

Theory of Confirmation in Carnap's "Testability and Meaning."

First sense of confirmation:

p. 434

Confirm sentences → deductive consequences also confirmed

6. Reducibility of Confirmation

The number of sentences for which, at a certain moment, we have found a confirmation of some degree or other, is always finite. If now a class C of sentences contains a finite sub-class C' such that the sentence S is a consequence of C', then, if the sentences of C' are found to be confirmed to a certain degree, S will be confirmed to at least the same degree. In this case we have, so to speak, a complete confirmation of S by C'. (It is to be noticed that "complete" is not meant here in an absolute sense, but in a relative sense with respect to certain premisses.) On the other hand,

Remark: This is a weak sense of confirmation. If observation sentences are confirmed, then all we can secure by this means is confirmation of the deductive consequences of the observations.

Second sense of confirmation:

pp. 434-45

Sentence confirmed by confirmation of its deductive consequences.
If consequences independent, more confirmed consequences strengthens confirmation.

On the other hand, suppose that S is not a consequence of any finite sub-class of C , but each sentence of an infinite sub-class C'' of C is a consequence of S , – e.g. if S is a universal sentence and C'' the class of its instances. In this case, no complete confirmation of S by sentences of C is possible; nevertheless, S will be confirmed by the confirmation of sentences of C'' at least to some degree, though not necessarily to the same degree. Suppose moreover that the sentences of C'' are mutually independent. Since their number is infinite, they cannot be exhausted. Therefore the degree of confirmation of S will increase by the confirmation of more and more sentences of C'' but without ever coming to a complete confirmation. On

Remark: This is a version of bare hypothetico-deductive confirmation. In this bare form, it is almost universally regarded as too permissive. There are very many proposals for how to repair it.