and the second gives rise to behavior suited to the circumstances stably related to it—I extend my arm a bit further.

If this were the way things worked, the hypothesis in question would be incorrect. To understand the relation between cognitive states, the beliefs and desires to which they give rise, and the actions they cause, we would have to recognize circumstances as a significant parameter of the projection relation.

While the picture sketched is crude, it seems the principle it illustrates could survive in more sophisticated accounts. It seems then that version (2) can at least claim the virtue of not ruling out such accounts a priori, so that the contextualist hypothesis can be weighed against alternatives.[4]

[4]Research on this paper was begun while on sabbatical leave from Stanford University. It was also supported by a grant from the National Science Foundation and a grant to the Center for the Study of Language and Information from the System Development Foundation.

This paper owes a great deal to a seminar on planning and practical reasoning, held at the Center for the Study of Language and Information during winter quarter 1984. Thinking about Bob Moore's theory of knowledge and action was particularly helpful. While the ideas in this paper are basically in the spirit of Barwise and Perry 1983, the seminar and other discussions with Michael Bratman, Stan Rosenschein, John Etchemendy, Ned Block, David Israel, and others led to an increased appreciation of the importance of action in thinking about the attitudes. Both Jon Barwise and I have been thinking a great deal about such matters, and hearing his ideas on the semantics of OLP, a simple programming language based on English commands, was extremely helpful. Other developments in the theory of situations are reported in Barwise and Perry 1985.

10

Thought Without Representation

I see a cup of coffee in front of me. I reach out, pick it up, and drink from it. I must then have learned how far the cup was *from me*, and in what direction, for it is the position of the cup relative to me, and not its absolute position, that determines how I need to move my arm. But how can this be? I am not in the field of vision: no component of my visual experience is a perception of me. How then can this experience provide me with information about how objects are related to *me*?

One might suppose that while no component of my perception is of me, some component of the knowledge to which it gives rise must be. Perhaps I am able to infer where the cup is from me, because I know how things look, when they are a certain distance and direction from me. Without a component standing *for me*, how could this knowledge guide my action, so that it is suited to the distance the cup is *from me*?

But some philosophers think that our most primitive knowledge about ourselves lacks any such component: basic self-knowledge is intrinsically selfless. Something like this was presumably behind Lichtenberg's remark, that Descartes should have said "It thinks" rather than "I think." And according to Moore, Wittgenstein approved of Lichtenberg's remark:

> The point on which he seemed most anxious to insist was that what we call "having toothache" is what he called "a primary experience ..."; and he said that "what characterizes 'primary experience' is that in its case, "'I' does not denote a possessor." In order to make clear what he meant by this he compared "I have a toothache" with "I see a red

> patch"; and said of what he called "visual sensations" generally ... that "the idea of a person does not enter into the description of it, just as a (physical) eye does not enter into the description of what is seen"; and he said that similarly "the idea of a person" does not enter into the description of "having toothache." ... He said that "Just as no (physical) eye is involved in seeing, so no Ego is involved in thinking or having toothache"; and he quoted, with apparent approval, Lichtenberg's saying, "Instead of 'I think' we ought to say 'It thinks'" (Moore 1959, 302-03).

I am sympathetic with Wittgenstein's view as I interpret it. There is a kind of self-knowledge, the most basic kind, that requires no concept or idea of oneself. The purpose of the present paper, however, is not to argue directly for this view, but to try to see how it could be so, by seeing how it is possible to have information about something without having any "representation" of that thing. I begin by studying something a bit more open to view, the possibility of talking about something, without designating it.

I

It is a rainy Saturday morning in Palo Alto. I have plans for tennis. But my younger son looks out the window and says, "It is raining." I go back to sleep.

What my son said was true, because it was raining in Palo Alto. There were all sorts of places where it was not raining: it does not just rain or not, it rains in some places while not raining in others. In order to assign a truth-value to my son's statement, as I just did, I needed a place. But no component of his statement stood for a place. The verb "raining" supplied the relation *rains*(t, p)—a dyadic relation between times and places, as we have just noted. The tensed auxiliary "is" supplies a time, the time at which the statement was made. "It" does not supply anything, but is just syntactic filler.[1] So Palo Alto is a constituent of the content of my son's remark, which no component of his statement designated; it is an *unarticulated* constituent. Where did it come from?

[1]Note that if we took "It" to be something like an indexical that stood for the location of the speaker, we would expect "It is raining here" to be redundant and "It is raining in Cincinnati but not here" to be inconsistent.

In approaching this question, I shall make five initial assumptions, which together will provide a framework for analysis. First, I shall assume that the meaning of a declarative sentence S can be explained in terms of a relation between uses of S and what is said by those uses—the propositional content of the statement made. Consider the declarative sentence *I am sitting*. Different people at different times say quite different things by using this sentence. What they say depends in a systematic way on the *context*—the facts about the use. The pertinent facts in this case are the user and the time of use. An explanation of the meaning of *I am sitting* quite naturally takes the form of a relational condition:

> A use u of *I am sitting* expresses a proposition P iff there is an individual a and a time t such that
>
> (i) a is the speaker of u
>
> (ii) t is the time of u
>
> (iii) P is the proposition that a sits at t.

The second assumption is that the propositions expressed by statements—at least the simple sorts of statements we shall consider here—have *constituents*. Their constituents are the objects (relations, individuals, times, places, etc.) that they are about. Thus the constituents of my statement that I am sitting are me, the present moment, and the relation of sitting.

The third assumption is that a declarative sentence has significant components, the meanings of which can be explained in terms of the relations between uses of these components and the objects those uses stand for or designate. Let us suppose that in our sentence the components are the three words, *I*, *am*, and *sitting*. We can explain their meanings as follows:

> A use u of *I* designates an object a, iff a uses *I* in u; a use u of *am* designates a time t, iff t is the time at which u occurs; a use u of *sitting* designates a relation R, iff R is the relation *sits*(a,t).

In the first two cases, facts about the use affect the object designated. This is not so in the third case; no variable for the use appears on the right of the "iff." Expressions of the first sort we call "context-sensitive"; those of the second we call "context-insensitive," or "eternal." In this example, each of the components is a separate word, but this is not