1.3.2. Indexicality and vagueness

While we can avoid the complications posed by the variety of speech acts by limiting the uses of language that we will study, the phenomena of indexicality or deixis cannot be handled in the same way because most sentences have indexical features. In particular, time reference through the use of tense is usually indexical. Still, we will be able to sidestep most of the problems raised by indexicality.

These problems derive from the consideration that, if the propositions expressed by sentences vary with the context in which they are used, the logical properties and relations of these sentences (which we trace to the propositions they express) may vary as well. The proposition expressed by the sentence *I am here* will depend on the speaker and the speaker's location (and also the time of utterance). And this sentence may express the same proposition as the sentence *You are there* when the latter is used by a second speaker in an appropriately related context. However, the two sentences would not express the same proposition when they are used by a single speaker. So it seems that whether or not two sentences express the same proposition depends on who is using them as well as on many other features of the context of use. But sentences are supposed to be logically equivalent when they express the same proposition, so how can we determine sentences themselves, considered without any information about the contexts in which they are used, are or are not equivalent? Analogous questions arise for entailment and the other deductive properties and relations we will consider.

Our way of dealing with indexicality is to assume that, when we consider a sentence, we consider it as used in a particular context; and, when we consider several sentences in relation to one another, we consider them all as used in the same context—by the same speaker, at the same place and time, etc. The claims we will make about equivalence, entailment, and other deductive properties and relations derive from very general principles and hold for any single context of use, so we will never need to specify just what the context is. It will be enough to assume that there is a context and that it is kept fixed when comparing sentences.

Indeed, we could attribute to a sentence in its own right, and to a group of sentences in relation to each other, only those properties that do not vary with changes in the context. That is, we would not say that the relation between the sentences *I am here* and *You are there* described above is a relation between the sentences themselves since it holds only for certain uses of them. The term **statement** has sometimes been used to speak of a particular use of a sentence. If we were to adopt this

convention, we might say that the relation holds between certain statements made using these two sentences. But, in any case, we can say that the entailment I am here $\Rightarrow I$ will always have been here is a relation between sentences because it holds whenever they are used in the same context—no matter what this context is. And all the features of interest to us will be of this latter sort.

Since we will assume that sentences are always considered in some fixed context, we will always be in fact considering statements in the sense mentioned above. As a result, the ability to ascribe properties and relations to sentences themselves has no special benefits for us in the case of indexicality. However, it does provide a way of handling the phenomenon of *vagueness*.

One way of understanding vague terms is to suppose that their significance varies with the context of use but is not completely determined by it. The meaning of the word *large*, for example, depends on the line to be drawn between what is and what is not large. This line is settled to some degree by features of the context of its use—whether the word appears in a discussion of molecules or of galaxies, for example—and some contexts will pin it down more precisely than others. But there is usually, and perhaps always, some indeterminacy remaining, and this means that we have fewer options for discussing vague sentences than we do for sentences exhibiting ordinary forms of indexicality. We understand the entailment I am here $\Rightarrow I$ will always have been here to hold because the propositions expressed by the two sentences are related in a certain way in every context of use. But we cannot understand the entailment

$Crawfordsville is small \Rightarrow Crawfordsville is not large$

to hold for the same reason because the sentences involved may not express definite propositions in any context of use.

Still, there is a way of comparing the two claims of entailment. We can understand each to hold because of the relation between the propositions that *would be* expressed by the sentences if certain factors were specified. In the first case, these factors, the speaker and location and time of utterance, specified by any actual context of use. In second case, the relevant factors are precise delineations of the terms *small* and *large*. The latter are not provided by an actual context of use, but we can still say that the propositions expressed by the sentences would represent a case of entailment no matter how these factors were specified.

That is, we have two ways of understanding the claim that a pair of

sentences stand in the relation of entailment. According to one, we say this is so because of a constant relation that holds between the propositions the two sentences *do* express, whatever these propositions are. In the second way of speaking, we do not assume that the sentences actually express propositions and say that they are related because of a constant relation between the propositions they *would* express given the specification of further factors, no matter how these factors are specified. The second way of understanding *entails* is the more general one, and it is the one we will use when speaking carefully. However, it will sometimes be convenient to speak as if propositions are in fact expressed by the sentences in question in cases when this is not really accurate (as in the second example above). When doing this, we will be speaking as if we had fixed not only a context of use but also any further factors required for the sentences to express definite propositions.

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