

Passages from Frege's "Negation" (1919)
(References to Geach and Black, bolding added)

Here, however, a difficulty arises. If a thought has being by being true, then the expression 'false thought' is just as self-contradictory, as 'thought that has no being.' In that case the expression 'the thought: three is greater than five' is an empty one; and accordingly in science it must not be used at all-except between quotation-marks. [117]

So that which we can grasp as the sense of the interrogative sentence before answering the question-and only this can properly be called the sense of the interrogative sentence-cannot be a thought, if the being of a thought consists in being true. [118]

But in an interrogative sentence neither the truth nor the falsity of the sense may be asserted. Hence an interrogative sentence has not as its sense something whose being consists in its being true. The very nature of a question demands a separation between the acts of grasping a sense and of judging. And since the sense of an interrogative sentence is always also inherent in the assertoric sentence that gives an answer to the question, this separation must be carried out for assertoric sentences too....

The being of a thought thus does not consist in its being true. [119]

Thoughts that perhaps turn out later on to be false have a justifiable use in science, and must not be treated as having no being. Consider indirect proof; here knowledge of the truth is attained precisely through our grasping a false thought. [119]

Of course we cannot infer anything from a false thought; but the false thought may be part of a true thought, from which something can be inferred. [119]

The thought contained in the sentence:

'If the accused was in Rome at the time of the deed, he did not commit the murder' may be acknowledged to be true by someone who does not know if the accused was in Rome at the time of the deed nor if he committed the murder. Of the two component thoughts contained in the whole, neither the antecedent nor the consequent is being uttered assertively when the whole is presented as true. We have then only a single act of judgment, but three thoughts, viz. the whole thought, the antecedent, and the consequent. If one of the clauses were senseless, the whole would be senseless. [120]

The being of a thought may also be taken to lie in the possibility of different thinkers' grasping the thought as one and the same thought. [120]

But it must be possible to put a question to which the true answer is negative. The content of such a question is, in my terminology, a thought. It must be possible for several people who hear the same interrogative sentence to grasp the same sense and acknowledge the falsity of it. [121]

A false thought must be acknowledged, not indeed as true, but as sometimes indispensable: first, as the sense of an interrogative sentence; secondly, as part of a hypothetical thought-complex; thirdly, in negation. It must be possible to negate a false thought, and for this I need the thought; I cannot negate what is not there. [122]

Our act of judgment can in no way alter the make-up of a thought. We can only recognize what is there. A true thought cannot be affected by our act of judgment. In the sentence that expresses the thought we can insert a 'not'; and the sentence we thus get does not contain a non-thought (as I have shown) but may be quite justifiably used as antecedent or consequent in a hypothetical sentence complex. Only, since it is false, it may not be uttered assertively. But this procedure does not touch the original thought in any way; it remains true as before. Can we affect a false thought somehow by negating it? We cannot do this either; for a false thought is still a thought and may occur as a component part of a true thought. [122]

The world of thoughts has a model in the world of sentences, expressions, words, signs. To the structure of the thought there corresponds the compounding, of words into a sentence; and here the order is in general not indifferent. [123]

It thus appears impossible to state what really is dissolved, split up, or separated by the act of negation. With the belief that negation has a dissolving or separating power there hangs together the view that a negative thought is less useful than an affirmative one. [124]

People speak of affirmative and negative judgments; even Kant does so. Translated into my terminology, this would be a distinction between affirmative and negative thoughts. For logic at any rate such a distinction is wholly unnecessary; its ground must be sought outside logic. I know of no logical principle whose verbal expression makes it necessary, or even preferable, to use these terms. [125]

After refuting errors, it may be useful to trace the sources from which they have flowed. [126]

We are probably best in accord with ordinary usage if we take a judgment to be an act of judging, as a leap is an act of leaping. Of course this leaves the kernel of the difficulty uncracked; it now lies in the word 'judging.' Judging, we may say, is acknowledging the truth of something; what is acknowledged to be true can only be a thought. **The original kernel now seems to have cracked in two; one part of it lies in the word 'thought' and the other in the word 'true.'** Here, for sure, we must stop. The impossibility of an infinite

regress in definition is something we must be prepared for in advance. [126]

If someone thinks it within his power to produce by an act of judgment that which, in judging, he acknowledges to be true, by setting up an interconnexion, an order, among its parts; then it is easy for him to credit himself also with the power of destroying it. As destruction is opposed to construction, to setting up order and interconnexion, so also negating seems to be opposed to judging; and people easily come to suppose that the interconnexion is broken up by the act of negation just as it is built up by the act of judgment. Thus judging and negating look like a pair of polar opposites, which, being a pair, are coordinate; a pair comparable, e.g., to oxidation and reduction in chemistry. But when once we see that no interconnexion is set up by our judging; that the parts of the thought were already in their order before our judging; then everything appears in a different light. It must be pointed out yet once more that to grasp a thought is not yet to judge; that we may express a thought in a sentence without asserting its truth; that a negative word may be contained in the predicate of a sentence, in which case the sense of this word is part of the sense of the sentence, part of the thought; that by inserting a 'not' in the predicate of a sentence meant to be uttered non-assertively, we get a sentence that expresses a thought, as the original one did. If we call such a transition, from a thought to its opposite, negating the thought, then negating in this sense is not co-ordinate with judging, and may not be regarded as the polar opposite of judging; for what matters in judging is always the truth, whereas we may pass from a thought to its opposite without asking which is true. [127-8]

Are there two different ways of judging, of which one is used for the affirmative, and the other for the negative, answer to a question? Or is judging the same act in both cases? Does negating go along with judging? Or is negation part of the thought that underlies the act of judging? Does judging consist, even in the case of a negative answer to a question, in acknowledging the truth of a thought? In that case the thought will not be the one directly contained in the question, but the opposite of this. [129]

This involves separating negation from the act of judging, extracting it from the sense of 'it is false that ... ,' and uniting negation with the thought. Thus the assumption of two different ways of judging must be rejected. [130]

On the assumption of two ways of judging we need:

1. affirmative assertion;
2. negative assertion, e.g. inseparably attached to the word 'false';
3. a negative word like 'not' in sentences uttered non-assertively.

If on the other hand we assume only a single way of judging, we only need:

1. assertion;
2. a negative word.

Such economy always shows that analysis has been pushed further, which leads to a clearer insight. There hangs together with this an economy as regards a principle of inference; with our decision we can make do with one where otherwise we need two. **If we *can* make do with one way of judging, then we *must***; and in that case we cannot assign to one way of judging the function of setting up order and connexion, and to another, the function of dissolving this. [130-1]

If one thought contradicts another, then from a sentence whose sense is the one it is easy to construct a sentence expressing the other. Consequently the thought that contradicts another thought appears as made up of that thought and negation. (I do not mean by this, the act of denial.) But the words 'made up of,' 'consist of,' 'component,' 'part' may lead to our looking at it the wrong way. If we choose to speak of parts in this connexion, all the same these parts are not mutually independent in the way that we are elsewhere used to find when we have parts of a whole. The thought does not, by its make-up, stand in any need of completion; it is self-sufficient. Negation on the other hand needs to be completed by a thought. The two components, if we choose to employ this expression, are quite different in kind and contribute quite differently towards the formation of the whole. One completes, the other is completed. And it is by this completion that the whole is kept together. [131-2]

This example shows how something that needs completion can be amalgamated with something that needs completion to form something that needs completion....

Metaphorical expressions, if used cautiously, may after all help towards an elucidation. I compare that which needs completion to a wrapping, e.g. a coat, which cannot stand upright by itself; in order to do that, it must be wrapped round somebody. The man whom it is wrapped round may put on another wrapping, e.g. a cloak. The two wrappings unite to form a single wrapping. There are thus two possible ways of looking at the matter; we may say either that a man who already wore a coat was now dressed up in a second wrapping, a cloak, or, that his clothing consists of two wrappings-coat and cloak. These ways of looking at it have absolutely equal justification. The additional wrapping always combines with the one already there to form a new wrapping. [134]

Wrapping up a thought in double negation does not alter its truth-value. [135]