

II 'ON SENSE & REFERENCE'

The Metalinguistic Approach to Identity

Frege starts by explaining the approach that he used to take to identity, in which

$$a = b$$

is held to be, not about *a* and *b* directly, but rather about the terms '*a*' and '*b*'. In other words it is equivalent to:

'*a*' and '*b*' co-refer

in which '*a*' and '*b*' are mentioned and not used. Frege now rejects this account since it would have the consequence that an identity sentence would express 'no genuine knowledge'. He is not denying that it would express no knowledge; but it would be knowledge about words, not about the world. To see this, consider a case in which I introduce a new term, let's say 'Tiger Town' to refer to Princeton. Then

Tiger Town is Princeton

doesn't tell you anything about Princeton, but it is nonetheless true (and linguistically informative) that

'Tiger Town' and 'Princeton' co-refer

In contrast an identity sentence like

The Morning Star is the Evening Star

gives us real information about the Morning Star.

There are other problems with the metalinguistic approach:

- (i) where does it stop? ('*a* is the same size as *b*')
(ii) what about mixed uses? ('*a* and *b* are both planets, and in fact are identical')
(iii) what happens with translation?

Sense

Now it is plausible to connect with a sign not only the designated object, which may be called the reference of the sign, but also the sense of the sign, in which is contained the manner and context of presentation. (218)

In the case of genuinely proper names like 'Aristotle', opinions as to the sense may differ ... (n.2)

Different terms can have different senses but the same reference; they can have the same sense and the same reference; but they cannot have the same sense and different reference. What are senses? Modes of presentation? Descriptions?

Sense without Reference

Frege says that this is possible, and gives examples from astronomy and mathematics (p. 218). A sentence containing an empty name will lack a truth-value (q.v. the Odysseus example, p. 220). But the sentence does not *assert* that the name has a reference. Rather it *presupposes* it (p. 224). The presuppositions of a sentence are the conditions that it has to fulfill if it is to get a truth value. [Question: what account can now be given of negative existentials?]

Indirect Discourse

Words in indirect discourse are held to have as their reference what is standardly their sense. Then we can maintain the thesis that the substitution of co-referring expressions does not change the truth value of a sentence; it is just that, in indirect discourse, sameness of reference is only given when we would normally have sameness of sense.

Distinguish senses from images (ideas)

Ideas are subjective. (Worry: Can we keep senses distinct from ideas? The Third Realm.) The telescope analogy.

The Sense and Reference of a Sentence

The proposition is the sense of a sentence. (For 'proposition' Frege uses the term 'der Gedanke', which is normally translated 'thought') So what is the reference?

We have realized that we are to look for the reference of a sentence whenever the reference of the sentence-components are the thing that matters; and that is the case whenever and only when we ask for the truth value.

Thus we find ourselves persuaded to accept the truth-value of a sentence as its reference. (221)

So all true sentences have the same reference. Isn't the truth-value a property of a proposition? No; to ascribe truth to a proposition is just to say what is said by the sentence that expresses that proposition.

What interests us can therefore never be merely the reference; but the proposition alone does not give knowledge; only the proposition together with its reference, i.e. its truth-value, does. Judging may be viewed as a movement from a proposition to its reference, i.e. its truth-value. (221)

Does Substituting a Coreferential Sentence Maintain Truth-Value?

Indirect discourse

Other propositional attitudes (and related constructions):

X fears that he will never see the Morning Star again

Columbus inferred from the roundness of the Earth that he could, traveling West, reach India

He opened the window so that he could see the Evening Star

She commanded that he should seek the Morning Star

Here we have indirect contexts, so the sentences denote their customary senses.

Sentences containing subordinate clauses

He *who discovered the elliptical shape of the planetary orbits* died in misery

The square root of four *which is smaller than zero*

Here the subordinate clause is not a sentence.

Dependent clauses that involve implicit conjunction

Napoleon, who recognized the danger to his right flank, personally led his troops against the enemy's position

Other truth functional connectives

If, then

Although, but, yet

"The latter illuminate [the sense] in a peculiar fashion" (p. 226); but truth value is unchanged if 'the implicate' is replaced by one of the same truth value (does he here mean the conjunct, or the connective?).

Factives and Anti-Factives

Bebel imagines that France's desire for vengeance could be assuaged by the restitution of Alsace-Lorraine (German verb is 'wähnen')

Bebel knew that France had lost the war of 1870

Causal sentences

Napoleon personally led his troops against the enemy's position because he recognized the danger to his right flank

Because ice is lighter than water, it floats on water

The clause, while it does denote a truth-value, is not restricted to this function in that its sense comprises, beside one proposition, also part of another. (228)