a form of what Ryle has called *knowing how*), must be carefully distinguished from knowing the meaning of words in the sense of being able to talk about them as a lexicographer might – thus, defining them. Mastery of the language involves the latter as well as the former ability. Indeed they are *both* forms

of *know how*, but at different levels – one at the ‘object language’ level, the other at the ‘meta-language’ level.

To put our finger on what is involved, it will be useful once again to turn our attention away from language as *activity* to language as *product*, thus inscriptions, recordings and the like. If we can understand the meaning of ‘meaning’ in the context, say, of inscriptions, we shall not be far from understanding what it is to speak of the meaning of verbal activity.

Thus, consider the old chestnut

(3) ‘Und’ (in German) means *and*

Two things are to be noted: (a) The subject of this sentence is a singular term. (b) The word with which it ends is an unusual use of the word ‘and’, for it is not serving as a sentential connective. Let me take up these two points in order.

Many philosophers have succumbed to the temptation to construe the subject of (3) as the name of a linguistic abstract entity, the German word ‘und’ as a universal which can (and does) have many instances. Yet this is a mistake which can (and does) cause irreparable damage. There are, indeed, many ‘und’s, and they are, indeed, *instances* of a certain kind – ‘und’-kind, we may call it. There are also many lions and they are instances of lion-kind. But it is important to distinguish between two singular terms which are in the neighborhood of the sortal predicate ‘lion’. There is, in the first place, the singular term which belongs in the context

... is a non-empty class.

Ordinary language has no neat expression which does this job. The phrase ‘the class of lions’ will do. But there are also such terms as ‘the lion’ or ‘a lion’ or ‘any lion’

The lion (or a lion, or any lion) is tawny

where these are *roughly* equivalent in meaning to

All lions are tawny

Each of these expressions in its standard use in such sentences has ‘conversational implicatures,’ some of which are relevant to the linguistic examples which I shall shortly be giving. I call such singular terms ‘distributive terms’ (DSTs).¹³

Thus the correct interpretation of the subject of (3) treats it not as an abstract singular term which designates an abstract entity, but as a distributive singular term. In other words (3) is, for our purposes, identical in sense with

(3¹) The (or an, or any) ‘und’ (in German) means *and*

or, equivalently, with

(3²) ‘Und’s (in German) mean *and*.

The second point to be noted about (3) was that it involved an atypical use of the word ‘and’, for it is clearly not functioning as a sentential connective. A natural move is to construe the context as a quoting one. This idea may tempt one to rewrite (3) as

(3³) ‘Und’ (in German) means ‘and’

but quoting contexts are often such that to leave them unchanged while adding quotes to the quoted item changes the sense. And it is clear that (3) doesn’t merely tell us that ‘und’ and ‘and’ *have the same meaning*, it in some sense *gives* the meaning. I have argued that the correct analysis of (3) is

(3⁴) ‘Und’s (in German) are ‘and’s

where to be an ‘and’ is to be an item in any language which functions as ‘and’ does in our language. Roughly to say what an expression means is to classify it functionally by means of an illustrating sortal.¹⁴

According to this analysis, *meaning is not a relation* for the very simple reason that ‘means’ is a *specialized form of the copula*.¹⁵ Again, the meaning of an expression is its ‘use’ (in the sense of function), in that to say what an expression means is to classify it by means of an illustrating functional sortal.

Notice that instead of ‘giving’ the complex function of ‘und’ (in German) by using an illustrating functional sortal, we could, instead, have listed the syntactical rules which govern the word ‘und’ in the German language. In general the rule governed uniformities which constitute a language (including our own) can be exhaustively described without the use of meaning statements, including those to be discussed below. In practice, the use of meaning statements (translation) is indispensable, for it provides a way of

mobilizing our linguistic intuitions to classify expressions in terms of functions which we would find it difficult if not (practically) impossible to spell out in terms of explicit rules.

The above discussion of 'means' is but the entering wedge for the resolution of our problem. It provides the essential clues, but its significance is not yet manifest. For there are other ways of making meaning statements than by the use of 'means'. And it is these other ways which have generated much of the confusion and perplexity which are characteristic of the controversy over conceptual change.

Thus consider

- (4) 'Dreieckig' (in German) *stands for* triangularity

According to appearances (surface grammar) the following seem to be the case: (a) 'Triangularity' is a name. (b) It refers to a nonlinguistic entity. (c) *Stands for* is a relation which, given the truth of (4), holds between a linguistic and a nonlinguistic entity. I shall argue that (a), (b) and (c) merely *seem* to be the case, and that, contrary to the general opinion, to 'countenance' statements like (4) is *not* to commit oneself to a Platonistic ontology.

The point grows directly out of our previous account of 'means' sentences. For there we encountered two ideas which can be put to good use; (a) 'Means' is a specialized form of the copula; (b) What follows 'means' is to be construed as a metalinguistic sortal. (c) The subject of a 'means' statement is a metalinguistic distributive singular term. To put these ideas to work all we need to do is to construe 'triangularity' as a metalinguistic distributive singular term, and 'stands for' as another (and more interesting) specialized copula.

Consider the following sentence, which is of a kind to which logicians have paid little attention

- (5) The pub is the poor man's club

How are we to understand the copula 'is'. Only a most superficial reading would take (5) to be a statement of identity. Surely we have here a statement involving two distributive singular terms formed, respectively, from the sortals 'pub' and 'club'. It has the form

- (6) the K_1 is the ϕK_2

and is roughly equivalent to

- (5¹) Pubs are poor men's clubs

I propose, therefore, that we read (4) as

- (4¹) The 'dreieckig' is the German 'triangular'

which transforms into

- (4²) 'Dreieckig's are German 'triangular's

or, which is the same thing,

- (4³) 'Dreieckig's (in German) are 'triangular's

According to this interpretation, (4) is simply another way of doing what is done by (3) i.e. giving a functional classification of certain inscriptions belonging to the German language. What is the point of having this second way? The answer is simple: because *this* way of doing the job relates the classification to the truth context

- (7) Triangularity is true of a

which tells us, in first approximation, that

- (8) Expressions consisting of a 'triangular' appropriately concatenated with an 'a' are true.

In general, I suggest that so-called nominalizing devices which, when added to expressions, form corresponding abstract singular terms, thus '-ity', '-hood', '-ness', '-tion', 'that...', etc., are to be construed as quoting contexts which (a) form metalinguistic functional sortals, and (b) turns them into distributive singular terms.

Thus 'triangularity' merely *looks* (to the eye bewitched by a certain picture) to be a name. It merely *looks* as though it referred to something non-linguistic. Applying to expressions in *any* language which do a certain job, its inter-linguistic reference is confused with a non-linguistic reference. Again 'stands for' merely *seems* to stand for a relation. It is, as 'means' proved to be, a specialized form of the copula.

VI

Clearly the present occasion does not permit a systematic development of the semantical theory to which the preceding is but the preface. Yet it is not difficult to see its outlines, and enough has been said above to prepare the way for its application to specific problems.

Notice, for example, the new look of the problem of 'identity conditions for attributes'. Since talk about attributes is talk about linguistic 'pieces', and not about platonic objects, identity means sameness of function, and belongs in a continuum with similarity of function.

Thus, after studying two games which use physically different materials and motions, we might decide that the two games are the 'same' i.e. that we can find an abstract specification of correct and incorrect moves and positions such that it picks out for both games the moves and positions which are correct or incorrect according to their less abstractly formulated rules.

And by virtue of this fact, we could say, for example, that the *Dame* of one game is the Queen of the other. By parity of reasoning, we can say that

f -ness = g -ness if and only if the rules for f 's are the same as the rules for g 's

One can also make sense of the idea that bishops are more like castles than they are like knights. Indeed, we are all accustomed to making judgements of this kind. 'The bowler in cricket is like the pitcher in baseball'. We decide similarity of 'pieces' with reference to the roles they are given by the rules.

Let us now look at likeness of meaning from a somewhat different direction. Consider the familiar fact that isosceles triangularity and scalene triangularity are species of triangularity. In our framework this is spelled out as the fact that

'isosceles triangular's

and

'scalene triangular's

consist of a common predicate (a 'triangular') concatenated with a modifier (an 'isosceles', a 'scalene') in such a way that 'triangular', 'isosceles

'triangular', and 'scalene triangular' constitute a fragment of a system of geometrical classification.¹⁶

The important point is that isosceles triangularity is to be construed as (isosceles triangular)-ity, the scope of the quoting context '-ity' being indicated by the parentheses. Contrast this with the contrast between Euclidean triangularity and Riemannian triangularity. Here the scope of '-ity' is simply 'triangular'. Thus to talk about Euclidean triangularity is to talk not about

'Euclidian triangular's

but about

Euclidian 'triangular's

i.e. inscriptions which function as does our word 'triangular' when it is governed by specifically Euclidian principles.

Thus it is important to note that the use of the illustrating device to form functional sortals involves an important flexibility. Not all aspects of the functioning of the illustrating expression need be mobilized to serve as criteria for its application. Thus consider

Euclidian triangularity and Riemannian triangularity are varieties of triangularity

This becomes

Euclidian 'triangular's and Riemannian 'triangular's are varieties of 'triangular'.

It is clear that the functioning of the illustrating word 'triangular' which is relevant to somethings being a 'triangular' is a generic functioning which abstracts from the specific differences between Euclidian and Riemannian geometries.

Compare

Classical negation and intuitionistic negation are varieties of negation.

Here again the context makes clear just what aspects of the functioning of the illustrating term is being mobilized by the abstract singular term into which it is built. It is our intuitive appraisal of the functional similarity of expressions in different linguistic structures which grounds our willingness to make statements of this form.

I have often been asked, what does one gain by abandoning such standard platonic entities as *triangularity* or that $2 + 2 = 4$ only to countenance such exotic abstract entities as functions, roles, rules and pieces. The answer is, of course, that the above strategy *abandons nothing but a picture*. Triangularity is not abandoned; rather 'triangularity' is *seen for what it is*, a metalinguistic distributive singular term.

And once the general point has been made that abstract singular terms are metalinguistic distributive singular terms, rather than labels of irreducible eternal objects, there is no reason why one should not use abstract singular terms and categories of abstract singular terms in explicating specific problems about language and meaning. For just as talk about triangularity can be unfolded into talk about 'triangular' inscriptions, so talk about any abstract entity can be unfolded into talk about linguistic or conceptual tokens.

NOTES

* This paper is an attempt to bring to bear on topics of central concern to this Conference lines of thought which I have developed in three recent papers: 'Conceptual Change', in Pearce *et al.* (eds.), *Conceptual Change*, D. Reidel Publishing Company, Dordrecht, Holland, 1973; 'Reply to Quine', *Synthese* 26 (1973), also published by D. Reidel; and 'Reply to Marras', in *The Canadian Journal of Philosophy* 2 (1973), published by the Canadian Association for Publishing in Philosophy, University of Alberta, Edmonton, Alberta. Substantial portions of these papers have been reprinted in the following text. [The editors wish to express their appreciation to D. Reidel Publishing Company and *The Canadian Journal of Philosophy* for permission to reprint these portions of Professor Sellar's paper.]

¹ *The Journal of Philosophy* 65 (1968), 590-602. This paper was reprinted in *Semantics* (ed. by D. D. Steinberg and L. A. Jakobovits), Cambridge, England, 1971. Page references will be to the latter.

² *Ibid.*, p. 71.

³ *Ibid.*, p. 68.

⁴ See 'Some Reflections on Language Games', *Philosophy of Science* 21 (1954), 204-228, reprinted as Chapter 11 in *Science, Perception and Reality*, London 1963.

⁵ Note the stress on negative uniformities on page 422.

⁶ A *raising* of the hand can be construed, roughly, as a rising of the hand *qua* something which can be brought about by a volition to have one's hand rise. By absorption, the latter becomes a volition to *raise* one's hand. According to the Verbal Behaviorist, of course, a volition is a thinking out loud or a proximate propensity to think out loud, 'I shall ...'.

⁷ It is perhaps worth noting that the concept of pattern governed linguistic behavior must be extended to include the recursive know-how involved in 'going up the meta-language hierarchy'.

⁸ See 'Toward a Metaphysics of the Person', in *The Logical Way of Doing Things*, New Haven 1969, pp. 230-52.

⁹ Cf. 'a (cat on a mat)', which has the form 'a K'.

¹⁰ Cf. 'a (cat) on a (mat)' which has the form 'a K₁ on a K₂'.

¹¹ I.e. as Davidson points out, an essential part of the 'sense' of the single quotes is to say 'this item'.

¹² Note that the criteria for these sortals are flexible, and context dependent. What counts as an 'or' in one classificatory context may be classified as *like* an 'or' in another. If Germans were to use 'oder' only in the inclusive sense, and we were to use 'or' only in the exclusive sense, we might, nevertheless, for some purposes, classify 'oder's as 'or's, taking as our criteria what the two functions of 'or' as it is *actually* used have in common. In this case 'or' would be a *generic* functional classification, and we would distinguish its inclusive and exclusive species, though the only species for which we had an illustrating classification would be the latter. In other contexts the criteria for being an 'or' might be more specific, thus to function *exactly* as do the exclusive 'or's of the background language. In this case 'oder's would not be 'or's, though they would, of course be functionally *similar*.

¹³ See my 'Abstract Entities', *Review of Metaphysics* (1963), 627-71 [reprinted as Chapter 5 in my *Philosophical Perspectives*, published by Charles Thomas, Springfield, Illinois, 1968]. Notice that I am *not* saying that all expressions of the form 'the K' which are not definite descriptions of an individual K are DSTs. Thus in 'The lion once roamed the western plains', the subject is not a DST, for, though its sense is roughly equivalent to 'Lions once roamed the western plains', it is not even remotely equivalent to 'All lions once roamed the western plain'.

¹⁴ It is, of course, an over-simplification to speak of 'the' function of a certain expression in a given language. Classifications are always relative to a purpose. Various devices can be used to make it clear *which* functions of the word which is used to form an illustrating sortal are serving as criteria for its application. As was pointed out in note 12, the use of illustrating sortals is flexible, criteria of application shifting with context and purpose. Thus the mere fact that a token is classified as a 'simultaneous' [means *simultaneous*] need not pin it down to either the function of 'simultaneous' in a relativistic corpus or its function in a classical corpus. On the other hand the context of classification *may* so pin it down. In the former case, 'simultaneous' [means *simultaneous*] is a generic functional classification and would have as its species 'relativistic simultaneous' [means *simultaneous* (relativistic)] and 'classical simultaneous' [means *simultaneous* (classical)].

¹⁵ I am assuming, of course, without argument, that the copula 'is' does not stand for an 'ontological *nexus*' (exemplification). The theory of predication is the crux of ontology. I have posed the issues in 'Naming and Saying', Chapter 7 of *Science, Perception and Reality*, London 1963. Notice that from my point of view Bergmann is (mis-)perceptive but consistent when he treats meaning as a *nexus*. See his 'Intentionality', in *Semantica*, Rome 1955, reprinted in *Meaning and Existence*, Madison 1960, pp. 3-38.

¹⁶ The questions, 'what is a predicate? a predicate modifier? concatenation?' are of the greatest importance. On the present occasion, there is nothing to do but rely on intuitive considerations.