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Utterance and Context

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Abstract: In this paper we explain two approaches to contextsensitive utterances, focussing on temporal indexicals and tense. The first approach is David Kaplan's account in "On the Logic of Demonstratives" (1979) and "Demonstratives" (1989). The second is the refexive-referential approach used by Korta and Perry in *Critical Pragmatics* (2011). We argue for the second approach, using a famous example of Arthur Prior's.

Keywords: context, episodes, indexical, reflexive-referential, tense, utterances.

¹ We refer to ourselves in this paper as MDP, KK, and JP.

1. INTRODUCTION

If JP says, "I live in California," he says something true about JP. If MDP says, "I live in California," she says something false about MDP. Utterances of sentences with indexicals such as "I" express different propositions, depending on *context*, in this case the speaker. Similarly with tense. An utterance by KK of "I am tired," early Sunday morning as he gets out of bed, may be false. But ninety minutes later, returning from running his daily 5K to get ready for mass, his utterance of the same words will be true.

In this essay we consider what seems to be an issue of detail. On Kaplan's approach, contexts are sets, quadruples of a speaker, time, location and world. Utterances do not appear in the theory, but are modeled by pairs of expressions and contexts. An expression has a *character* (meaning); an expression-in-context has a *content* (proposition or component thereof.)

On the account we favor, the "reflexive-referential" theory, utterances appear in the theory; they are what the theory is about. Speaker-of, time-of, and location-of are *roles*, that is, functions from an utterance to the object that stands in the appropriate relation. The

term "context" is used with its usual meanings for the truthconditionally relevant circumstances of an utterance, but contexts as such are not entities within the theory.

We argue that this difference is more significant that it might seem, and that our approach has advantages for understanding the relation between the content of utterances (and other contentful episodes), their causal roles and their cognitive significance. On the other hand, we do not deny Kaplan's point, that modelling utterances as pairs of expressions and context has advantages in developing a logic of indexicals and demonstratives.

2. PRIOR'S ROOT CANAL

Here is a famous quote from Arthur Prior

[H]alf the time I personally have forgotten what the date is and have to look it up or ask somebody when I need it for writing cheques, etc.; yet even in this perpetual dateless haze one somehow communicates, one makes oneself understood, and with time references too. One says, e.g. "Thank goodness that's over!" . . . says something which it is impossible that any use of a tenseless copula with a date should convey. It certainly doesn't mean the same as, e.g. "Thank goodness the date of the conclusion of that thing is Friday, June 15, 1954," even if it be said then. (Nor, for that matter, does it mean "Thank goodness the conclusion of that thing is contemporaneous with this utterance." Why would anyone thank goodness for that?).

(Prior 1959: 17)

Consider two sentences Prior might have used to give thanks on June 15, 1954 at 7 p.m.

Thanks goodness that...

- (1) the root canal is over [now].
- (2) the root canal is over as of Friday evening, June 15, 1954.²

(1) seems a normal thing for a person who has just undergone a root canal to say. (2) does not, although with a bit of effort one can construct an example where it makes a bit of sense — perhaps one's dental insurance lapses on June 16. The cognitive and emotional significance of (1) and (2) — the doxastic and emotional states that would typically cause such utterances and of which such utterances would be signs — are different.

MDP and KK argue that if one supposes, as Prior does, that the difference in cognitive significance must be due to difference in the propositions expressed by (1) and (2), then metaphysical consequences loom. And Prior draws such conclusions. If we confine ourselves to objective facts about the temporal events — the "B-

² Actually, June 15, 1954 was Tuesday, and not Friday, as Prior indicates. We will, however, keep Prior's example as it is.

series" in McTaggart's (1908) terminology — then we can give the truth-conditions of (2). But to get at the different truth-conditions of (1) we need "A-properties," such properties as being past, present and future. Objective facts about insurance coverage dates might make one happy that one's root canal did/is/will take place before June 15, 1954. But it is the diminution of fear and apprehension of *future* pain that makes one happy that ones root canal has *already* taken place.

MDP and KK point out that the metaphysical conclusion depends on taking the difference in cognitive signifcance to be a difference in proposition expressed.³ On either Kaplan's approach or on our approach, there is a more plausible alternative; one can believe the same proposition in more than one way, and the different ways of believing account for differences in cognitive significance.

A. KAPLAN'S APPROACH

In Kaplan's theory, a context is a set, a quadruple of a speaker, a time, a location, and a world. A proper context is one in which the speaker is in the location at the time in the world. The meaning, or *character* of an expression is a function from contexts to *contents*. The content of a

³ See de Ponte and Korta (2017).

sentence is a proposition, that of other expressions is their contribution to the proposition expressed by sentences in which they occur, basically an object, property, or relation. Thus (1) and (2) have the same content in the circumstances we are imagining, that Prior's root canal occurs prior to Friday evening, June 15, 1954.

In a series of essays, JP defended Kaplan's theory, and argued that Kaplan's concept of character was not only a contribution to understanding how indexicals and demonstratives work, but also to understanding intentionality in general.⁴ Basically, JP claimed that the causal roles of perceptual states, states of belief and desire, and intentions and volitions can only be understood in terms of character. JP's term for this generalized concept of character was "role". The causal role of a visual state, for example, is to carry information about the objects in view of the perceiver at the time and place of

⁴ See the early essays collected in JP's *The Problem of the Essential Indexical and Other Essays* (2000). The move to the reflexive-referential begins in the essay "Cognitive Significance and New Theories of Reference" (1988), with the concept of "the proposition created." This essay was a reply to Howard Wettstein's important essay "Has Semantics Rested on a Mistake?" (1986). In his essay, Wettstein introduced examples in which the expression, character, and context are basically the same, but the cognitive significance is nevertheless different. The reflexivereferential theory is developed in *Reference and Reflexivity* (2012 [2001]) and in Korta and Perry, *Critical Pragmatics* (2011). The notion of episode was first introduced in Crimmins & Perry, "The Prince and the Phone Booth: Reporting Puzzling Beliefs" (1989), in their account of beliefs as concrete cognitive particulars.

perception. The same state can carry information about different objects at different locations at different times, for different perceivers or the same perceiver at different times and places. We cannot understand this simply in terms of propositions that encapsulate the information captured, but must also bring in roles, functions from the circumstances the perceiver is in to *what* is perceived.

B. THE REFLEXIVE-REFERENTIAL APPROACH

Our position differs somewhat from Kaplan's view, and the view that JP defended. Kaplan discusses utterances to motivate his theory, but he does not bring them into his theory as such; they are replaced by, or perhaps modeled as, pairs of expressions and contexts: "expressions-in-context". Kaplan's main interest was developing a logic of demonstratives and indexicals. For this purpose he regarded utterances as an unnecessary complication. For one thing, a pair of context and expression can have a content, even if the speaker of the context does not utter the expression at the time and place of the context in the world under consideration. More importantly, utterances take time; the validity of an argument with one hundred steps might depend on the context being the same for all of them, but

we can't talk or write that fast. So, for logical purposes, utterances can get in the way.

From the point of view of understanding the relations between the contents of states and their causal roles, however, it is very helpful to have *episodes*, — paradigmatically, utterances, but also perceptions, thoughts, and actions — in our theory, as well as more extended "episodes" such as beliefs, desires and intentions. It is such episodes that *have* contents, have causes, and have effects. So, in the theory of intentionality, episodes and, in particular, utterances are too important to ignore, in spite of the complications they pose for logic.

For this purpose, we consider the elements of Kaplan's contexts to simply be properties of utterances, which objects fill the roles of speaker-of, time-of, and location-of. The fact that utterances have speakers and occur in locations at times clearly inspired Kaplan's concepts of context and character. We promote these inspiring episodes to first-class status.

The chief advantage of our view is simply that that it accounts for — and makes use of — the fact that utterances have many other

properties in addition to having speakers, locations, and times, that can be relevant to understanding their cognitive significance.⁵

One way to handle these, while sticking with Kaplan's approach, is to add more members to the context set, or to introduce additional sets. The latter is more or less the approach of Jon Barwise and JP in *Situations and Attitudes* (1983). On the "relational theory of meaning" advocated there, the meaning of a sentence is taken to be a relation among various situations connected to an utterance, although the utterance itself is, as in Kaplan's theory, only modelled and not introduced directly into the theory. The basic relation is between the utterance situation, which determines the speaker, location and time, and, in lieu of propositions, described situations. But various other situations, are added to the range of the relation, for dealing with names, descriptions, ambiguity and other phenomena.

On the reflexive-referential account, however, the treatment of such factors is simpler and more straightforward. They are all properties of the utterance, which can be recognized as necessary to handle various phenomena.

⁵ We consider the issue of possibilities and worlds in the last section.

On the reflexive-referential theory, truth and falsity are regarded as properties of episodes. An utterance has truthconditions, and is true if it satisfies them. Take a simple example, JP's utterance u of "I am sitting". For u to be true, there must be a speaker of u and a time of u, and the speaker must be sitting at the time. These are the *reflexive* truth-conditions. Then, *given* that JP is the speaker and noon August 28th is the time of u, JP must be sitting at that time for it to be true. That is, by identifying the occupants of the roles in the reflexive truth-conditons, we obtain the *referential* truthconditions. The latter are not, in themselves, conditions on the utterance. JP could be sitting at that time without uttering anything. But if we conceive of the referential truth-conditions as giving *what else* has to be the case for the utterance to be true, *given* the referential facts, the referential truth-conditions are conditions on the utterance.

In the referential-reflexive theory, we distinguish being true and being factual. Truth is a property of utterances and other episodes. Being a fact is a property of a state of affairs, or circumstances, or whatever else one takes to serve as *possiblities*.

That JP is sitting at noon is a fact, because he is. No utterance or episode is required. It would be a fact that Venus is the second planet from the sun, even if no one ever said so, even if there were no language, or even no life on earth, and no utterances. But for an utterance of "Venus is the second planet from the sun" to be true, life, language, and speakers are all required.

Thus the truth-conditions of each utterance are determined by the expressions used and the occupants of relevant roles. Utterances with different expressions, and different occupants of the relevant roles, will have different truth-conditions. Truth, the property that all true utterances have in common, is the property of meeting the truthconditions that an utterance provides for itself.

Usually the phrase "truth-conditions" is used in contemporary philosophy for what we call "referential truth-conditions," what *else* has to be the case for the utterance to be true, *given* the facts of reference. In this sense, quite different utterances can have the same truth-conditions, for example JP's utterance of "I like philosophy now" and KK's simultaneous utterance to JP of "You like philosophy now". But the reflexive truth-conditions will not be the same; the former requires the speaker of that very utterance to like philosophy to be true, the latter requires that the person the speaker of that utterance is addressing likes philosophy.

Let u be an utterance of "I love sailing now". Taking just the meaning into account, we can say:

u is true iff the speaker of u loves sailing at the time of u. As noted, these are conditions on the utterance u, properties *it* must have to be a true; that is, conditions on the utterance *itself*, and hence *reflexive truth-conditions*.

Suppose MDP is the speaker of u, and July 2017 is the time. Given that, we can give the *referential* truth-conditions of u, that is, what else has to be the case for u, given the reference of 'I' and 'now'. Note that they put *no* conditons on u, but on MDP and July 2015. They are also the referential truth-conditions of KK's utterance at the same time to MDP, "You love sailing now!"

We argue that the reflexive-referential theory inherits a key insight of Kaplan's theory, and JP's earlier view, but the inclusion of utterances gives it two advantages. The inherited key insight is the

distinction between different ways in which information can be discovered, believed and asserted.

The first advantage is that the cognitive significance of an utterance for different hearers can depend on the perceptual and causal relations the hearer has to the utterance, and which referencedetermining referential facts they know, and how they think of them. To account for this, we need to bring in additional properties of the utterance, and in particular causal properties. These are not modelled by Kaplan's expressions-in-context.

The second advantage concern certain possibilities that are hard to find unless, again, we have utterances — or more generally cognitive and linguistic episodes — in our account. We elaborate on these two advantages below. We start with the first one, on sections 3 and 4, and we discuss the second one on sections 5 and 6.

One final point, before we leave Prior's example for a bit. On his list of things it would be strange to thank goodness for he includes

(3) The conclusion of the root canal is contemporaneous with this utterance. The referential truth-conditions of (3) are that the conclusion of the root canal is contemporaneous with the utterance (3). This is about the same as the reflexive truth-conditions of (1).

(1) the root canal is over [now].

The reflexive truth-conditions of (1) are that the root canal is over at the time of utterance (1).

In general, an utterance that elevates the relevant reflexive truth-conditions of an original utterance to referential truthconditions will not have the same cognitive significance as the original. Compare, "I need some salt," "KK needs some salt" and "the speaker of this utterance needs some salt", all said at dinner by KK. The relevant reflexive truth-conditions of the first are that the speaker of the utterance needs some salt. This is what KK intends to convey; that is, he wants others at the dinner table, who can reach the salt, to be able to identify the one who needs salt in a way that will lead them to pass the salt in the right direction. They hear the utterance; they can easily identify the speaker; they know where the speaker is in comparison to them, so they will know how to get the salt to the person that needs it. The second utterance does not have

these virtues; it will help KK's fellow diners to help the person who needs the salt only if they know who KK is; even if this can be assumed it sounds pretentious. The third utterance is better than the second. As long as his fellow diners know that KK is referring to his own utterance with "this," they can figure out where to pass the salt. Otherwise they might wonder what utterance he is referring to perhaps something he reads on the menu. By referring to his own utterance, rather than simply making it, KK makes the utterance part of the referential content, that is, part of what he is talking about. Even if they realize which utterance he demonstratively refers to, and manage to pass the salt in the right direction, this will strike his fellow diners as odd — perhaps a way of emphasizing KK's obsession with utterances.

Similarly, in (3), Arthur Prior refers to his own utterance, instead of simply producing it, making the utterance itself part of the referential content, that is, part of what he is talking about. To understand him, the audience would need to know what utterance he is referring to; and even if they do, it will strike them as odd. Thus the cognitive significance of (3) — which talks about (1) or, in other

⁶ See Korta and Perry (2011), Chapter 7.

words, includes (1) in its referential truth-conditions — is different from the cognitive significance of (1).

3. VARIETIES OF COGNITIVE SIGNIFICANCE

The first advantage mentioned above is that in the reflexivereferential theory there is a simple account of how utterances have have different cognitive significance for different people, depending on their relation to the utterance. To account for this, we need to bring in additional truth-conditions of the utterance; and additional properties. Utterances have reflexive and referential truth-conditions, as we noted. But many other levels of truth-conditions can be considered for different purposes. The reflexive content of MDP's uterance u is simply that the speaker of u loves sailing at the time of u. Suppose MDP steps off the boat at a pier in San Francisco Bay after an afternoon of sailing. After accidentally falling in the cold water of San Francisco Bay during the sail, she had said to KK, "Sometimes I hate sailing." But as she steps off the boat she utters u, "I love sailing now." A stranger, who like Prior, is in a dateless haze, and is looking in the oppposite direction, hears her. Initially, he has only an utterance-bound "cognitive fix" on the speaker of u: whoever is the

speaker of the utterance he hears.² Then he turns, and recognizes that the speaker of the utterance is the young lady he sees. Now he knows that she is the person who must now love sailing for the utterance he heard to be true. Also, the stranger originally has only an utterancebound fix on the time of u: the time of the utterance he hears. Once he turns, and realizes that he is hearing the utterance at the same time it occurs — rather than hearing it over the radio — he realizes that the time of the utterance is also the time of his hearing of it; it is the time that, even in his dateless haze, he thinks of as "now." So, as he gains more knowledge about the properties of the utterance, he moves from only grasping the reflexive truth-conditions to grasping the referential truth-conditions, which he can express with "She likes sailing now."

Suppose you see a video of MDP, whom you recognize, uttering u, but have no idea when the video was taken. If you believe her, you would come to believe that at the time of the utterance she enjoyed sailing. Your understanding is utterance-bound, for you can identify the time at which she loved sailing only as the time at which u occurred. But since you recognize MDP, you have more than a reflexive understanding. The relevant truth-conditions are conditions

⁷ We own the phrase "cognitive fix" to Howard Wettstein.

both on the time of the utterance and on MDP. In *Critical Pragmatics*, KK and JP call such truth-conditions "utterance-bound," and considered a large number of examples and issues in which utterancebound truth-conditions (and other "hybrid" truth-conditions) are crucial to understanding semantic and, in particular, pragmatic issues.

4. BACK TO PRIOR

On both Kaplan's approach and the reflexive-referential approach, Prior's utterances (1) and (2) are importantly different in cognitive significance. On both approaches, the explanation for the difference need not rely on the proposition expressed, but in the way of appreheding or asserting that proposition. So either approach can avoid Prior's metaphysical conclusions.

To see the advantages we claim for the reflexive-referential approach, let's assume that Prior's philosophical thoughts were inspired by a real root canal that he had on June 15, 1954, in early afternoon. Towards evening he went to a bar with friends, all of whom, like Prior, went around in dateless hazes. It hurt him to talk, but he wrote a note and showed it to his friends:

(4) I had a root canal earlier today.

The note is preserved in the Museum of Tense Logic in Auckland, together with a little explanation of how it came to be written. We examine it, more than half a century later. The cognitive significance of the note was much different for his friends at the bar than it will be for us.

Such a note is a token, the physical product of act of writing, which we take to be a species of uttering. When one takes a note to be meaningful, one thinks of it as the result of an intentional act of writing. The context for the expression-in-context, or the occupants of the relevant roles for an utterance based theory, is provided by the intentional act that produced the token.⁸

Thus the context, character, and content of writing the note don't change between 1954 and 2017. And it is the same utterance of the same expression and the same objects filling the utterance-relative roles and the same reflexive and referential contents, in 1954 and 2017.

Let's imagine that Prior's friends and the museum-goers both were in dateless but not totally clueless hazes. That is, they couldn't

^s See Predelli (1998, 2011) and Perry (2003) for complications.

provide the date and time they became aware of the note, but they knew the year — 1954 and 2017 respectively.

Thus, when they inspected the note, both groups would understand its truth-conditions at an incremental but still utterancebound level:

The display of this note was true, iff it occurred on a day when Prior had a root canal, later in the day than the root canal.

The difference is that the two groups, although both in dateless hazes, know different things about the utterance. Prior's friends, who witnessed the display, know that it occurred on the same day that they are sitting with Prior in the pub and can offer him a drink. The museum-goers, aware that Prior died in 1969, know that whatever the exact date of the utterance, or the exact date of their inspection, the first occurred many years before the second. And this difference explains why the first group offers Prior a drink, but the second group makes no such effort.

Kaplan's theory also has the resources to explain the difference. Kaplan's contexts contain not only speakers, locations, and times, but also possible worlds. So the context of Prior's utterance contains all the facts that could be possibly relevant, including all facts about his utterance, its effects in the bar, and much later in the museum. Even if we do not have utterances in our basic semantics, we can bring them in through the "back-door", by finding them in the possible world in the context.

To us, this seems a bit roundabout. The utterances, and other episodes the truth-conditions and cognitive significance of which we want to understand, are what our semantic and pragmatic theories are ultimately theories about. It seems natural to give them a central place in our theories. In addition, the inclusion of utterances in our theory brings a second advantage for the reflexive-referential theory over the Kaplan-Perry one.

5. WETTSTEIN'S CHALLENGE

In his important essay, "Has semantics rested on a mistake?" Howard Wettstein pointed out that whatever the virtues of what he called the "Kaplan-Perry" account has in explaining cognitive signifcance of cases involving indexicals, it does not handle Frege's *Begriffsschrift* (1879) problem, the origin of worries about cognitive significance, which involves proper names. "Hesperus is Hesperus" and "Hesperus is Phosphorus" clearly have different cognitive significance; one learns from the second that the names co-refer, but not from the first. On a directly referential account of proper names, which is more or less what Frege had in the *Begriffsschrift*, this is hard to account for. On Kaplan's account, the character of a proper name is a constant function, from any context to the bearer of the name. The two sentences have the same content, a singular proposition to the effect that Venus is Venus. So, whatever the virtues of the Kaplan-Perry thesis for cases involving indexicals, it does not help with proper names.

In response to Wettstein's essay, JP introduced the concept of the proposition created by an utterance, in contrast with the proposition expressed by an utterance, which was basically the distinction between reflexive and referential content.

On the reflexive-referential account, the two utterances have different reflexive truth-conditions. The first is true if and only if there is an object named by "Hesperus" which is self-identical. The second is true if and only if there is such an object, and there is also an object named by "Phosphorus", and the objects are identical. So, even though the contents or referential truth-conditions of the two utterances are the same, they differ in cognitive significance, in virtue of their different reflexive truth-conditions.

6. MORE HAZES

As noted, certain possibilities are hard to find unless we have utterances —and other episodes —in our account. We turn now to the discussion of this second advantage.

One can be in a dateless haze without knowing it; that is, one can be quite certain about the date, but be wrong. In such a case, it is natural to think, in retrospect, that one *might have* been correct; even that one's false belief was justified. This seems to provide another advantage for the reflexive-referential theory.

Suppose JP and Dan are planning to go to the Giants game on August 22, 2017. The day before, JP types out a reminder: "The Giants game is tomorrow. Don't forget." But he forgets to hit the "send" button. He notices that that the message has not been sent just before retiring, and hits the button. But he doesn't notice that it is already after midnight.

Dan, a dateless-hazer, sees the reminder, "The Giants game is tomorrow," when he wakes up on August 22, and sees that date on the email heading. He knows that the game is on August 22, and reasons, given JP's notorious reliability, "Today must be August 21." He then immerses himself in linguistic esoterica until late in the evening, when JP calls and says, "You missed the game!"

Dan thought, on August 22, that it was August 21. He had good reason for this belief. The game was scheduled for August 22. JP said, in an email this morning, that the game was tomorrow. JP is pretty reliable. Therefore, today must be August 21.

Could Dan have been right? It seems not, because for his belief to be true, August 22 would have to be August 21, which is not possible. Surely had Dan said,

(5) August 22 is August 21

we could diagnose some kind of irrationality (or was making some subtle linguistic point). But if he just says, as he did:

(6) Today is August 21

on August 22, this doesn't seem like the right diagnosis.

But there is a way Dan's utterance could have been true: if it had occurred on August 21 rather than August 22. That is, specifically, if the role of time-of for the utterance of 'today' had been filled by some moment occurring on August 21, the utterance would have been true.

On the expression-in-context approach, this doesn't seem like an option. Since the pair of expression and context is individuated by its members, we wouldn't have the same pair if the time of the context was August 21. So we have another advantage for the reflexivereferential theory and granting utterances first-class status in the semantics of tense and indexicals.

As Richard Vallée has pointed out,⁹ there is an objection to our strategy. One theory of events is that they are *individuated* by the time at which they occur, *where* they occur, and *which* object and properties involved. If we accept this account of event individuation, the reflexive-referential account is no better off than the expressions-incontext account.

⁹ Personal Communication.

We reject this account of the individuation of events; it is a plausible account of the individuation of facts, but not of events. Being a fact is, as noted, a property of whatever one takes to serve as possibilities, be it circumstances, state of affairs or whatever. We will not here develop an account of events, which we regard as very basic elements of reality. But we think an adequate account must allow for counterfactuals of the form, "if the election had occurred two weeks earlier, Clinton would have won," or, to follow with our example, "if Dan's utterance had occurred on August 21, he wouldn't had missed the Giant's game." It is a fact that he missed it and that he made his utterance on August 22. Nothing can change that. But the episodes involved, Dan's belief and Dan's utterance "Today is August 21" could have been true, had they occurred on August 21.

In his paper "Frege on Demonstratives" (1977), JP introduced the example of Heimson, who thought he was David Hume. Let's suppose instead that Heimson thought he was Bob Dylan, which will make it easier to make a case for his rationality. Here is the background story. Heimson falls, hits his head, and has amnesia as a result. He doesn't know who he is. He carries no identification. He awakes in a hospital where no one has any idea who he is. Heimson

decides to figure out who he is. Heimson's amnesia is of a rather peculiar sort; he retains "third-person" memories about lots of people, he simply doesn't remember which of them he is. He assumes he is one of the people about whom he knows a great deal. He notices that he knows all of Bob Dylan's songs by heart, the date of every concert where he performed, and loads of other things. He also knows a lot about a fellow named "Heimson," but not nearly as much as he knows about Dylan. He decides he is Dylan, and thinks, with some confidence, "I am Bob Dylan".

His thought cannot be true. Indeed, it seems necessarily false. But it might be rational. And we think it does get at a possibility, even if a rather remote one. The possibility is found at the reflexive level. Call his thought — the event of thinking, the episode, not its content — T. If Bob Dylan had the thought T, rather than Heimson, T would be true. This is the possibility that Heimson's sifting of the evidence available to him led him to think was the case.

David Lewis (1979), considering JP's original example, comes to the opposite conclusion. In "Frege on demostratives," JP advocated a version of the Kaplan-Perry view, that he called the two-tiered view. In a nutshell, to deal with the attitudes we need to recognize two levels of content for beliefs. *What* is believed is a proposition, often a singular proposition. *How* it is believed corresponds to character or role.

Lewis had nice things to say about this account, but thought that the level corresponding to character or role could serve as what is believed, and the upper tier could be jettisoned. Lewis noted that a character, a function from contexts to propositions, could be regarded as a property: the property an agent has at a time iff the character, applied to that agent and time, yields a true proposition. So, when JP says, "I am sitting," he "self-ascribes" the property P_{sitting}.

 $P_{\scriptscriptstyle{\text{sitting:}}} \!\!=\!\!$

the property x has iff the character of "I am sitting", with arguments x and t, yields a true proposition, that is,

the property someone x has at time t, iff x is sitting at t. On Lewis view, properties, rather than propositions, are the true "objects" of beliefs. A belief consists of an agent at a time selfascribing a property.

Lewis's view, like the Kaplan-Perry approach, does not involve episodes. We have agents, times, the relation of self-ascription, and properties. Lewis (1979, footnote 16) regards singular propositions and "de re" beliefs as unnecessary intrusions into the theory of the attitudes based on pre-occupation with the analysis of our customs for reporting beliefs .

Lewis's view incorporates much of the traditional picture that belief is a relation between an agent at a time and a proposition. His innovation is to replace propositions with properties. But we think the idea of objects of beliefs in this sense is a mistake. A belief consists in an agent at a time being in a mental state, an episode. This episode has truth-conditions, which can be characterized by propositions, many different propositions, depending on what is taken as given. But neither propositions, nor characters, nor characters construed as properties, are objects of belief in the sense that belief consists of a relation to them. Propositions, in our sense, are tools we use to characterize and keep track of the truth-conditions of the episode.

Lewis's account, like the Kaplan-Perry account, does not have episodes, utterances or beliefs, as elements. So, on Lewis's view, Heimson's belief, whether he thinks he is Hume or thinks he is Dylan, cannot be true in the strong sense that there is no possible way it

could be true. On his view, the belief consists of Heimson, the relevant time, and the attitude of self-ascription to the property of being Hume/being Bob Dylan. Since there is no possibility that Heimson at the time has that property, there is no way the belief can be true. Heimson is irrational in all possible circumstances.

So, we count it as a defect of the Kaplan-Perry account, and of Lewis's account, that it is unfair to Heimson. To paraphrase Billy Joel, Heimson may be crazy, but often in philosophy we are looking for a lunatic, to uncover hidden corners in the realm of possibilities.^w

7. CONCLUSION

The topic of this volume is contexts in general. We do not hold that theories that treat contexts as abstract entities, sets that encode relevent contextual information, are necessarily wrong-headed. For the purposes of formal theories that lend themselves axiomatization and computation, such theories have many virtues. But we think that in order to fully understand what is going on for many philosophical purposes, it must be kept in mind that possession and transfer of

¹⁰ Billy Joel "You might be right," in *Glass Houses* (1980).

information are always a matter of complex relations between the contents of episodes — thoughts, utterances, signals — and their other properties. In the reflexive-referential theory we advocate, episodes and their properties are not only kept in mind, but in the theory.

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