§8. Identity of content\(^{24}\) differs from conditionality and negation by relating to names, not to contents. Whilst elsewhere symbols simply represent their contents, so that each combination into which they enter merely expresses a relation between their contents, they at once stand for themselves as soon as they are combined by the symbol for identity of content; for this signifies [bezeichnen] the circumstance that two names have the same content. Thus with the introduction of a symbol for identity of content a bifurcation in the meaning of every symbol is necessarily effected, the same symbols standing one moment for their content, the next moment for themselves. This makes it appear at first as if it were here a matter of what pertains to the expression alone, not to the thought, and as if there were no need at all for different symbols for the same content and hence for a symbol for identity of content either. To show that this appearance is deceptive, I take the following example from geometry.\(^{25}\)

On the circumference of a circle lies a fixed point \(A\), around which a straight line rotates. When the latter forms a diameter, let us call the point at the opposite end to \(A\) the point \(B\). Let us then call, more generally, the point of intersection of the line and the circumference at any given moment the point \(B\), resulting from the rule that continuous changes in position of the line always correspond to continuous changes in position of \(B\). The name \(B\) therefore denotes\(^{26}\) something indeterminate so long as the relevant position of the line is not given. It can now be asked: what point is yielded when the line is perpendicular to the diameter?

\(^{24}\) The German term here is ‘Inhaltsgleichheit’, which has also been translated as ‘equality of content’. Throughout his writings, both here and in his later work, Frege makes clear that he understands ‘Gleichheit’ in the sense of ‘identity’, so either rendering is correct. Cf. SB, fn. A, p. 151 below.

\(^{25}\) Following Gensch, a diagram is added here to help the reader. Compare this with the example Frege later gives in SB, p. 152 below.

\(^{26}\) The verb ‘bedeutet’ is again being used in its vertical sense, making ‘denotes’ the more appropriate translation; cf. fn. 14 above.

The answer will be: the point \(A\). The name \(B\) has therefore in this case the same content as the name \(A\); and yet just one name could not have been used from the beginning, since the justification for doing so is only provided by this answer. The same point is determined in two ways:

1. immediately through intuition [Anschauung],
2. as the point \(B\) when the line is perpendicular to the diameter.

To each of these two modes of determination there corresponds a separate name. The need for a symbol for identity of content thus rests on the following: the same content can be fully determined in different ways, but that, in a particular case, the same content is actually given by two modes of determination is the content of a judgement. Before this judgement can be made, two different names corresponding to the two modes of determination must be provided for that that is thereby determined. But the judgement requires for its expression a symbol for | identity of content to combine the two names. It follows from this that different names for the same content are not always merely a trivial matter of formulation, but touch the very heart of the matter if they are connected with different modes of determination.\(^{27}\) In this case the judgement as to identity of content is, in the Kantian sense, synthetic. A secondary reason for introducing a symbol for identity of content is that it is occasionally useful to introduce an abbreviation in place of a lengthy expression. The abbreviation and the original expression must then be stated to have the same content.

\[
\text{—— (} A \equiv B \text{)}
\]

is therefore to mean: the symbol \(A\) and the symbol \(B\) have the same conceptual content, so that \(A\) can always be replaced by \(B\) and vice versa.

The function

§9. Let us suppose that the circumstance that hydrogen is lighter than carbon dioxide is expressed in our formula language. Then in place of the symbol for hydrogen we can insert the symbol for oxygen or that for nitrogen. This changes the sense in such a way that ‘oxygen’ or ‘nitrogen’ enters into the relations in which ‘hydrogen’ stood before. If an expression is thought of as variable in this way, it splits up into a constant

\(^{27}\) It is this idea that Frege later realized required the distinguishing between \(Sim\) and \(Bedeutung\). Two names may have the same \(Bedeutung\) (the same ‘content’), but different senses (if, as in the example here, they are connected with different ‘modes of determination’). For Frege’s later critique of his BS view that identity of content merely relates to names, see the opening passage of SB, pp. 151-2 below.