THE USE OF FORCE IN A THEORY OF MEANING¹

Huw Price (1983)

'It is good that you took up philosophy', I say. Am I asserting some fact to be the case; or expressing, non-assertorically, my *approval* of the fact that you took up philosophy? Accounts of the latter kind have seemed attractive to many philosophers, in ethics and elsewhere. Sentential operators such as 'It is true that ...', 'It is known that ...' and 'It is probable that ...' have been claimed to require analogous treatment.

In Fregean terms, what is in question in each of these cases is whether the distinctive feature of the meaning of sentences formed by the use of one these operators is to be construed as a feature of *sense*, or as one of *force*. Here I shall be discussing a general objection to the latter answer, due in part to Frege, and extended by Geach and by Searle. If successful, the objection would greatly restrict the possible use of distinctions of force in a theory of meaning. But I shall argue that the argument is by no means conclusive; and hence that it is possible that force, or something like it, could play a far more important part in an adequate account of meaning than has usually been thought.

Ι

The argument begins by observing that accounts of the disputed type characteristically propose an interpretation of just those (*canonical*) sentences or utterances in which constructions of the relevant type – 'It is probable that ...', 'It is good that ...', 'It is true that ...', or whatever – are not part of any clause other than a complete sentence. It is noted that there are many other (*subsidiary*) occurrences of such constructions, and argued that the proposed accounts are unable to deal with at least some of the: new cases, though obliged to do so. As Geach says, 'theories of non-descriptive performances regularly take into account only the use of a term "P" to *call* something "P"; the corroboration theory of truth, for example, considers only the use of 'true' to *call* a statement true, and the condemnation theory of "bad"

¹ This piece was written *circa* 1982–83, drawing in part on material from my PhD thesis (*The Problem of the Single Case*, Cambridge, 1981). In the thesis I proposed what would now be called an expressivist account of judgements of the form 'It is probable that *p*'. One chapter, on which this paper builds, tried to defend the view against the Frege-Geach argument. This piece earned a revise and resubmit from *Philosophical Review*, but was never resubmitted. Parts of it made their way into my 'Semantic Minimalism and the Frege Point', in Tsohatzidis, S.L.(ed.), *Foundations of Speech Act Theory: Philosophical and Linguistic Perspectives*, Routledge, 1994, pp. 132–55 (reprinted in *Naturalism without Mirrors*, Oxford, 2011, ch. 3) – though that paper favours a different approach to the Frege-Geach argument, leaning more heavily on semantic minimalism. I'm putting this piece online to facilitate self-citation.

considers only the way it is used to *call* something bad; predications of "true" and "bad" in *if* or *then* clauses, or in the clauses of a disjunction, are just ignored.' 'One could not write off such uses of the terms', Geach continues, 'as calling for a different explanation from their use to can things true or bad for that would mean that arguments of the pattern "if *x* is true (if *w* is bad), then *p*; but *x* is true (*w* is bad); *ergo* p" contained a fallacy of equivocation, whereas in fact they are clearly valid.' [1]

Searle's version of the argument is somewhat different, in that he admits a possibility which Geach's appeal to the validity of *modus ponens* would appear to exclude. Searle is objecting to what he calls *the speech act analysis* of words such as 'good', 'true', 'know' and 'probably'; the general form of which he takes to be: 'The word W is used to perform the speech act *A*.' Searle says that 'any analysis of the meaning of a word (or morpheme) must be consistent with the fact that the same word (or morpheme) can mean the same thing in all the grammatically different kinds of sentences in which it can occur.' For example, 'the word "true" means or can mean the same thing in interrogatives, indicative conditionals, negations, disjunctions, optatives, etc.' [2]

However, Searle recognises that in order to meet this 'condition of adequacy', speech act analysts are 'not committed to the view that every literal utterance of *W* is a performance of *A*, but rather [may claim] that utterances which are not performances of the act have to be explained in terms of utterances which are.' [3] Searle thus appears to acknowledge that it need not be said that the contribution the clause makes to the meaning of a conditional in which it occurs as antecedent is *identical* to the meaning it has when used canonically; but only that the former contribution depends in a rule-governed way (the rule associated with the conditional form) on the meaning the clause has in the latter case. If Geach's appeal to validity were successful, this view would seem untenable. The validity of *modus ponens* would depend on the meaning of such a clause being invariant between the two contexts.

Having admitted this possibility, however, Searle fails to take advantage of it. Having said that 'the speech act analysts ... need to show ... only ... that literal utterances which are not performances of act *A* stand in a relation to performances of *A* in a way which is purely a function of the way the sentences uttered stand in relation to the standard indicative sentences, in the utterance of which the act performed', Searle takes this to mean that if such sentences 'are in the past tense, then the act is reported in the past; if they are hypothetical then the act is hypothesized, etc. .[4] He concludes, correctly, that 'the speech act analysis of the ... words: "good", "true", "probable", etc. does not satisfy this condition. 'If this is good, then we ought to buy it', is not equivalent to 'If I commend this, then we ought to buy it.' 'This used to be good' is not equivalent to 'I used to commend this';' and so on. Searle himself does not canvas other ways in which the meaning of clauses such as 'It is good that p' in various contexts may be systematically related to their meaning when they stand alone. But it is clear that if the general objection is to be answered, the solution will lie in this direction. The argument from *modus ponens* is claimed to bar the way. Let us test its strength.

Π

As Geach notes, this argument is due originally to Frege, who uses it in arguing that a sentential negation operator cannot be construed as a sign of force; as an indication that a sentence, when uttered, has the force of a *denial*. Frege's argument is in two parts: (i) he notes that a negated sentence may occur as the antecedent of a conditional, where it does not amount to a denial, and concludes that in such a case the negation contributes to the sense of (or thought expressed by) the antecedent; and (ii) he says that if we want to allow that a case of modus ponens involving such a conditional is valid, we shall have to allow that the negation does not mark a denial, even when the negated sentence concerned stands alone. [5]

In (ii), the argument is presumably not that the validity of *modus ponens* depends on the meaning of the antecedent clause in the first premiss being *exactly* the same as it is when the clause occurs alone (as in the second premiss). True, it would follow that because the negative clause is not a denial in the former context, it is not a denial in the latter. But the same argument would show that when the clause stands alone it does not have the force of an assertion; for it lacks this force when used as an antecedent.

Rather, the argument appears to depend on the claim that the inference

(1) If not-*p* then *q*; not-*p*; therefore *q*

is valid only if the second premiss has the same sense (or expresses the same thought) as the antecedent of conditional forming the first premiss. If so, then because (according to (i)) the negation operator in the first premiss contributes to the sense of the sense of the antecedent, its role in determining the meaning of the second premiss must also be to modify sense, rather than to indicate force. So even in canonical cases, the negation operator cannot be held to modify force.

In other words, the purpose of the appeal to *modus ponens* is to extend the conclusion of (i) to canonical uses of the negation operator (and similarly for other operators, in Geach's case). But how is the requirement of identity of sense to be justified? Not, on the face of it, by Geach's remark that otherwise the inference would contain a fallacy of equivocation. For it is no more clear that such a fallacy will necessarily result from a difference of sense than that it will result from the acknowledged difference of

force (i.e., from the fact that only in the second premiss does the clause have assertoric force).

Frege and Geach do have another argument for requiring such identity of sense in inference (1): to note that we evidently do have it in

(2) If p then q; p; therefore q

(where *p* is not negated); and to reason that if (1) is to exemplify the same form of inference, we must have it there also. Now, this is an appeal not to a necessary condition for validity, but to the desirability of a uniform explanation of the validity of a class of inferences having a structural property in common. Moreover, although such a goal is indeed desirable, it doesn't follow – as Geach and Frege evidently conclude – that (1) need be treated as a special case of (2). (1) and (2) might be construed as distinct subtypes of a single more general form of inference. It is not obvious that in that case the general criterion validity would include the required identity of sense. There might rather be some more general condition which reduced to identity of sense in the special case of (2).

In any case, the use Frege and Geach make of the requirement of identity of sense depends on their claim that in the antecedent of a conditional a negation operator (or one of other operators consick by Geach) does modify sense. This they infer from the observation that in such a context such an operator does not act as a force indicator, in the way proposed with respect to canonical contexts. As we shall see, this is a nonsequitur. It assumes that there is no way to make sense of an occurrence of a force-indicator in a subsidiary context; whereas it is far from clear that this is so. In order to make sense of such an occurrence, it is not necessary to say that subsidiary uses of clauses of the form 'Not-p' (to take Frege's example) are literally denials. It is enough that their contribution to the meaning of the entire sentence in which they occur depends on the fact that such a clause does amount to a denial, when used canonically. For then there is a clear reason for including a force-indicator for denial in the subsidiary positions concerned: in order to show that the clause would have this force, if uttered alone.

In the next section I shall outline an account of this kind. It turns out that it does yield identity of sense between the two occurrences of 'Not-p' in (1). But this is no help to Frege and Geach, for the account evades the first part of their argument, on which, as we have seen, the conclusion of their appeal to *modus ponens* depends.

I shall largely present the account in terms of probabilistic sentential operators, such as 'It is probable that ...' (in which class I have a special interest, having argued elsewhere that utterances such 'It is probable that p' are not assertions [6]). The proposal begins with the claim that an utterance of the form Pq, where P is such an operator and q an appropriate sentence, is what may be called a *partial assertion*. Partial assertion is held to be a category of force, of which assertion as usually conceived ('full assertion') may be a limiting case. The general category is characterised by the stipulation that partial assertions are those utterances which stand to partial beliefs, or degrees of confidence, as full assertions stand to full beliefs. [7] A full assertion that q characteristically expresses its speaker's full belief that q (and in suitable circumstances will lead a hearer to adopt a full belief that q). Analogously, a partial belief that q (and in suitable circumstances will lead a hearer to adopt a hearer to adopt the same partial belief that q).

What concerns us here is not whether this is an adequate approach to the meaning of the probabilistic terms of natural language, but the fact that by characterising force in terms of an associated type of propositional attitude, it can escape the Frege objection. The strategy requires that indicative conditionals themselves be treated non-assertorically. A sincere utterance of 'If p then q' is said to indicate that a speaker possesses what may be called an inferential disposition: a mental state such that they were to adopt the mental attitude associated with the utterance 'p', they would be led to adopt the mental attitude associated with 'q'. For example, 'If it is probable that it is going to snow, then Boris will be learning to ski', expresses a disposition to infer from a strong partial belief that it is going to snow, to a full belief that Boris is learning to ski.

This suggestion provides a clear sense in which the expression 'It is probable that ...' makes the same contribution to a canonical utterance, as to a conditional utterance in which it occurs in the antecedent or consequent. In each case it marks the association of the meaning of the whole utterance with a certain kind of mental attitude: namely a strong partial belief. Other features of the occurrence of the expression in each case, determine first which particular strong partial belief is involved (i.e., its content); and secondly, how this partial belief stands in relation to the mental state associated with the utterance as a whole. In the canonical case the fact that 'It is probable that ...' is the outermost operator indicates that the latter mental state is just the partial belief itself. While in the conditional case, the occurrence of the expression in (say) the antecedent position indicates that possession of the partial belief in question is the antecedent condition of the inferential disposition associated with the conditional.

(This process of determination may be iterated, if the conditional itself occurs as a component of some larger utterance.)

It is important to distinguish this suggestion from the claim that a conditional *reports* a speaker's possession of such an inferential disposition. For if that were so, a conditional utterance would be an assertion *about* its speaker's state of mind, and would be false if and only if the speaker concerned did not have such an inferential disposition. But the proposal is supposed to interpret the indicative conditionals of natural language; and in practice what speakers indicate by saying 'That's false' in response to such utterance is not that they don't believe the original speaker has the state of mind in question, but that (even having heard the utterance) they don't have it themselves. Similarly the response 'That's true' indicates that a hearer has the inferential disposition in question, and not that they take the speaker to do so. So to claim that a conditional reports its speaker's possession of such a disposition, is to be forced to acknowledge that the terms 'true' and 'false' are applied to such utterances in a non-standard way; even though to make this claim is to treat these utterances as assertions.

For the same reason it is important not to interpret the conditional 'If it is probable that p, then q' as 'If I were to partially assert (strongly) that p, then I would assert that q.' This seems to be what a suggestion of Dummett's (in response to Geach's argument) would amount to, for the probability case [8]. Note that to reject this reading is not to deny that someone who has the disposition to infer from a strong partial belief that p to a full belief that q, would, if they were to partially assert (sincerely, and to a suitably high degree) that p, be at least willing to assert that q; but simply to say that 'If it is probable that p, then q' is not a statement that this is the case.

L. J. Cohen has pointed out that if Dummett's reading is to apply the probability case, there should be a use for a construction

meaning 'If I were to assert (agree) guardedly that *A*, then I should assert (agree) that *B*'. But this would not be a use paraphrasable by 'If it is probable that *A*, then *B*'. For though it happens to be true that if I were to assert (agree) guardedly that it will be cloudy this afternoon I should also assert (agree) that I am excessively cautious in my weather predictions, it is not true that if clouds are probable then I am excessively cautious. [9]

On the present view, however, the conditional 'If I were to assert guardedly that *A*, then I should assert that *B*' is associated with a disposition to infer from a belief that one has asserted guardedly that *A* to a belief that one has asserted (or will assert) that *B*. There is nothing to prevent someone from holding this disposition, but not a

disposition to infer from a high degree of partial belief that A to a belief that B; and it is this latter disposition which this view associates with the conditional 'If it is probable that A, then B.' [10]

IV

In the proposed account, 'It is probable that ...' does not modify sense, even when used as the antecedent of a conditional. So both occurrences of the probabilistic clause in

(3) If it is probable that q then p; it is probable that q; therefore p

have the same sense: that of 'q' itself. The claim on which Frege and Geach's appeal to *modus ponens* was seen to depend is thus validated; but not in such a way as to licence their conclusion (which depended on the claim that in the subsidiary position the operator does modify sense).

However, such force-modifier accounts do have a problem with validity, in that they seem incompatible with the standard treatment of this notion. The usual account of validity relies on the notion of truth; whereas in ruling that various types of utterances are not assertions, a force-modifier account appears committed to saying that these utterances are neither true nor false, at least in the required sense. In this section, concentrating on Frege's example, I want to mention an approach to validity which does seem compatible with a force-modifier account.

Ideally, the approach would rely on the following claims: the mental state the above account takes to be associated with a correct and sincere utterance of the first premiss of the inference (2) is such that anyone possessing both this mental state and that associated with a correct and sincere utterance of the second premiss, will come to adopt the mental state associated with the conclusion. The adoption of the latter mental state will not be a matter of choice for the person concerned, but rather the result of the realisation of the antecedent conditions of a disposition. The inference form is therefore valid in virtue of a relation at the mental level, between the state of mind associated with its premisses and that associated with its conclusion.

These claims are actually too strong. In so far as they are correct, however, it is irrelevant whether p and q are full assertions (associated with full beliefs) or partial assertions (associated with partial beliefs); or, indeed, whether p and q belong to any category of force defined in the same general way, so long as the associated type of mental attitude can form the antecedent or consequent condition an inferential disposition. (This appears to be a very broad class indeed.) Hence the account provides a uniform explanation of the validity of *modus ponens*, applicable equally to

cases in which the second premiss is assertoric in force, and cases in which it is not. In Frege's case it enables us to treat 'Not-p' as a *denial* that p (associated with a disbelief that p), without committing us to a different explanation of the two inferences (1) and (2). Instances of *modus ponens* involving a negative second premiss fall under uniform principle equally applicable to the positive (or assertoric) case.

To describe this uniform principle, however, we require a distinction not admitted by Frege, between *active* and *passive* occurrences of a force indicator (in canonical and subsidiary contexts, respectively). The general requirement for the validity of an inference purporting to be an instance of *modus ponens* is then that the antecedent of the conditional premiss should have both the same sense and the same force as the non-conditional premiss; though whatever force this is will be used passively in the first case and actively in the second. For those instances of *modus ponens* in which the second premiss and the conclusion have assertoric force, this condition reduces, in effect, to that of identity of sense; i.e., to the condition endorsed by Geach and Frege. From the present point of view, their mistake consists in taking this class to be universal, whereas in fact it is a special case.

Two qualifications: first, a lot more needs to be said before the account given here of the correctness of *modus ponens* can be brought under a general theory of valid inference. The general project would most plausibly take the form of a rule-by-rule justification of a suitable natural deduction system. For each rule, the aim would be to provide a justification analogous to that here offered for *modus ponens*; i.e., ideally, an account which demonstrates that a person who has the mental states or attitudes taken to be associated with the premisses of the rule in question, will also have that associated with its conclusion. The nature of the demonstration may differ from rule to rule. The simplest case will perhaps be that of Conjunction Elimination: the rule which justifies the inference

(4) p and q; therefore p.

Here the mental state associated with the premiss will simply be the combination of those associated with its conjuncts; and possession of this combination guarantees a person's possession of both of its components individually (and hence of the former component, in particular). Note, however, that in this case 'guarantee' has a sense significantly different from that in which the possession of the mental state associated with the premisses of modus ponens was said to guarantee that associated with its conclusion. I don't think that this is an objection to the approach, for there seems to be no reason to insist that all deductions rules be justified in exactly the same way. (On the contrary, the fact that there has been much dispute about the acceptability of some such rules but not others, suggests that there are differences in the grounds on which they rely.) However it does call attention to a

major oversimplification in the above account, and thus to the need for a second qualification.

It is clear that speakers do not draw all the logical consequences of their various beliefs. A realistic account will therefore have to admit that the suggested 'guarantee' is an idealisation. A person who utters a conditional may, knowingly or otherwise, not actually have the 'associated' inferential disposition. This aside, the dispositions to inference that people have are very imperfect. Their effectiveness seems to depend particularly on the extent to which the disposition and its antecedent mental attitude are both consciously held, at the same time. This admission raises several problems. (What is for such a mental state to be consciously held, for example?) But it is doubtful whether these vitiate the approach. After all, much of the usefulness of such respectable notions as belief and partial belief in explanatory models of linguistic and non-linguistic behaviour, depends on similar simplifications. In the present case, it may thus be claimed that the difference between validity and invalidity, though not accurately marked in the thought processes of any actual person, is revealed in the way suggested in an ideal model; to which our actual thought processes do in important ways approximate.

V

Clauses of such forms as 'Not-*p*' and 'It is probable that *q*' have many subsidiary occurrences in natural language, apart from those in which they form the antecedent or consequent of a conditional. If the approach suggested here is to form the basis of an adequate theory of meaning for natural language, it will be required to offer the same kind of explanation for each of these subsidiary contexts as it does for the conditional case. These explanations are bound to be a case-by-case affair. Here I shall indicate how the account might go in what is perhaps the most important case – that of negation – and finish with son remarks about the treatment of other propositional connectives. It would be surprising if this discussion were to convince a sceptical reader of the viability of the force-modifier approach; but I hope it will demonstrate that it is far from clear that additional cases will provide an insurmountable obstacle.

The treatment of sentential negation in a force-modifier account is both difficult and crucial: crucial, because negation is such a central logical operation. And difficult, because in rejecting Frege's argument to the effect that the negation operator modifies sense, we have left open the question as to whether, in general, the negation operator is to be construed as a sign of *denial* (or whether it does, after all, modify sense). The force-modifier treatment is less plausible for negation than for some other operators, because it is arguable that the very admission that there is such an activity as denial, opposed to assertion, provides a natural account of the sense

modification effected by a negation. Briefly, the argument is that once denial is recognised as an activity distinct from assertion, then it is open to us to take assertion conditions and denial conditions together to fix the sense of an assertoric utterance. It is then possible to take the sense of 'Not-p' to be related to that of 'p' by the convention that their assertion and denial conditions are reversed. [11] This account depends on what may be called the *complementarity of assertion:* the fact that in denying, or disagreeing with, an assertion made by another speaker, one effectively makes an assertion oneself. This is far from being a trivial property of assertion. [12] To explain it in terms compatible with the proposed force-modifier account, it is necessary to ask what gives an utterance assertoric force.

On the account suggested above, differences of force are linked to differences in the types of mental attitude with which utterances are characteristically associated. Assertions are said to be distinguished by being characteristically the expressions of (effectively) full beliefs. Now suppose a full belief that q is construed, *inter alia*, as a behavioural disposition: roughly, as the disposition to assume that q in deciding how to act (in calculating expected utilities). This amounts to a propensity to ignore possible outcomes of one's actions, except those which depend on its being the case that q (whenever one takes it to make a difference to the outcome of some action whether q). This kind of behavioural disposition has a natural complement: the disposition to ignore the complementary class of possibilities (in that class of cases in which it is held to be relevant whether q). The complement is itself a full belief. However, is it the right full belief to be associated with an assertion of the negation of the assertoric sentence 'q'?

The fact that a full belief, behaviourally construed, has a natural complement, does not explain why the *denial* of an expression of such a belief should amount to the expression of the complementary belief. It won't do to say that this is just what a denial of an assertion is, if at the same time we wish to make use of the notion of denial as a partial determinant of sense. For why should what partially determines sense be the conditions for expression of the complementary belief?

In order to answer this, note that in natural language there is a distinction between *declining to agree* with, and *disagreeing with*, an utterance made by another speaker. The former is appropriate when one does not accept that the assertion conditions of the utterance in question hold; the latter, roughly, when one thinks that conditions are realised which are *incompatible* with acceptance of the assertion in question. The latter form of disagreement is the one marked by the use of the reply 'That's false', in response to a previous assertion. It seems to me that it is this form of dissent which permits us to draw distinction between making an assertion *when* certain conditions hold, and making an assertion *that* they hold. For the two assertions 'q' and 'It is assertible that q' have essentially the same assertion conditions but differ sharply in

their denial conditions. One may legitimately disagree (in the strong sense) that it assertible that *q*, without disagreeing that *q*; but in declining to agree that it is assertible that *q*, one effectively commits oneself to declining to agree with an assertion that *q*. So if a language were to lack the facility for indicating disagreements of the strong kind, its assertions would not be distinguishable from simple indications that speakers took certain conditions to hold. There would then be no apparent use for a notion of sense distinct from that of assertion conditions (and no reason, I think, to distinguish truth from assertibility). [13]

The strong form of disagreement is that associated with the negation operator: the assertion conditions of 'Not-q' are the conditions for disagreement (in the strong sense) with an assertion that q (and *vice versa*). But what is the incompatibility on which strong disagreement depends? It seems to me that it is precisely that between a full belief and its complement; between assuming that q, and ruling out the possibility that q, in assessing the outcomes of one's possible actions. If so, then there is a clear basis for the association of the negative part of what the present account takes to determine sense (i.e., dissent conditions) with the natural complement of an assertion. For in order that the holding of these dissent conditions should be taken to be *incompatible* with an acceptance of the assertion concerned, the belief which they lead a speaker has to be that associated with the complement of that assertion; in other words the complement of the belief of which the original assertion is characteristically the expression.

This discussion arose from our recognition of the need for a force-modifier approach to meaning to provide an account of the negation of assertoric sentences, capable on the one hand of being generalised to utterances of non-assertoric force; and on the other of doing justice to the intuition that a negated assertion is itself an assertion. We have concluded that the latter intuition is well-founded, resting on the fact that an assertion has a natural complement. And we have indicated a plausible justification for the identification of the denial of an assertoric sentence with the assertion of the complement of that sentence, and hence explained how in the assertoric case a force-modifying negation operator can have an effect on meaning identical to a change in sense.

VI

How does this account generalise to utterances other than assertions? Here I shall consider only the case of partial assertions: utterances qualified by a probabilistic sentential operator, such as 'It is probable that ...'. Now an utterance such as 'It is not probable that q', or the response 'No' to the question 'Is it probable that q', is usually equivalent to the statement 'It is improbable that q'; i.e., to 'It is probable that not-q'. In such cases the negation occurs within the scope of the probabilistic force modifier,

and so doesn't present any new problem. Nevertheless, there are cases in which a denial applies to a partial assertion. Consider the exchange: 'It is very probable that Boris has learned to ski'; 'No it isn't; in fact it is rather unlikely that he has done so'. Can the partial assertion account explain the contribution of the (implicit) clause 'It is very probable that Boris has learned to ski' to the meaning of the first part of the reply (the part in which this clause is modified by a negation operator)? And in so doing, can it generalise the above account of the denial of an assertoric sentence?

'The simplest approach is to say that the denial of a partial assertion expresses a speaker's recognition that he or she possesses an attitude incompatible with the partial belief expressed by that partial assertion. However, the notion of incompatibility needed here is not quite what we have seen to be involved in the full assertion case. For there are many partial beliefs incompatible with any given one: any partial belief with the same content but different degree, in fact. The suggestion is that the application of a sentential negation operator to a partial assertion 'p' is characteristically a means of indicating that one holds some one of this range of partial beliefs, incompatible with that which would ordinarily be expressed by 'p' itself. But since 'Not-p' does not express any particular partial belief, it is not in itself a partial assertion. In the case of full assertions, in contrast, the use of a negated sentence 'Not-q' characteristically signifies that a speaker has a particular full belief, incompatible with that which the unnegated utterance 'q' would ordinarily express: i.e., the complement of the belief expressed by 'q'.

Why should the weaker notion of incompatibility, associated with partial assertions, not also be used in the full assertion case? Isn't a weak partial belief (say) that *q* just as incompatible with a full belief that q as with a strong partial belief that q? It seems to me that the answer depends on a difference between full and partial assertions to which I have drawn attention elsewhere [14]: an effectively full assertion has the effect of 'declaring closed' the list of evidence on which it, or its rejection, might be based. To assert that q is to assert, in effect, that no new evidence will reveal that not-*q*. But a partial assertion is alway relative to evidence, in the sense that it is subject to withdrawal 'without fault', should new evidence come to hand. This means that to indicate that one has some degree (other than 0 or 1) of partial belief that q in response to an assertion that q_i is to indicate that one doesn't think that the evidence justifies the assertion that q. That is, this response amounts to *declining to agree* (that the assertion conditions of 'q' hold), rather than to *disagreeing* (that q). Hence if full assertions are to attract a form of dissent distinct from that based solely on assessment of assertion conditions (as I suggested above is required for the distinctions between asserting *when* and asserting *that*, and between truth and assertibility), this form of dissent must be grounded on incompatibility of the strong kind. (Conversely, it doesn't matter from the point of view of determination of sense, that applied to a partial assertion a denial is an indication of difference of opinion

with respect to assertion conditions alone; for the sense of 'It is probable that q' can be said to be that of 'q' itself.)

The differences between these two notions of incompatibility should not obscure their similarity – both rest on the impossibility of a person's holding particular pairs of mental attitudes at the same time. This similarity provides the basis of a universal rule, associated with the sentential negation operator whereby the meaning of a sentence containing such an operator depends on the meaning of the clause to which it is applied – and this is all that the proposed account requires.

I shall not attempt here to deal with the various logical connectives – disjunction, conjunction, and so on – in the same detail as I have in the case of negation. But it seems reasonable to hope for similar accounts: in the case of disjunction, for example, for an account which in treating disjunction as a force-modifying sentential function, nevertheless explains why when this function is applied to a pair of assertions, the result can itself be considered an assertion (so that in this special case, the function can I construed as modifying sense). The way in which such an account might go is illustrated by the case of (indicative) conditionals. We have taken the conditional 'If p then q', where 'p' and 'q' are full assertions, to be associated with a disposition to infer from a full belief that *p* to a full belief that *q*. The proposed account would argue that to hold this disposition is equivalent to holding a certain belief: namely that belief whose behavioural consequences amount to a disposition to ignore the possibility that both p and not-q, in assessing one's possible course of action. (In saying this, we can make use of the fact that we have been able to construe the effect of negating an assertoric sentence as a modification of sense; and will presumably rely on a similar fact about conjunction.)

VII

The possibilities for rule-governed relations of meaning between subsidiary and canonical uses of clauses such as 'It is probable that q' are thus far from exhausted by those envisaged by Frege, Geach and Searle. It is obvious that to claim to be convincing, a force-modifier account of the meaning of such clauses would have to go far beyond anything offered here; but in showing that it is possible to make a start, we have shown that the Frege argument is far from conclusive.

It might well be asked, what will remain of the notion of (full) assertion, in the absence of the criterion which the Frege argument would provide? What will then prevent *any* distinction of meaning being ruled a distinction of force? One possible answer is implicit above: distinctions of force are based on distinctions in associated mental attitudes, so that full assertions are those utterances which characteristically express (effectively) full beliefs. If this is to provide a useful criterion, it will be

necessary to explain how full beliefs are to be distinguished from other attitudes (without, of course, saying that they give rise to full assertions). It is not clear whether behavioural criteria alone can do the trick. Another approach – complementary, I think – is to appeal to the patterns of assent and dissent to which utterance-types are subject. Elsewhere I have suggested that full assertions are best regarded as those utterances which do not give rise to the kind of 'no-fault' disagreement which arises (for example) between speakers who, having different evidence, reach different conclusions as to the probability of some proposition. [16] It seems to me that if the Fregean distinction between sense and force were to survive at all the adoption of theory of meaning of the kind suggested here, it would be in virtue of being grounded on some such basis.

NOTES

1. 'Ascriptivism', *Philosophical Review*, 69(1960), pp. 221–5, p. 223. The argument is repeated in Geach's 'Assertion', *Philosophical Review*, 74(1965), pp. 449–465.

2. Speech Acts (Cambridge, 1969), p. 137.

3. Ibid., p. 138.

4. Ibid., p. 138.

5. 'Negation', in P. Geach and M. Black (eds.), *Translations from the Philosophical Writings of Gottleb Frege* (Oxford, 1960), pp. 117–35; at pp. 129–30.

6. In my "Could a Question be True?": Assent and the Basis of Meaning', The *Philosophical Quarterly*, forthcoming [*The Philosophical Quarterly* 33, 354–364]; and 'Does "Probably" Modify Sense', forthcoming [*Australasian Journal of Philosophy* 61, 396–408].

7. 'Full' in contrast to 'partial'. The notion of a full belief is an idealisation: no one is ever so confident of a belief as to act as if it were true, no matter what the consequences of being wrong. But a belief may be *effectively* full, relative to some given context, in which there is a limit to the (positive and negative) utilities of the outcomes which may result from an agent's acting as if it were true. The availability of the weaker notion renders harmless our use of the simpler idealisation.

8. Which Dummett, like Geach, does not himself refer to; M. Dummett, *Frege: Philosophy of Language* (London, 1973), pp. 351–354.

9. The Probable and the Provable (Oxford,1977), p. 29, n. 19.

10. Cohen makes the further point that on Dummett's reading there would be no obvious use for 'If it is probable that *A*, then I should prefer not to assert guardedly that *A*'; whereas there is such a use along the same lines as 'Even if it is true that *A*, I would prefer not to say so'. The present view handles this in much the same way.

11. For the details, see my 'Sense, Assertion, Dummett and Denial', Mind, 92(1983).

12. Though the property is usually taken for granted; i.e., it is not thought to require explanation that the negation operator can *both* modify sense, and provide a way of indicating denial.

13. For a fuller account see my 'Sense, Assertion, Dummett and Denial', *Mind*, 92(1983).

14. In my "Could a Question be True?": Assent the Basis of Meaning', *The Philosophical Quarterly*, forthcoming [*The Philosophical Quarterly* 33, 354–364].

15. Or perhaps, that of a person's behaving in such a way as to indicate that he or she has such a pair of attitudes.

16. In ""Could a Question be True?": Assent the Basis of Meaning', *The Philosophical Quarterly*, forthcoming [*The Philosophical Quarterly* 33, 354–364].