

We could then represent contexts by the same indexed sets we use to represent circumstances, and instead of having a *logic of contexts and circumstances* we have simply a *two-dimensional logic of indexed sets*. This is algebraically very neat and it permits a very simple and elegant description of certain important classes of characters (for example, those which are true at every pair  $\langle i, i \rangle$ , though the special significance of the set is somehow diminished in the abstract formulation).<sup>36</sup> But it also permits a simple and elegant introduction of many operators which are monsters. In abstracting from the distinct conceptual roles played by contexts of use and circumstances of evaluation the special logic of indexicals has been obscured. Of course restrictions can be put on the two-dimensional logic to exorcise the monsters, but to do so would be to give up the mathematical advantages of that formulation.<sup>37</sup>

## IX. Argument for Principle 2: True Demonstratives

I return now to the argument that all indexicals are directly referential. Suppose I point at Paul and say,

He now lives in Princeton, New Jersey.

Call *what I said*—i.e., the content of my utterance, the proposition expressed—‘Pat’. Is Pat true or false? True! Suppose that unbeknownst to me, Paul had moved to Santa Monica last week. Would Pat have then been true or false? False! Now, the tricky case: Suppose that Paul and Charles had each disguised themselves as the other and had switched places. If that had happened, *and* I had uttered as I did, then the proposition I *would have* expressed would have been false. But in that possible context the proposition I *would have* expressed is not Pat. That is easy to see because the proposition I *would have* expressed, had I pointed to Charles instead of Paul—call this proposition ‘Mike’—not only *would have* been false but actually is false. Pat, I would claim, would still be true in the circumstances of the envisaged possible con-

<sup>36</sup>See, for example, Krister Segerberg, “Two-dimensional Modal Logic,” *Journal of Philosophical Logic* 2 (1973): 77–96. Segerberg does metamathematical work in his article and makes no special philosophical claims about its significance. That has been done by others.

<sup>37</sup>There is one other difficulty in identifying the class of contexts with the class of circumstances. The special relationship between the indexicals ‘I’, ‘here’, ‘now’ seems to require that the agent of a context be at the location of the context during the time of the context. But this restriction is not plausible for arbitrary circumstances. It appears that this approach will have difficulty in avoiding the problems of (6) and (8) (section VII).

text provided that Paul—in whatever costume he appeared—were still residing in Princeton.

### IX. (i) The Arguments

I am arguing that in order to determine what the truth-value of a proposition expressed by a sentence containing a demonstrative *would be* under other possible circumstances, the relevant individual is not the individual that *would have* been demonstrated had those circumstances obtained and the demonstration been set in a context of those circumstances, but rather the individual demonstrated in the context which *did* generate the proposition being evaluated. As I have already noted, it is characteristic of sentences containing demonstratives—or, for that matter, any indexical—that they may express different propositions in different contexts. We must be wary of confusing the proposition that would have been expressed by a similar utterance in a slightly different context—say, one in which the demonstratum is changed—with the proposition that was actually expressed. If we keep this distinction in mind—i.e., we distinguish Pat and Mike—we are less likely to confuse what the truth-value of the proposition *actually* expressed would have been under some possible circumstances with what the truth-value of the proposition that *would have been* expressed would have been under those circumstances.

When we consider the vast array of possible circumstances with respect to which we might inquire into the truth of a proposition expressed in some context *c* by an utterance *u*, it quickly becomes apparent that only a small fraction of these circumstances will involve an utterance of the same sentence in a similar context, and that there must be a way of evaluating the truth-value of propositions expressed using demonstratives in counterfactual circumstances in which no demonstrations are taking place and no individual has the exact characteristics exploited in the demonstration. Surely, it is irrelevant to determining whether what I said would be true or not in some counterfactual circumstance, whether Paul, or anyone for that matter, *looked* as he does now. All that would be relevant is *where he lives*. Therefore,

- (T3) the relevant features of the demonstratum *qua demonstratum* (compare, the relevant features of the  $x$   $Fx$  *qua the*  $x$   $Fx$ )—namely, that the speaker is pointing at it, that it has a certain appearance, is presented in a certain way—cannot be the essential characteristics used to identify the relevant individual in counterfactual situations.

These two arguments: the distinction between Pat and Mike, and consideration of counterfactual situations in which no demonstration occurs, are offered to support the view that demonstratives are devices of direct reference (rigid designators, if you will) and, by contrast, to reject a Fregean theory of demonstratives.

### IX. (ii) The Fregean Theory of Demonstrations

In order to develop the latter theory, in contrast to my own, we turn first to a portion of the Fregean theory which I accept: the Fregean theory of demonstrations.

As you know, for a Fregean the paradigm of a meaningful expression is the definite description, which picks out or denotes an individual, a unique individual, satisfying a condition *s*. The individual is called the *denotation* of the definite description and the condition *s* we may identify with the *sense* of the definite description. Since a given individual may uniquely satisfy several distinct conditions, definite descriptions with distinct senses may have the same denotation. And since some conditions may be uniquely satisfied by no individual, a definite description may have a sense but no denotation. The condition by means of which a definite description picks out its denotation is *the manner of presentation* of the denotation by the definite description.

The Fregean theory of demonstratives claims, correctly I believe, that the analogy between descriptions (short for 'definite descriptions') and demonstrations is close enough to provide a sense and denotation analysis of the 'meaning' of a demonstration. The denotation is the demonstratum (that which is demonstrated), and it seems quite natural to regard each demonstration as presenting its demonstratum in a particular manner, which we may regard as the sense of the demonstration. The same individual could be demonstrated by demonstrations so different in manner of presentation that it would be informative to a competent auditor-observer to be told that the demonstrata were one. For example, it might be informative to you for me to tell you that

That [pointing to Venus in the morning sky] is identical with  
that [pointing to Venus in the evening sky].

(I would, of course, have to speak very slowly.) The two demonstrations—call the first one 'Phos' and the second one 'Hes'—which accompanied the two occurrences of the demonstrative expression 'that' have