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You Can Say That Again

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In this paper I shall address what strike me as a numer of related confusions in the philosophy of language and logic. Although the discussion will center around a certain analysis of tenses, what is more fundamentally at issue are widely-held views about meaning and the nature of agreement and disagreement.

Consider the following puzzle. Most philosophers readily assume that

(i) Necessarily, sentences having different truthconditions express different propositions

and also that

(ii) The truth-conditions of a tensed sentence are relativized to its time of production

If (i) and (ii) are true, however, then it would seem as if a tensed sentence produced at different times can never express the same proposition. But pre-theoretically, it seems obvious that the same tensed sentence (e.g., 'J.F.K. was assassinated') can, on different occasions, express (or mean) the same thing. Hence, in some important sense of the term 'proposition', it seems obvious that

(iii) Sometimes, nonsimultaneous occurrences of a tensed sentence express the same proposition

How should we deal with the apparent inconsistency in (i)—(iii)? Part of what I shall argue is that as long as we want to understand how a real living language works, then the first statement in this triad should be rejected. Moreover, we shall also have to reconsider seriously a number of received ideas in the philosophy of language and logic. Specifically, I think we shall have to reject the view that

(iv) Tenses refer to times

and also possibly that

(v) Propositions have truth-values.

Furthermore, and perhaps most controversially, I believe that, if we

are ever to have a satisfactory understanding of natural languages, we will have to accept two related claims:

- (vi) Sentences expressing the same proposition can have different truth-values
- (vii) Contradictory sentences can have the same truth-value.

I

For simplicity, let us consider only well-formed declarative sentence-events (tokens) the sentences. In other words, let us take a sentence to be an instance of a concatenation of morphemes, having truth-conditions. The visual or auditory pattern of a sentence may (of course) be replicated, and let us think of a sentence and its replicas as instances of the same string of morphemes. Although I prefer here to regard sentences as events or tokens rather than types, I may occasionally appear to treat sentences as types, as when I say that a sentence has different truth-values or expresses different propositions at different times. This is merely a short cut for saying that a sentence and its replicas do not all have the same truth-conditions or express the same proposition.

Of more central importance to this discussion is the notion of a proposition. But here, matters are more complicated. One aim of this paper is to address the question: What do sentences express? Let us agree that sentences do express things (have meaning), and let us take our task to be that of determining what these things are. Moreover, since philosophers typically use the term 'proposition' to designate what a sentence expresses (or can be used to express), it would be natural to rephrase our question as follows: What are propositions like? But I want to consider how to answer that question with an eye to the inconsistent triad above, and at this stage in the game it would be improper to answer it by appealing to any familiar view of propositions, much less the received view according to which statements (i) and (v) above are true. After all, it is this received view in particular that I want to call into question. I suggest, therefore, that we try (as much as possible) to return to a state of philosophical innocence and proceed as though there had never been a theory of propositions. Beginning afresh in this way, we will be forced to look at language use — and not the pronouncements of philosophers — for clues as to the

nature of what sentences express. In fact, I shall henceforth avoid, when possible and appropriate, the term 'proposition', and simply say that sentences express *things*. Hopefully, this will help us to clarify our intutions about what sentences express, by distancing us from a familiar theoretical framework. It should also enable us better to understand what it is for users of a natural language to *agree* or *disagree* with one another.

But now that we are starting from scratch, so to speak, we can see one reason why I regard statement (i) in the original inconsistent triad as the most dispensable of the three. To begin with, statement (iii) is a fundamental pre-theoretic truth about language use, one which any theory of language must be compatible with. Although it contains the provisionally dreaded theoretical term 'proposition', (iii) merely captures the ordinary language-user's intuition that successive replicas of a sentence can express the same thing. For example, when I say

(1) J.F.K. was assassinated

I (or someone else) can later express what I earlier expressed by replicating (1). Moreover, in some cases replicas of a tensed sentence produced many years apart can express the same thing — for example, (1) produced now and 5 centuries hence. Among other things, this is how historians of different epochs can make the same observations about the past.

Even less controversial is statement (ii), which is simply an abbreviated definition of 'tensed sentence'. It captures the feature of a certain class of sentences that sets members of that class apart from such expressions as '7 is a prime number', '2 + 2 = 4', and 'all bachelors are unmarried'. The timelessness of these latter sentences, as I have argued elsewhere (Braude, 1973), is best understood in terms of the invariance of their truth-conditions over time.

Moreover, not only are (ii) and (iii) antecedently plausible and relatively non-theoretical, they are also empirically supportable. One reason we know (ii) to be true is that we know how language-users assign truth-values to tensed sentences, and we know that such assignments depend on when, relative to those sentences' times of production, what is said to occur in fact occurs. And we know that (iii) is true, first of all, because language-users believe themselves able to reexpress what they or others have previously expressed, either with different sentences or by replicating the sentence(s) used earlier. To suppose that one is never correct in such beliefs is simply to confuse speaking a natural language with some more esoteric form of linguistic activity. Furthermore, if (iii) were false, if we could never re-express what we or others expressed previously by replicating the sentences used earlier, then our natural languages would not serve the urgent human needs that motivated their development in the first place, and

they would not be usable by small children and idiots (see Braude, 1976).

Statement (i), by contrast is wholly theoretical and non-empirical; it is a component of a philosophical theory of language. But the adequacy of any theory of language, I submit, depends in part on whether it is compatiable with (iii). On the surface, of course, it appears that (i) and (iii) are blatantly incompatible, given the truth of (ii). And as I shall argue below, the maneuvers required to reconcile (i) and (iii) involve adjustments to (iv) which are far from convincing. In fact, a misguided allegiance to (iv) may lie at the root of the whole problem.

II

One reason those who accept

(ii) The truth-conditions of a tensed sentence are relativized to its time of production

are inclined to accept

(i) Necessarily sentences having different truthconditions express different propositions

is that in addition to (ii) they also accept

(iv) Tenses refer to times.

The idea behind (iv) is that the indexicality of tenses is reflected in what a tensed sentence expresses, just as the indexicality of the personal pronoun is reflected in what 'I am hungry' expresses (for example, as produced by different people). Many philosophers maintain that an ordinary tensed sentence without an explicit temporal demonstrative contains a reference to a certain time or times, simply in virtue of being tensed. For example, what 'S is now O' expresses through the use of the demonstrative 'now', 'S is O' is supposed to express simply in virtue of being in the present tense. That is why the demonstrative in the former sentence is regarded as superfluous; 'S is O' is already supposed to contain a reference to the present. Similarly, the past and future-tense sentences 'S was O' and 'S will be O' are supposed to contain references respectively, to times before and after the present, even though they contain no explicit singular terms referring to those times.

Various systems of tense logic display their allegiance to

this general approach to tenses by defining tense operators in terms of a chronological logic, such as Prior-type UT-calculus (see, e.g., Prior, 1967, 1968; also Rescher and Urquhart, 1971). For example, where 'Uab' is 'instant a is earlier than instant b', 'TaA' is 'formula A is true at instant a', and where 'n' is a constant for 'now', the past-tense 'PA' (to be read, 'it was the case that A') is often defined as '(\exists t) (Utn & TtA)'.

If we ask 'What is the present to which a tensed sentence implicitly refers?', a natural first answer might be to expand (iv) as follows.

(iv') The tense of a sentence refers to an interval coterminous with the sentence's time of production.

But then we can see why it would be difficult from this perspective to explain how replicas of

- (1) J.F.K. was assassinated
- (2) Jones is feeling tired

produced at t, can express the same thing as replicas produced later at t'. For example, at t, (2) would express whatever is expressed by the presumably tenseless sentence

(2') Jones [is] feeling tired at t

while at t' it would be equivalent instead to

(2") Jones [is] feeling tired at t'.

Some have endeavored to sidestep this problem by arguing that the tense of a sentence refers to more than the sentence's time of production. Specifically, they would amend (iv') to read

(iv") The tense of a sentence refers to the sentence's specious present

A sentence's specious present is a *variable* interval; its length, or extremities relative to a sentence's time of production, may change from one context to another. Hence, a sentence's specious present may be a short interval on one occasion and a long interval on another. Moreover, on some occasions the specious present for a sentence may lie mostly in that sentence's future (or past), while on other occasions it may extend equally into the sentence's past and

future. But given that the specious present for a tensed sentence varies in these ways, nonsimultaneous replicas of a tensed sentence can contain references to the same specious present, an interval including all the times of production of those replicas. And since successive replicas of a tensed sentence can contain references to the same specious present, those replicas can express the same thing, despite being produced at different times.

Tyler Burge has advanced a sophisticated and provocative version of this view (see Burge, 1974). He observes that a sentence like

(3) My body is too weak for dancing

can be used appropriately as an answer not only to the question 'Why aren't you dancing?', but also to 'Why didn't you attend the dance last month?'. This suggests to Burge that the interval referred to in (3) as the present can vary from replica to replica. In answer to the first question, that interval might be considered relatively short — say, that evening (the speaker might just have given blood). But in answer to the second question, the interval referred to as the present extends into the previous month. Moreover, since we are presumably free to choose any interval we like as the present, Burge believes we can choose the same interval at different times and thereby express the same proposition with nonsimultaneous replicas of a tensed sentence.

In my view, however, allegiance to (iv) only makes it more difficult to understand how nonsimultaneous replicas of a tensed sentence could express the same proposition. Consider, for example, replicas of

(4) Plato is buried in Athens

produced now and shortly after Plato's death. On the view under consideration, if these temporally remote replicas of (4) express the same thing, it is because they contain references to the same specious present. But how does it happen that the speakers of these replicas consider the same interval to be the present? How, in fact, does a speaker select a specious present for his tensed sentences? Are we to suppose, for example, that the producer of (4) in antiquity regarded the present for that sentence as a period extending more than 2,000 years into the future? Would it be impossible for us now to express with (4) what that sentence expressed after Plato's death, if the ancient speaker considered the present to extend only to 1968?

The problem with using (iv") to resolve the apparent inconsistency in (i)—(iii) is that it presupposes a bizarre picture of language use. In order to explain how nonsimultaneous tensed sentences can express the same thing, it must endow speakers of a natural language with

extraordinary good luck and a preposterous historical perspective. For me to express the same thing with a tensed sentence as earlier (or later) speakers express with their replicas, not only must I regard the specious present for my sentence as sufficiently extensive to include those other times, but the producers of the other replicas must regard the present for their sentences as the same interval I take to be the present. Now of course we do not know the entire history (including the future history) of language use. Hence, we do not know, at the time of speaking, when earlier or later replicas of our sentences are produced, or when producers of that (or other) sentences express what we are expressing. And since we do not, as a rule, communicate with each other about our choice of specious presents, we certainly do not know what speakers of those other sentences take to be the specious present. But then if (iv") is true, whether or not nonsimultaneous tensed sentences express the same thing is completely fortuitous. But of course it is not fortuitous; in fact, a natural language would be a total failure if it were.

Besides, it is perfectly clear that considerations concerning the length of specious presents do not intrude on our use of ordinary tensed sentences. For example, in saying

(1) J.F.K. was assassinated

we don't need to worry about the extent of its specious present, lest our decision prevent some future speaker of (1) from expressing what we expressed. In fact, we simply don't think at all about specious presents when using our language. But it is difficult to see how a view like Burge's could be true unless speakers of ordinary tensed sentences frequently engaged in considerations concerning specious presents. And it is absurd to suppose that such a complicated selection of intervals of time is a process or activity that occurs automatically, or without conscious deliberation. Indeed, it is imperative that speakers know what the specious present for their sentences is, if they are ever to know when they've succeeded in expressing what they or others express.

Although I regard the above considerations as sufficient to subvert the view that tenses refer to a specious present, I want to consider some additional difficulties facing those who would use it to reconcile our original statement (i) with (ii) and (iii). The importance of these further problems is that they direct our attention to some fascinating and (to my knowledge) hitherto undiscussed features of tenses and their role in communication. They also provide a further illustration of just how far allegiance to (iv) takes us from an accurate account of the use of natural languages.

III

The issues I want now to examine can best be introduced by considering some cases.

Case 1: I am attending a party with my friend Jones, who (I happen to know) has had an extremely exhausting day. At one point I notice that Jones is nodding off to sleep in a comfortable chair. Turning to my host, I remark,

(2) Jones is feeling tired

But suppose that my host is unable to see Jones dozing in the chair. Believing him to be well rested, he says to me, 'You must be mistaken'. But I shake my head and reply, 'Jones is feeling tired'.

I realize that speakers are rarely so boring as to repeat exactly the same words used previously, when trying to express again what they earlier expressed. In real life I probably would not have replicated (2) exactly in response to my host's incredulity. I would instead have chosen another sentence to express what I earlier expressed with (2) - for example, 'Jones is wiped out' 'Jones is exhausted', or (in deference to my host's ego) 'I know you seldom err, but Jones is feeling the effects of a rough day'. But apart from this convenient artificiality, we have here a paradign case of nonsimultaneous tensed sentences expressing the same thing. In ordinary discourse, of course, that sort of agreement seldom occurs simultaneously; people agree with themselves or with others on separate occasions. And in the situation we are imagining here, it is clear that by replicating (2) my intention was to express what I expressed previously. It is not a case in which I wanted merely to report the sentence I had uttered previously, as though I might no longer wish to be claiming that Jones is feeling tired. If that had been all I wanted to do, it would have been more appropriate to say, 'What I said was...'.

Case 1, then is just the sort of case which partisans of (iv") believe they can explain. Let us say that my first replica of (2) was produced at moment M, and that my later replica was produced at M'. Champions of the specious present would claim that the two replicas of (2) express the same thing because they each refer to the same specious present, some moment M'' which includes moments M and M'.

Now an ordinary present-tense sentence 'S is $\not O$ ' is true just in case S is $\not O$, not simply during the interval regarded as the present (i.e., at some time or other during that interval), but throughout the present. At the very least this is true of (2) in this case. In real life, had I wanted to express, for example, the more cautious and complicated proposition typically expressed by 'Jones is feeling tired at some time during the present', I would not have produced as simple a sentence as (2). And we may suppose that I had no reason to expect Jones'

condition to undergo any sudden or rapid change. Hence, there would be no reason for me to say anything more circumspect than 'Jones is feeling tired'. Presumably, then, defenders of (iv") would take the two replicas of (2) to have the same truth-conditions; that is how they would explain the fact that the replicas express the same thing. Both sentences would be considered true just in case Jones is feeling tired throughout M".

But now let us suppose that between M and M' a powerful amphetamine that Iones had ingested several minutes beforehand suddenly takes effect, so that by the time I replicate (2) at M', Jones is brimming with energy. What truth-values should we then assign to my two replicas of 'Jones is feeling tired'? I submit that we should take the first replica (produced at M, before Jones feels the effect of the drug) to be true, and the second (produced after Jones' resurgence of energy) to be false. In this case, I think we should say that although I expressed the same thing at M and M', nevertheless the sentence I produced at M is true, while the sentence I produced at M' is false. In this way we can capture what is semantically peculiar about the case, while still respecting what seemed initially to be correct about it namely, that I expressed at M' what I expressed earlier at M. After all, that is what seemed to be obvious about my verbal performance at M' before learning about the amphetamine. And I submit that this extra bit of information should not alter our assessment of what I expressed at M'. Whether or not lones felt the effect of an amphetamine is completely irrelevant to determining whether I expressed at M' what I expressed earlier at M. Recall that, ex hypothesi, I had no knowledge at M and M' that Jones had taken an amphetamine, and so that fact certainly did not enter into my consideration at those times.

But notice that we cannot analyze the case this way on the view under consideration. According to the view of language embracing (i) and (iv"), both replicas of (2) have the same truth-conditions, and necessarily, any two sentences having the same truth-conditions have the same truth-value. Therefore, by insisting that nonsimultaneous tensed sentences express the same thing in virtue of referring to the same specious present, this account of tenses and their role in agreement fails to allow for changes in the world to correspond to changes in truth-value assignments to tensed sentences. And that difficulty seems especially enbarrassing in view of the fact that one of the most interesting features of tensed sentences is that most such sentences can change in truth-value with time.²

Case 2: This case should be especially useful for those who can detect contradictory sentences more easily than sentences expressing the same thing. The scene is later at the party mentioned in case 1. Jones, feeling the effect of the amphetamine, is circulating among the guests with great zest and conviviality. During this time, two partygoers engage in conversation. The first, A, having last seen Jones

asleep in the easy chair, and believing him still to be asleep, says to B, 'Have you seen Jones?'. B, having last seen Jones involved in an animated discussion in the ktichen, and believing him still to be in that room, says (at M) 'Yes. Jones is in the kitchen'. A, understandably incredulous, and also mindful of B's reputation as a practical joker, replies 'Jones is not in the kitchen'.

Now first of all, this is surely a paradigm case of the occurrence of a pair of contradictory sentences in ordinary discourse. For one thing, the members of such sentence-pairs are hardly ever produced simultaneously. One would think, then, that any remotely adequate analysis of contradictory tensed sentences would not be stymied by the fact that they are produced at different times. Interestingly, however, this is precisely where the traditional accounts of contradictories go awry. To bring their stark artificiality clearly into the open, consider the following additional features of case 2. Suppose that when B says

(5) Jones is in the kitchen

Jones is in the kitchen but that when A says

(6) Jones is not in the kitchen

Jones had returned to the living room.

How are we now to understand this case? First of all, I submit that knowledge of Jones' whereabouts is irrelevant to determining whether (5) and (6) are contradictories. It is obvious that A is denying what B expressed; that was clear before I mentioned where Jones was. But it also seems as if each of their sentences is true. Jones is in the kitchen when B utters (5), and is not in the kitchen when A utters (6). But then contrary to the received view of contradictories, it seems as if the contradictoriness of (5) and (6) is independent of the truth-value assignments we make to the sentences.

It seems ironic that defenders of (iv") should have difficulty handling nonsimultaneous contradictories. Presumably, they would accept the received view that contradictories must have different truth-values. And in order to assign opposing truth-values to (5) and (6), they would relativize the sentences' truth-conditions to the same specious present M". (5) would be true, I suppose, just in case Jones is in the Kitchen throughout M". But what are the truth-conditions of (6)? Is (6) true just in case Jones is not in the kitchen throughout M"? The problem is that this statement of (6)'s truth-conditions is ambiguous. It could be stating the truth conditions of either

(6') Jones is not in the kitchen at some time during M"

or

(6") Jones is not in the kitchen at any time during M"

Now if (5) is true just in case Jones is in the kitchen throughout M'', then one would think that A's denial of (5) would have the truth-conditions of (6'') — i.e., that his sentence (6) has the force of

(7) Jones is in a different room (throughout M")

or

(8) Jones is out of the kitchen (throughout M")

But in that case (5) and (6) need not have opposite truth-values. In fact, if Jones is in the kitchen for only part of M'', both sentences are false. Only if (6) is understood to have the truth-conditions of (6') must (5) and (6) have different truth-values. Unfortunately, however, this seems to require an arbitrary difference in the way we interpret (5) and (6). We don't take (5) to mean 'Jones is in the kitchen at some time during M'''. And I submit that it would be suspicious in the case described to give (6) the truth-conditions of (6'). (6) does seem to have the force of something like (7) or (8), and the case does seem to require that we give parallel analyses of the truth-conditions of (5) and (6).

But can it be acceptable, my opponent might wonder, to allow sentences expressing the same thing to differ in truth-value, and to allow contradictory sentences to have the same truth-value? I grant that at first this might seem like a crazy thing to take as a given about ordinary language, since it seems to call into question much of a deservedly well-entrenched theoretical framework in logic. But it doesn't seem so outrageous when we reflect that we are dealing with nonsimultaneous pairs of sentences. For example, the traditional and familiar notion of contradictories applies to sentences abstracted from the temporal restrictions placed on their truth-conditions. But then there is no reason to expect that this venerable notion of contradictories will apply to the richer notion of a tensed sentence. Since tensed sentences can be adequately understood only in a temporal context, and since they do have their truth-conditions relativized in some way to their times of production, it is not surprising that nonsimultaneous contradictory tensed sentences can have the same truth-value. A satisfactory analysis of a tensed natural language simply requires a notion of contradictories different from the standard Aristotelian notion. So

long as we are concerned with the temporal aspects of language (and tensed sentences in particular), the concept of contradictories can no longer be explained in terms of opposing truth-values. My suspicion is that an adequate notion of contradictories for an analysis of natural languages will be (at least partly) pragmatic rather than wholly semantic. Perhaps it will have to be spelled out in terms of such things as intentions, presuppositions, or even Gricean implicatures. I am therefore, not renouncing our logical framework. Rather, I am suggesting only that its application has certain hitherto unacknowledged limitations. Still, it is definitely an embarrassment to the standard accounts of tenses that they fail to represent these interesting features of language.

Nevertheless, I imagine that few will be easily swayed to my point of view. Most will be tempted to try to explain away the anomalous situations characterized above rather than scuttle or severely limit the use of familiar and otherwise apparently viable logical tools. But I think this would be a mistake. In fact, it may succeed only in creating additional serious problems. To see why, consider the following challenge to my remarks about cases 1 and 2 above.

Some might urge that it was wrong from the start to claim that I expressed the same thing both times I uttered

(2) Jones is feeling tired

They would contend, quite sensibly, that person B can agree with person A even though A and B do not express the same thing. For example, in case 1, some might argue that the respect in which I agree with myself when I repeat (2) is that my later remark abbreviates a sentence like

(9) Jones was feeling tired then [i.e., when I uttered the first sentence] and still is

In that case, I would have been uttering an implicit *conjunction* the second time, and the reason my sentence is false at that time is simply that the second conjunct is false.

Now while I agree that some cases of agreement can be handled along these lines, many — including case 1 — cannot. First of all, I don't think we would have been inclined to understand my sentence at M' this way before learning about the change in Jones' condition. And remember, ex hypothesi, neither my host not I knew Jones had taken an amphetamine. Any my host didn't ask me (say) whether Jones' condition was stable; he was incredulous about my assessment of Jones' present condition. Hence, the correct interpretation of my

second sentence is what I think would have been our initial interpretation — namely, that I expressed about Jones neither more nor less than what I expressed earlier.

Moreover, it is preposterous to claim that people cannot express the same thing with nonsimultaneous tensed sentences, simply because the sentences are produced at different times. A language with that feature would be a failure as a natural language. Human languages are presumably designed to facilitate communication, not to force it into convoluted patterns satisfying the canons of old-fashioned logical analysis. Barring cognitive or linguistic limitations, we can express whatever we want, whenever we want. The passage of time imposes no limits on what we can express; nor does it limit what we can say using the present tense. The passage of time may, however, determine what can be said *truly*.

Apparently, then, by trying to explain away the odd features of cases 1 and 2, we return to the implausible position which earlier forced us to consider the view that tenses refer to a specious present. The problem with the initial interpretation of (iv) — i.e., (iv') — was that it could not help explain how nonsimultaneous tensed sentences could express the same thing. We accordingly modified that view by understanding the time referred to as a specious present. But that view still left it a mystery how speakers could agree on a specious present, and it also could not explain how tensed sentences expressing the same thing could differ in truth-value, and how contradictory tensed sentences could have the same truth-value. And now, in order to explain away these interesting (and unheralded) facts of ordinary language, proponents of the referential analysis of tenses seem forced to retreat back to the deeply unsatisfactory view that nonsimultaneous tensed sentences necessarily express different things.

The view that tenses refer to times thus appears to be far less attractive than we might have thought initially, and seems to lead to extremely implausible descriptions of ordinary discourse. What, then, are we to make of the cases thought by many to support the referential analysis? Let us now turn our attention to that topic.

ΙV

One kind of case apparently supporting a referential analysis of tenses is exemplified by Burge's example

(3) My body is too weak for dancing

As we observed earlier, (3) can be used appropriately as a reply not only to 'Why aren't you dancing?', but also to 'Why didn't you attend the dance last month?'. Since (3) can serve as an answer to this

second question, Burge and others conclude that the present referred to in (3) can extend a month into the past.

This line of reasoning conceals several mistakes. The first is the failure to see that even if (3) does implicitly contain a reference to a time, we are not compelled to attribute that referring role to its tense structure. Since this mistake figures also in another case discussed below, I will postpone my comments about it until then.

A second mistake may simply be the failure to remember that the grammatical and semantic tenses of a sentence need not be the same. For example, suppose you ask the grocer about the price of his fruit, and he replies,

(10) Those melons will be 89 cents each

Although this sentence is grammatically inflected in the future tense, it is clearly a present-tense sentence semantically. Or suppose I ask you, 'What are you doing tomorrow!', and you reply

(11) I'm flying to Chicago

Your reply should clearly be understood to be in the future tense, even though your sentence is grammatically inflected in the present tense (this particular discrepancy between grammatical and semantic tenses is, of course, common in German).

Similarly, I suggest that (3) is not a semantically present-tense sentence, or at least *not only* a semantically present-tense sentence, as an answer to 'Why didn't you attend the dance last month?'. In that case (3) might plausibly be understood as equivalent to one of the following.

- (12) My body was too weak for dancing and still is
- (13) My body is often (or is usually) too weak for dancing

(12) is a conjunction of a past- and present-tense sentence, and (13), whose principal temporal operator is 'It is often (or usually) that case that...', clearly has truth-conditions more complicated than those for a simple present-tense sentence.

In any event, that (12) and (13) are indeed plausible translations of (3) in this case reminds us that what a sentence expresses is partly a function of the way it is embedded in a bit of life. That is why we can know what a sentence expresses only after knowing certain facts about the sentence's context of production. That is also why many sentences of ordinary language can be paraphrased in certain contexts by longer and more explicit sentences. Hence, when Elmer Fudd says 'She

waved at him', he might be expressing what those of us who can pronounce the letter 'r' would express with 'She raved at him'. Cases of irony or sarcasm furnish somewhat more relevant examples. Thus, in some contexts, 'That was an interesting remark' might express what one would more straightforwardly express with 'That was a dull remark'. Finally, to take a case similar to Burge's dancing example, suppose I ask you, 'Why did Professor Jones try to burn down his elementary school when he was 8 years old?' and you reply

(14) He did it because he is crazy

Presumably, the grammatically present-tense 'he is crazy' in (14) abbreviates something like 'he has always been crazy' or 'he has been crazy for a long time'. This is perhaps clearer still when we reflect on the oddity of answering 'Why didn't Professor Jones help his classmates burn down the school when he was 8 years old?' with

(15) He is very mature

A different sort of case, purportedly supporting a referential analysis of tenses, is the following. This case is supposed to show that tenses can refer to rather *specific* times. Suppose I ask you, 'Why didn't Mary attend last week's party?', and you reply by saying

(16) Mary was sick

Burge and others have maintained that the past tense in (16) refers to a specific time in the past — namely, the time of the party. If (16) were true just in case Mary is sick at *some* time or other prior to (16)'s production, then it could be true even though Mary was not sick at the time of the party. But in that case (16) would not be a proper reply to the question. Thus, we are told, (16) is best understood as equivalent to

(16') Mary was sick then

where the demonstrative 'then' is understood to refer to the time of the party.

But in neither this case nor the case of (3) must we suppose that some (possibly covert) feature of a sentence's tense structure is referring to a time, simply because that sentence abbreviates another sentence containing explicit temporal references. The equivalence of (16) and (16') in certain situations does not suggest that something in the tense structure of (16) is doing the job of 'then' in (16'). Rather, it suggests simply that in those contexts the explicit use of 'then' is

unnecessary. The reason we can economize and utter (16) is because in context it is clear what we are saying. Given the background of shared presuppositions required for the occurrence of (16) to be intelligible and appropriate in the conversational context we are considering, an explicit reference in (16) to the time of the party would be gratuitous. The study of the suppression of the demonstrative in (16') thus seems to be a matter for the pragmatic analysis of conversational contexts, rather than the semantic analysis of tenses.

Context, then, often supplies information which we can omit from our overt pronouncements without hindering communication. Proponents of referential analyses of tenses apparently overlook this vital fact in some cases, and in so doing, attribute more structure to our language than it actually has.

V

We see, then, that despite our refusal to attribute a referring role to tenses, we can still plausibly account for the familiar linguistic episodes in which this role is allegedly manifest. But denying that tenses refer has serious and far-reaching consequences for the philosophy of language. We can best see this by considering first just what tenses apparently do, given that they do not refer.

My position on the matter is that tenses are nothing more than very general sorts of restrictions placed on sentences' truth-conditions. They determine the very general respect(s) in which a sentence's truth conditions are relativized to its time of production.³ For example, generally speaking a past-tense sentence of the form 'S was Ø' is true just in case S is $\not O$ prior to its time of production [the sentence to the right of the biconditional is tenseless]. When a sentence 'S was Ø' abbreviates a sentence 'S was \emptyset at t', then the sentence is true if and only if S is \emptyset at t and t is before the sentence's time of production. But in such a case it is not the tense of the sentence that is responsible for the increased specificity of these truth-conditions. What is responsible is the modifier 'at t', the explicit production of which may be unnecessary in that context. The past tense of 'S was Φ ' merely imposes a certain general kind of temporal restriction on the sentence's truth-conditions. For the sentence to be true, what it reports must occur before its time of production, rather than after or at that time, as in the case of the future and present tenses, respectively.

Of course, in making general claims about tenses and tensed sentences, some abstracting from the intricacies of ordinary discourse is inevitable. In fact, the truth-conditions of tensed sentences are rarely this straightforward. For example, 'Jones is sick' and 'Jones is smiling' might differ in truth-conditions in virtue of the sorts of beliefs about being sick and smiling we presuppose in discourse. Consider: how long must Jones be in some appropriately abnormal state for a replica of 'Jones is sick' to be true? One would imagine at least as long as the sentence's (presumably rather brief) time of production. But if Jones' condition lasts only that long, we might be reluctant to say that he was sick. On the other hand, Jones might smile only during the sentence's time of producton, and that would be sufficient for an ordinary instance of 'Jones is smiling' to be true. But these complications in the truth-conditions of tensed sentences are due to pragmatic presuppositions about being sick and smiling. As in the case of suppressed specific references to times, they are not complications in the sentences' tense structure.

According to this non-referential account of tenses, therefore, although the tense of a sentence determines how the sentence's truthconditions are relativized to its time of production — that is, whether what the sentence reports must occur before, during, or after its time of production (or more complicated sorts of relationships as in the case of compound tenses) — this is not accomplished by means of covert references to times made in the sentences. Granted, in stating a tensed sentence's truth-conditions we refer to moments of time. But truth-conditions are expressed in a meta-language, and the level of abstraction at which we state a sentence's truth-conditions is far removed from the everyday contexts in which object-language sentences are usually produced. The statement of a sentences's truthconditions deals with the way that sentence functions within a certain linguistic context, and there is no reason whatever to insist that every temporal reference in the metalinguistic statement of a tensed sentence's truth-conditions corresponds to some temporal reference in the associated object-language sentence. Hence, tenses are not like the referring singular terms 'now' and 'then', which typically refer to times in object-language sentences. But once we grant this, we must seriously reconsider other widely-held views about language.

To begin with, we have seen that nonsimultaneous replicas of a tensed sentence can have different truth-conditions but express the same thing. For example, successive replicas of

(1) J.F.K. was assassinated

produced at moments M and M', can express the same thing, as we know from ordinary discourse. But the replica produced at M is true just in case J.F.K. is assassinated before M, while the later replica is true just in case J.F.K. is assassinated before M'. Thus the period of time in which J.F.K. must be assassinated for a replica of (1) to be true changes from M to M'. In this respect, the replicas of (1) have different truth-conditions. But while this change appears minimal, it is nevertheless significant, since it is this variability of truth-conditions

which enables the replicas to differ in truth-value — for example, when J.F.K. is assassinated sometime between M and M'. In any case, since replicas of (1) expressing the same thing can differ in truth-conditions, we must abandon the familiar view that a change in a sentence's truth-conditions determines a corresponding change in what it expresses.

Taking a non-referential approach to tenses may also force us to reconsider another of the familiar views about propositions mentioned at the beginning of this paper — namely, that propositions have truth-values. We know from ordinary language use that nonsimultaneous replicas of a tensed sentence like (1) can express the same thing. But we also know that these replicas have different truthconditions and can differ in truth-value. But what about the propositions they express? If the sentences express the same proposition, and if propositions have truth-values, then we would presumably be in the awkward position of claiming that a true and a false sentence can both express the same true (or false) proposition. We also saw that pairs of contradictory sentences can have the same truth-value. What do we say about this? Do contradictory tensed sentences express contradictory propositions? If so, and if contradictory propositions have opposing truth-values (as one would expect), then if two false sentences (say) are contradictories, one of these false sentences will express a true proposition.

The peculiarity of these claims is perhaps not reason enough for rejecting the view that propositions have truth-values. It may be intelligible to say (for example) that a false sentence can express a true proposition (though I doubt it). But once we grant (say) that contradictory sentences can have the same truth-value, it is far from clear that there is anything to be gained by assigning truth-values to the things sentences express. So long as we continue to maintain that a sentence is true when its truth-conditions are satisfied, then the truth-conditions of sentences would not be correlated in any straightforward way with the truth-conditions of the propositions which the sentences express. We would, in fact, have to provide two theories of truth, one for sentences, and another for propositions. And the latter, it appears, would be implausibly independent of the former.

I suppose some might argue that the need for two such theories of truth is precisely what we should expect. After all, they might say, since a sentence is a kind of linguistic *event*, and since what a sentence expresses is not, why should we expect to be able to correlate their truth-conditions in any neat way — if, indeed, they may be correlated at all? In fact, we should remember that propositions have traditionally been regarded as language-independent in some significant respect. That is why philosophers have wanted to say, for example, that the proposition that 7 is a prime number is true whether or not

anyone ever expresses it.

I shall not attempt to resolve this issue here. Even so, we can at least see that a decision in favor of treating propositions as truth-bearers will not restore our familiar account of the relationship between sentences and propositions, since on the traditional account sentences have the same truth-value as the propositions they express. Often, on these accounts, sentences are taken to have truth-values derivately, rather than primitively. That is, propositions are regarded as the primary truth-bearers, and sentences are true or false only insofar as they express true or false propositions, respectively. But this approach turns on the plausibility of the view that a change in a sentence's truth-conditions determines a corresponding change in proposition expressed — a view which I have tried to show in untenable. If my observations about tenses and their role in agreement are correct, then, we have persuasive reasons for abandoning this picture of the relationship between sentential and propositional truth-value.

Indeed, we have grounds for rethinking seriously the concept of a proposition. If propositions, the things sentences express, are not the sorts of things that have truth-values, what kinds of things are they? Here, we come to one of the deeper issues lurking beneath the surface of this paper; let me comment on it briefly. I suggest that we should not take too literally the pre-theoretical intuition that sentences express things (whether or not we call these things 'propositions'), or that a sentence means something. Although these are very natural ways to describe what sentences do, they foster the illusion that the successful use of a sentence does some thing which we can then describe in a reasonably exhaustive or complete way. Although I cannot defend the view here, I suggest that the meaning of (or proposition expressed by) a sentence is no more clearly or exhaustively specifiable than would be the humor or sensitivity of a sentence. 4 How a sentence is humorous or sensitive can be roughly and incompletely specified by choosing some description of the context in which the sentence is produced. But little more can be said about what a sentence means or expresses. We can offer some description of the context in which the sentence is produced, and thereby point to certain features of its use - e.g., how it is a response to what preceded it, what effect it produced, etc. But such accounts are fated to be incomplete, and ultimately no more precise than the bit of language they are intended to explicate. We can say what a sentence means or expresses only by producing another sentence, and at no point can we fall back on a bit of language whose meaning is any more precisely explicable than the one we wanted to explain initially.

But if it is a mistake to suppose that what a sentence expresses is exact or clearly specifiable, then perhaps one reason nonsimultaneous replicas of a tensed sentence can so easily express the same thing is that sentences generally do not express something precise. The convoluted attempts examined earlier to explain how tensed sentences can express the same thing or contradict one another (e.g., by means of reference to the same specious present) are simply examples of the sort of theorizing one tends to engage in by supposing that natural languages are kinds of calculi, more or less precise vehicles for communicating. Of course, philosophers have for some time been arguing that this general approach to language is deeply mistaken. The foregoing discussion is merely an attempt to make the same point in a different way.⁵

Notes

- ¹ Buridan comes to discussing them in his Sophisms (my cases are modeled after some of those he presents see Scott, 1966). But Buridan resolutely refuses to abandon the traditional concept of contradictories, as well as the view that tenses refer. He also seems to embrace the view that we use tenses to refer to a specious present (see, e.g., chapt. 7, sophism 3).
- ² Contrary to what some have believed, not all tensed sentences can change in truth-value with time. See Braude, 1973.
- ³ See Braude, 1973 for an explanation of this position from a somewhat different point of view.
- ⁴ For a good defense of this view, see Goldberg, 1982. Also, Braude, 1979: 152-174, 205ff.
- 5 I am grateful to many people for stimulating and helpful discussions of this topic, and for criticisms of ancestors of this paper. In particular I wish to thank Bruce Goldberg, Scott Weinstein, Alan Tormey, Tyler Burge, and Steven Davis.

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