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Jim Mackenzie
University of Sydney

FROM SPEECH ACTS TO SEMANTICS[1]

Abstract. Frege introduced the notion of pragmatic force as what distinguishes statements from questions. This distinction was elaborated by Wittgenstein in his later works, and systematised as an account of different kinds of speech acts in formal dialogue theory by Hamblin. It lies at the heart of the inferential semantics more recently developed by Brandom. The present paper attempts to sketch some of the relations between these developments.

Keywords: assertion, dialogue, force (Fregean), force (pragmatic), inferentialism, pragmatics, semantics, speech acts

1. Speech Acts

Pragmatics, the study of speech acts, may be carried out either *descriptively*, comparing the rules and conventions that operate in various actual discursive contexts, or *formally*, working out the consequences of simple, precise rules of dialogue and exploring the properties of dialogues conducted in accordance with them (Hamblin, 1970, p. 256). In terms of this contrast, the present work is on the formal side, exploring simplified versions of central pragmatic concepts which may then provide a general structure for future more realistic descriptive studies; though it does not go so far as to present rules of dialogue set-theoretically as in Mackenzie, 1990. In pragmatics we distinguish between various kinds of linguistic action such as asserting, questioning, defining, promising, warning, expressing doubt about, and calling another participant to order, and it is helpful to have clear, even if oversimplified, understandings of these and of the relations between them.

Frege distinguished different kinds of speech acts in terms of what he called *force*:

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> An interrogative sentence and an assertoric one contain the same thought, but the assertoric sentence contains something else as well, namely assertion. The interrogative sentence contains something more too, namely a request. Therefore two things must be distinguished in an assertoric sentence: the content, which it has in common with the corresponding propositional question; and assertion (Frege, 1918, p. 329).

Dummett elaborates:

> The theory of sense and reference is then to be supplemented by an account of the various forms of linguistic force that may be attached to a sentence: the theory of force thus supplies an account of the various uses that are actually made of sentences in actual speech. The separation of sense and force can only be justified if it is possible, for each variety of force, to give a *uniform* description of the linguistic act which is effected by the utterance of an arbitrary sentence, whose truth-conditions are supposed known, to which a force of that kind is attached. There will thus be one general account of the use of sentences to make an assertion, another of their use to ask a sentential question, and so on, each applicable independently of the particular sense and hence the particular truth-conditions of the sentence. (On Frege's own account of the matter, this holds good only for assertions and sentential questions; but, as we have seen, if a theory of meaning of this general structure is possible at all, the procedure should be able to be extended to commands, requests, expressions of desire, etc.) (Dummett, Michael, 1973, p. 416, his emphasis; see also his ch. 10, pp. 295–363.)

Force is embodied in rules of dialogue which require those who engage in discourse to behave in particular ways. Wittgenstein said, "For a *large* class of cases – though not for all – in which we employ the word "meaning" it can be defined thus: the meaning of a word is its use in the language" (Wittgenstein, 1953, I § 42, pp. 20ᵉ, his italics). We are investigating *conduct*, governed by normative rules, rather than regularities of behavior.[2] He is celebrated as an advocate of an anti-theoretical and pragmatic approach to linguistic meaning. In his (1953, i. § 54, p. 27ᵉ), he distinguishes between (*i*) practices governed by explicitly formulated rules, (*ii*) practices governed by rules, whether formulated or not, and (*iii*) practices open to normative assessment, whether or not practitioners are aware of consulting or being guided by anything. Though we may try to formulate the proprieties of conduct explicitly as rules, explicit rules presuppose norms implicit in practice. A rule can govern conduct only if it is applied correctly, and if this correctness in turn also had to be formulated explicitly, we should be faced with an infinite regress. The regress can be avoided only if at some point there are practices of distinguishing correct from incorrect conduct which

have not been formulated into explicit rules (Wittgenstein, 1953, I. § 201, p. 81e; Brandom, 1994, pp. 20–21).

Linguistic interaction is governed normatively, at least in sense (*iii*) of Wittgenstein's list, by being open to assessment. Indeed, those who behave improperly are subject to sanctions. If you agree to "Tiree is a blue wren" then you must agree to "Tiree is a bird" if asked or withdraw you earlier agreement, and that "must" is enforced by other speakers of the language. (Quine speaks of "bizarreness reactions" in such circumstances, 1951, § 3, p. 53; cf. Mackenzie, 1984). The ways in which speakers of a language enforce its rules on those of their fellows who disobey them are familiar to all of us. Brandom elegantly relates an illustrative anecdote:

> 'Having several times committed himself to the claim that a wolf is present (thereby licensing and indeed obliging others to draw various conclusions, both practical and theoretical) under circumstances in which he was not entitled by the evident presence of a wolf to undertake such a commitment and to exercise such authority, the boy was punished – his conduct practically acknowledged as inappropriate – by withdrawal of his franchise to have his performances treated as normatively significant (1994, p. 180).

The similarity of the ways speakers enforce the rules in widely different times and cultures can be seen from the fact that a version of the same story was told by Æsop (*Fab.* § 196, p. 200).

The phenomena in which we are interested are constituted by linguistic interaction, by dialogue; but a proper subset of them have been studied in detail in the context of logic and are very familiar in that setting, and we can take advantage of this familiar, and strictly speaking misleading, context in describing them here.

Assertion lies firmly within the realm of normative rules and appropriate linguistic action. Assertion is distinguished, indeed constituted, by its inferential role. Parrots and thermometers may reliably produce what appear to be true assertions in, and only in, appropriate circumstances; but these are not assertions at all, merely responses, because parrots and thermometers do not engage in giving and asking for reasons. Brandom explains: "The parrot does not treat 'That's red' as incompatible with 'That's green,' nor as following from 'That's scarlet' and entailing 'That's colored' " (1994, p. 89). The same point had been made much earlier by the pirate Long John Silver, speaking of his parrot Cap'n Flint: "Here's this poor innocent bird o' mine swearing blue fire, and none the wiser, you may lay to that" (Stevenson, 1883, ch. 10, pp. 96–7).

2. Statements

For expository purposes, we may help ourselves to a set of *statements* or indicative sentences, as deployed in an ordinary one-speaker (monolectical) logical system, with the apparatus of connectives, operators and quantifiers, and the taxonomy of statements – negations, conditionals, universal generalisations, and so on – constituted by that apparatus. What the rules allow a participant to say at a particular stage of a dialogue may depend, in several ways, on what has already been said by or to that participant. To allow for this it is convenient to imagine that with each participant is associated a *store* on or in which (tokens of) locutions are inscribed and from which they may be erased, depending on what occurs in the dialogue. A participant in dialogue is thus being taken to be a temporally extended object. (Recall Locke's definition of a *person* as "a thinking intelligent being that has reason and reflection and can consider itself as itself, the same thinking thing in different times and places", 1690, II. xxvii. 9 = 1961, vol. 1, p. 280, which made reidentifying a person at different times central to the concept).[3] In *Fallacies*, Hamblin calls this store a *commitment store* (1970, p. 257). The word "commitment" may suggest a belief, even an especially fervent belief; but this suggestion is misleading. Participants in dialogue need not believe their current commitments, nor need they commit themselves to everything, or indeed anything, they believe. Some participants in dialogues, for example corporate bodies and machines, may be regarded as being incapable of having beliefs.[4] In the notes distributed to his logic classes in 1979 Hamblin used the word *tally* rather than *commitment*, perhaps to prevent students from mistakenly thinking that a commitment was a belief (1979, pp. 3–4). He said that "... the primary theoretical job that commitment-stores do for us is to provide us with a dialectical definition of statements" (Hamblin, 1970, p. 265), as the central class of locutions to which participants become and cease to be committed in the course of a dialogue. Things other than statements, such as observations, may justify a statement. A statement may justify something other than a statement, such as an action. But only statements can serve in both roles, and it is in the first instance to statements that participants become or cease to be committed.[5]

3. Questions

A question is a speech act which is grammatically marked as needing to be followed by a speech act which is an *answer* to it; the answer typically

must have a different participant as its speaker, and have an identifiable relation to the question, being either syntactically related to it or of a specific kind which may serve as an answer to many questions. This characteristic of questions means they can be used for finding out something which the answerer knows but the questioner does not, and also for finding out whether the answerer knows something which the questioner already knows (teachers often employ questions in this way), and also for eliciting admissions. People are creative and rule-subverting, and develop the practice of exploiting the requirement for a question to be answered by asking what appears grammatically to be a question to make a substantive point, the rhetorical question.[6] Questions can be added to the language of a monolectical logic in at least two ways. The first is with a *locution modifier*, an expression which, when prefixed to a statement, forms a locution which is not a statement, in this case the corresponding sentential question. From the statement "p" we construct the question "$?p$", to be read as "Is it the case that p?". Sentential questions may have no effect on commitments. A second way is to introduce expressions corresponding to *interrogative pronouns*, occupying the places of quantifiers. If "$\exists x, \varphi x$" is to be read "Something is φ", then "$Qx.\varphi x$" would be the question "What is φ?". By saying "What is φ?" a participant becomes committed to "Something is φ").[7]

What is said after a question, the response to it, may be of various kinds – *I don't know*, or *I didn't understand the question*, for example, are allowable responses to most questions. Among the responses to a question are those which are either themselves statements syntactically related to the question (as "p" and its negation are each related to the question "$?p$") or specify a particular statement syntactically related to the question when they occur as a response to that question (as "Yes" and "No" do for sentential questions, for example, and as "The Sparrow" does as a response to "Who killed Cock Robin?"), and in each case the answerer becomes committed to that related statement.[8]

4. Withdrawals

Making a statement, or in some circumstances not objecting to a statement made by somebody else (Hamblin, 1970, p. 274), adds that statement to one's commitment-store. But a commitment can be cancelled. There may be several kinds of locution whose utterance removes commitment to a particular statement, perhaps together with other effects. The most direct is a locution which simply removes any commitment its speaker may have had

to the statement it specifies, which we may call a retraction or *withdrawal* (and specifically, the withdrawal *of* a particular statement). One may withdraw a statement to which one has had no commitment. The withdrawal of a statement can be formed directly from the statement by another *locution modifier*, reulting in a locution which is a withdrawal rather than a statement. The resulting locution may be read "I'm not sure that *p*".

5. The core of pragmatics

So far we have been listing various kinds of speech acts and noting features of the use of each. But speech acts do not occur just one by one; they form a system. A speech act is a *move* in a dialogue *game.* "In the long run, whether a given locution is or is not a statement, question or the like depends upon its place in a dialectical system, and not vice versa" (Hamblin, 1970, p. 259).

> One of our first ideas about language is that there are different species of words – nouns, pronouns, adjectives, verbs and so on. As we learn more about language, we come to see that these species, much refined, reappear as categories in terms of which we frame rules; and these rules, from among all possible strings of English words, exclude most as not being sentences. These rules are the rules of grammar. Another of our first ideas about language is that there are different species of sentences – statements, questions, commands, and so on. Were we to learn more about language, we might come to see that these species, much refined, appear as categories in terms of which we frame rules. These rules, from among all possible strings of English sentences, would exclude many as not being intelligible discourses. One such rule, for example, would be some refinement of the idea that questions must be answered. That there should be rules of that kind is necessary if we are to explain how *communication* – as against independent vocalizers scattered about the landscape uttering sentences into a lonely void – is possible. (Mackenzie, 1984, p. 345b, emphasis in original.)

The most crucial relationship in pragmatics is one which connects several species of *force* in Dummett's sense. Let us use the term "statement" for a sentence whose utterance constitutes an assertion in the absence of special circumstances.[9] A main class of things to which participants may become committed are statements in this sense. The heart of pragmatics lies in the rules governing the relation of a set Γ of statements to a different, syntactically related, statement s, which require that if a person has asserted or accepted the statements in Γ (say, "Every human is mortal" and "Socrates

is human"), that person *must not* deny, question, express doubt about, or ask for reasons to accept the statement *s* (say, "Socrates is mortal"), and *must* affirm it if asked. Thus the different kinds of speech acts – statements, questions, expressions of doubt (withdrawals), and any others which may be identified – are governed by proprieties which connect them and their functions to each other. The relation is commonly expressed in shorthand form as: From Γ, *s* may be inferred.[10] These pragmatic rules constitute the practice of inference and the avoidance of inconsistency in communication (Mackenzie, 1984, 1990).

The primary way in which this core relationship appears in dialogue is through participants' ability to demand consistency from one another. Consistency is a concern of all human use of language except where someone talks without any attention to whether what is said is true or false. Some nonsense verse may qualify,[11] but much achieves its effects precisely by being deliberately inconsistent either with other parts of itself or with common knowledge (e.g. Carroll's "The sun was shining on the sea", 1871, ch. 4, pp. 233–6) and therefore is concerned with consistency. Heidegger's *Gerede* (idle talk) 1927, p. 213) has a structure of transitive authority and hence does not completely disregard truth and consistency. "Humbug" in the sense of Black (1985, p. 143) and "bullshit" in the sense of Frankfurt (2005, pp. 33–4) may be instances, and they are precisely the kinds of discourse we feel to be nearest to lacking any meaning.

> At first sight we would suppose it to be a requirement of the statements in a commitment-store that they be *consistent*; but on reflection, we may come to think that, although there does exist an ideal concept of a 'rational man' which implies perpetual consistency, the supposition is by no means necessary to the operation of a satisfactory dialectical system. In fact, even where our ideals of rationality are concerned, we frequently settle for much less than this; a man is 'rational', in a satisfactory sense, if he is capable of appreciating and remedying inconsistencies when they are pointed out. (Hamblin, 1970, pp. 263–4, his italics).

Participants in dialogue need a kind of speech act with which to call an interlocutor to account for what appears to be an immediate inconsistency, and to which (in the first instance) the other must reply by withdrawing one or other of the set of immediately inconsistent statements. Subsequently replies which adopt other strategies may be explored: for example, removing the immediate inconsistency by pointing to an equivocation (Mackenzie, 1988). But as Lewis Carroll drew to our attention, it is not sufficient just to remove inconsistencies. A participant becomes liable to an objec-

tion for immediate inconsistency not only by adding (or allowing to be added) a commitment to something immediately inconsistent with her existing commitments, but equally does so by doing anything which would *remove* a statement immediately implied by her existing commitments. We must not express doubt about, or ask what reason there is to accept, or do anything else which would withdraw our commitment to, a statement which immediately follows from others among our commitments. This is what the Tortoise failed to do in his instructive dialogue with Achilles (Carroll, 1895; Mackenzie, 1979). (A dialogue strangely misunderstood by Deleuze, 1990, p. 20.)[12] The idea is that if the sequent $\Gamma \vdash s$[13] is an immediate consequence and I am committed to all the elements of Γ, then (*a*) though I do not need to affirm *s*, I must agree to it if asked; (*b*) if I say something *t* immediately inconsistent with *s*, then I may be called to account and must then withdraw either *t* or an element of Γ; and (*c*) (Carroll's point) that if I say something which has the effect of removing *s* from my store, then I may be called to account and must then either admit (affirm) *s* or withdraw an element of Γ. The meaning of the sequent $\Gamma \vdash s$ in the sense relevant to dialogue is that a participant who does anything which has the effect either of adding something inconsistent with *s* or of removing commitment to *s* when committed to all elements of Γ becomes liable to an objection which will require readjustment of the participant's store to consistency on the matter of whether *s*.[14]

In practice, an inconsistency can be apparent only if it is fairly immediate. Most interlocutors would object to somebody who was committed to the premisses of an Aristotelian syllogism denying or expressing doubt about its conclusion. Hence our example above where Γ is "Every human is mortal", "Socrates is human" and inconsistence arises from "It is not the case that Socrates is mortal" or "I'm not sure that Socrates is mortal". Properties of familiar relations are also immediate. People object if one denies "$a\mathrm{R}c$" when committed to "$a\mathrm{R}b$" and to "$b\mathrm{R}c$" where R is a transitive relation (e.g. one denoted by a comparative adjective, as "is taller than") or denies the converse of a symmetrical relation to which one is committed (denies "$b\mathrm{R}a$" when committed to "$a\mathrm{R}b$", where R is a symmetrical relation like "is near"). However, an inconsistency which requires a page or so of mathematical reasoning is not immediate enough to be a ground for objection in ordinary, or even in mathematical, conversation. Notoriously, Frege became aware of the inconsistency in his system only after his attention was drawn to it by a letter from Bertrand Russell (1902; Frege, 1903). Mathematicians have proved the equivalence of the Axiom of Choice to many other propositions (Rubin & Rubin, 1985), but in most cases these equiv-

alences are not obvious, and though anybody who affirmed the Axiom of Choice and denied one of the other propositions would be inconsistent, the inconsistency would not be apparent to most people.

> We should reflect, too, that consistency presupposes the ability to detect even very remote consequences of what is stored, and that this would itself make nonsense of certain kinds of possible dialectical application. Could we model a discussion, between mathematicians, of the validity of a certain theorem, if we had to model the mathematicians themselves as all-seeing? In a discussion of a proof a participant may be committed to one step, but not yet committed to the next, which may be still under discussion. This, at least, is the sense of 'commitment' relevant to dialectical systems: others may use what sense they may. (Hamblin, 1970, p. 264).

How adept participants are at recognising implications and inconsistencies – which ones are immediate for them, and which are not – obviously differs among individuals, and also among topics being discussed. Expertise in a field includes the ability to recognise as immediate implications which those without that expertise need to have explained.[15] Often too, those with expertise can recognise that two statements which seem to outsiders to be inconsistent can actually be true together under certain conditions. It is also possible that a set of statements some would regard as inconsistent in all cases is seen by others as actually consistent – that some people have in this sense a different logic from others. Intuitionist mathematicians, followers of Brouwer and Heyting, may be willing to agree to "Not every statement has a truth value", but not to concede "Some statement has no truth value", though for those accustomed to classical logic the former immediately implies the latter. Followers of Meinong may affirm "There are some things which do not exist", which to classical logicians is self-contradictory. In dialogues between those who follow different logics, only what is immediately inconsistent according to both logics will justify an objection for immediate inconsistency.

When called to account for what seems an immediate inconsistency, there is at least one thing I may do other than withdrawing what I wrongly denied or affirming what I wrongly removed, namely to adopt a defence of equivocation. Thus if I am committed to "Every duck is female" and to "Donald is a duck" and have denied or withdrawn (etc.) what follows validly from them, "Donald is female", I may remove my liability to objection by *distinguishing* two senses of "duck", as applying on the one hand to all waterbirds of a certain kind (the hunting sense), and on the other hand to adult female birds of that kind (the barnyard sense, in which ducks

are contrasted with drakes and ducklings). I can then retain my commitment to "Every duck in the barnyard sense is female" and to "Donald is a duck in the hunting sense" while rejecting "Donald is female", since it is not an immediate consequence of those two commitments.[16] Other kinds of locutions may be introduced and the properties of the rules governing their use explored.

6. Argument

Explicit argument can be introduced to dialogue in various ways. A convenient one is to specify the *challenge* of a statement, a locution which like a withdrawal removes any commitment the speaker may have had to the statement challenged but which also requires the other participant either to dispense with commitment to the statement or to give a *ground* for accepting it. Thus if Ann says the challenge of "p", Bob must respond either by saying the withdrawal of the statement challenged, "I'm not sure that p", or by retaining (or adopting) commitment to "p" and providing an argument for "p", of the form "Because q".[17] This response would be taken as committing Bob both to "q" and to "If q then p". It is commitment which makes clear the difference between the challenge or demand-for-evidence sense of "Why?", "How is it known that?", which leaves the challenger not committed to the statement challenged, and the speech acts performed by other senses of "Why?", such as "How come?" (Aristotle's efficient cause) or "What for?" (final cause), each of which presumes that the respondent remains committed to the statement about which "Why?" was asked. The ascription of the conditional relating the ground offered to the statement challenged ("If q then p") in effect makes explicit the arguer's claim to the validity of arguing from q to p, a claim implicit in using q as a response to a challenge of p. The conditional may be only contingently true, and is so in most actual argument.[18]

Considerable effort has been expended by logicians over the past fifty years or so in developing systems of monolectical logic in which *ex impossibile quodlibet* does not hold, that is, in which it is not the case that from a contradiction any statement whatever can be inferred. (Fine, 1974; Anderson & Belnap, 1975; Routley, Meyer, Plumwood & Brady, 1983; Read, 1988; Anderson, Belnap & Dunn, 1992; Priest, 2008) It is certainly valid in classical logic that $\{p, \neg p\} \vdash q$. In a setting of dialogue, however, there is no reason to suppose that an inconsistency will lead to a "psychotic break" (Meyer, 1975, p. 417) or to having to admit the truth of every statement:

anybody who responded to "How is it known that q?" by saying "Both p and $\neg p$" would simply become liable to a resolution demand for immediate inconsistency.

7. Speech Acts and Maps

The distinction between the functions of different kinds of speech acts is central to meaning. This can perhaps be more easily seen if we step outside language in the ordinary sense and consider such things as maps. A wiggly blue line between two black dots on a map may entitle a traveller to conclude that there is a water-course between the cities of Albury and Wodonga. But it only confers this entitlement if we construe that map as representing what the countryside is like, as having assertoric force. The map would justify quite different entitlements if we took it as a proposal, suggesting changing the countryside to be like this, or as a question, asking whether the traveller had ever been in a region like this. What Frege called force is not limited to verbal language, but is central to the communication of meaning.

Meaning is to be understood in terms of the kinds of things which may be done, correctly or not, successfully or not, in the course of participating in dialogue. An expression has meaning to the extent that it is taken to affect what may and what may not occur subsequently in the conversation (as the occurrence without a later withdrawal of both "Every human is mortal" and "Socrates is human" renders the later saying of "Socrates is not human" or "I'm not sure that Socrates is human" a trigger for a charge of immediate inconsistence). Participants treat "It's red" as precluding "It's green" or doubt about "It's colored", as something which must be admitted by those who have said "I's scarlet". Even observation reports must be inferential, that is, give rise to logical relations (and therefore constraints on later conduct in dialogue) (Brandom, 1994, p. 590).

8. Inferentialism

Inferentialism is the view that something's linguistic meaning is a matter of its inferential role. "What was needed was a functional theory of concepts which would make their role in reasoning, rather than supposed origin in experience, their primary feature" (Sellars 1975, p. 285). Two statements have the same inferential role just in case replacing one by the

other never turns a good inference into a bad one. In the most immediate sense, the only expressions which have an inferential role are statements, which can be inferred from other things, and from which other things can be inferred. (This is Kant's doctrine of the primacy of the propositional.) Strictly speaking, expressions which are only parts of statements – words and phrases, subsentential expressions – can not have an inferential role. "We therefore distinguish contents that *can become a judgment* from those that *cannot*" (Frege, 1879, § 2, p. 12, his emphasis). One of Frege's important contributions was to explain how subsentential expressions could be understood as having an inferential role in an extended sense by looking at substitution. As well as considering inferential role of the sentence "φa", we look also at sentences "φb" and "φc" and so on for the predicate "φ" and at sentences like "ψa" and "χa" for the subject term "a" (see also Brandom, 1994, p. 97)

A statement's inferential role depends on what it can be inferred from (its circumstances of application), and what can be inferred from it (the consequences of its application); thus a consequence of application of the statement "Tiree is a blue wren" has among its conseequences of application the statement "Tiree is a bird". Where these are dislocated, where the consequences of application do not follow from the circumstances of application, the statement, or more broadly the statement form, ceases to have a use. This occurs most visibly with pejoratives: to classify somebody as (to use a long obsolete example) a *goddam* it is sufficient that the person be of English nationality; but the consequences of its application include that the person be more than usually prone to committing blasphemy and disobeying the third commandment (Shaw, 1924, scene i, p. 60). If one ceases to accept the inference from being English to being prone to commit blasphemy, then one ceases to use the word "goddam". (Dummett, 1973, p. 454; Brandom, 1994, p. 126–130). Conversely, as we learn more about the world or as our prejudices change, other expressions connecting circumstances to consequences come to be used.[19] Among the circumstances of application of some (many) sentences are observations, as those who identify meaning with method of verification or with assertibility have remarked. Among the consequences of application of some sentences are actions and other non-linguistic events, as the classical pragmatists insisted. Frege's initial focus on logic and mathematics excluded the empirical and the practical, and thus in the *Begriffsschrift* he was able to consider only inferentially sufficient premises as circumstances and only inferentially necessary conclusions as consequences. His account needs thus to be extended to include the empirical and the practical.

The earliest formulation of the idea that meaning is a matter of inference before Kant was due to Leibniz: "One thing *expresses* another (in my language) when there is a constant and ordered relation between what can be asserted of the one and what can be asserted of the other. In this sense a projection in perspective expresses its ground plan. Expression is common to all forms, and is a genus of which natural perception, animal sensation, and intellectual knowledge are species" (*To Arnauld*, 9 October 1687 = 1973, pp. 71–2.[20] Leibniz's definition of "expression" here makes essential reference to the public, inferentially articulated practice of *asserting*. He is thus distinguishing, not as Descartes did (e.g. in his 1641) between two kinds of stuff (the mental and the material), but between what is, and what is not, inferentially articulated. "It is this in which Leibniz's *rationalism* consists: that where empiricists begin with a primitive notion of *representation* and seek to ground in it whatever inferences are to be recognized (as Hume attempts to ground causal and inductive inference), he as a rationalist begins with inference and then explains the notion of representation in terms of it" (Brandom, 1981, p. 479, his italics).

Leibniz (1765, II. ix. 8, p. 137; II. xxix. 13, pp. 261–2; IV. xii. 4, pp. 451–3; etc.) repeatedly attempted to make clear that an image is not the same as a concept (or "*distinct idea*"), that is an understanding of "the nature and properties of" (p. 262) something.

> The central point is that Locke tries to use 'idea' in such a way that an 'idea of x' may be a sense-presentation of it or something like a concept or notion of it; and Leibniz repeatedly insists that these are wholly different and should not be given the same name. In his terminology, the datum of the senses is an 'image', and an 'idea' is an intellectual item which is involved in understanding, judging, defining, and so on. One wishes that Hume had been saved from Locke's conflation by reading this salutary corrective." (Remnant & Bennett, 1981, p. xvi).

9. The Pre-Kantian Assumption

The common assumption about meaning before Kant was that an explanation of linguistic meaning must begin with a theory of terms, both singular (e.g. "Socrates") and general (e.g. "human"). One would need to grasp the meanings of these before, and independently of, any other meanings. They are representations. Using their meaningfulness, we would then explain how terms are combined into assertions or propositions, and how the

truth or falsity of these depends on what is combined and how. From this account of the meaningfulness of propositions in turn we would explain how propositions are combined in inferences, and how the validity or invalidity of these depends on what is combined and how.[21]

Kant rejected this order of explanation. For him the fundamental unit of awareness or cognition is the judgement (assertion). He said, "Now the only use which the understanding can make of these concepts is to judge by means of them" (1781/7, A68 B93), and went on, "Now we can reduce all acts of the understanding to judgements, and the *understanding* may therefore be represented as a *faculty of judgment*" (1781/7, A69, B94, italics in original). Frege adopted as one of the principles of his *Grundlagen* "never to ask for the meaning of a word in isolation, but only in the context of a proposition" (1884, p. x[e]; cf. § 60, p. 71[e] and § 62, p. 73[e]). "I start out from judgements and their contents, and not from concepts. ... And so instead of putting a judgement together out of an individual as subject and an already previously formed concept as predicate, we do the opposite and arrive at a concept by splitting up the content of a possible judgement" (Frege, 1881, pp. 16–17). As Dummett remarks, "In insisting on the crucial nature of the distinction between sentence and well-formed combinations of words that fall short of being sentences, and in giving a theory of meaning which offered an account of this distinction, Frege thus took a great stride forward, and contributed something that has become part of the foundation of any philosophical account of meaning" (1973, p. 4). To understand something as a term, whether singular or general, presupposes ascribing to it a role in judgement (Brandom, 1994, p. 362–3). "We have opposed throughout the view of assertion as the expression of an interior act of judgment; judgment, rather, is the interiorization of the external act of assertion." (Dummett, 1973, p. 362). Hamblin (1971) outlined inversion algorithms by which the semantic properties of a dialectical system may be recovered from the properties of the set of legal dialogues occurring within it. The pre-Kantian order leaves quite mysterious what it is for something to be a representation. The crucial, and puzzling, feature of representation is its *aboutness*: that a representation is, or purports to be, *about* something other than itself. The challenge for the inferentialist is to explain this *aboutness* without assuming what is to be explained.

10. Truth

It is perhaps worth noting in passing that this view permits a substantive response to Derrida's charge that philosophers have self-servingly fetishized

reason-giving, which he sees as simply *one* game one can play with language, deserving no privilege of any kind relative to the myriad of others. Rather than simply ignoring him, or demonizing him as a dangerous irrationalist just for raising the challenge, on the one hand, or acquiescing in the radical conclusion he draws from what he takes to be the unanswerability of his challenge to justify the privileging he calls 'logocentrism', on the other, the pragmatic rationalist offers a responsive answer to that challenge: that our expressions play a suitable role in reasoning is an essential, necessary element of *our saying*, and *their meaning*, anything at all. Apart from playing such a role in justification, inference, criticism, and argument, sentences and other locutions would not have the meanings appealed to and played with by all the other games we can play with language. We philosophers should be proud to acknowledge and affirm our logocentrism, but should also justify it by an account of the relations between meaning and use, conceptual content and discursive practice. (Brandom, 2008, p. 43, his italics).

Donald Davidson emphasised the part that the concept of truth, and in particular the distinction between what somebody (including the speaker) thinks is so and what is so, plays in the meaningfulness of language:

If this account of radical interpretation is right, at least in broad outline, then we should acknowledge that the concepts of objective truth and of error necessarily emerge in the context of interpretation. The distinction between a sentence being held true and being in fact true is essential to the existence of an interpersonal system of communication. (Davidson, 1975, p. 169).

How this distinction emerges was explained by Brandom in his *Making It Explicit* (1994). The essentially social notion of language use is implemented in commitment stores and in the requirement for each participant to keep two versions of each other person's commitment store:

... the capacity to coordinate in our scorekeeping the significance a remark has from the perspective of the one to whom the commitment it expresses is attributed and its significance from the perspective of the one attributing it. This requires recognising the different specifications of the same claim that correspond to extracting its inferential consequences and antecedents in the context of other commitments that are acknowledged true by the scorekeeper, on the one hand, and extracting them in the context of other commitments acknowledged by the target of that scorekeeping, on the other. This is just the difference between employing as auxiliary hypotheses claims that are true (according to the scorekeeper) and employing as auxiliary hypotheses claims that are merely *held* true (according to the scorekeeper) by the interlocutor whose commitments are being assessed. Thus every scorekeeping perspective incorporates a distinction between what is (objectively) true and what is merely (subjectively) held true. (Brandom, 1994, p. 598, his emphasis).

The social perspective which results from the separating these two contexts is not *I-we*, which contrasts the individual with the community, or with everybody else, but *I-thou*, in which the contrast is that between commitments undertaken and commitments attributed (Brandom, 1994, p. 599). There can be no generally privileged perspective.

Because there cannot be a generally privileged perspective, objectivity must be understood to consist "in a perspectival *form*, rather than a non-perspectival or cross-perspectival *content*. What is shared by all discursive perspectives is *that* there is a difference between what is objectively correct in the way of concept application and what is merely taken to be so, not *what* it is, the structure – not the content." (Brandom, 1994, p. 600).[22]

To take something to be a representation is to take it to be a taking; that is, to take it to express an *attitude* concerning what there is and how things are. Its consequent liability for assessment as a successful representation (that it answers for its correctness to how things are) shows that this taking is implicitly open to the distinction between representational *attitude* (how things are taken to be by what is being treated as a representation) and representational *status* (the correctness of that attitude, which depends on how things actually are). The correctness of a representing is just this objectivity: that it is to be assessed in a way which takes the representation to answer to how things are, rather than how things are taken to be (Brandom, 1994, p. 78). By reversing the pre-Kantian order of explanation, we can begin with *assertion*, and characterise that as a social practice engaged in by people.

N O T E S

[1] Work for this paper was hindered by the inadequate funding of Australian academic libraries.

[2] Those philosophical traditions, notably positivism and postmodernism, which are disconcerted by the normative must seek solace where they can.

[3] "A speaker who is obliged to maintain consistency needs to keep a store of statements representing his previous commitments, and require of each new statement he makes that it may be added without inconsistency to this store" (Hamblin, 1970, p. 257). Even if we only wish to take account of, rather than to require, consistency, some sort of record or store of statements made and not subsequently retracted will be needed.

[4] Even when Hamblin was writing, information technology already enabled corporations such as utility companies to produce letters containing false assertions about a customer's indebtedness to them without the aid of a human being.

[5] Since Hamblin wrote the study of fallacies has mushroomed, and a variety of other conceptual schemes have been drawn on. Budzynska & Witek (2014) consider the relation of kinds of speech act to the speaker's character (*ethos*).

$^{6.}$ Schoolchildren may infuriatingly treat what a teacher intended as serious inquiries as merely rhetorical, deserving no answer. Conversely, sometimes people try to answer rhetorical questions. This was done unsuccessfully in:

> (Grandma Simpson and Lisa are singing together, "How many roads must a man walk down?".)
> Homer (overhearing): Eight!
> Lisa: That was a rhetorical question!
> Homer: Oh. Then, seven!
> Lisa: Do you even know what "rhetorical" means?
> Homer: Do I know what "rhetorical" means? (Appel, 1995).

It was done successfully on the cricket field when the Australian player Glenn McGrath said *Why are you so fat?* to his solidly built opponent Eddo Brandes of Zimbabwe, and was told, *Because every time I fuck your wife, she gives me a biscuit* [U.S., a cookie] (Portnoi, 2010).

^{7} By asking "When did you stop beating your wife?", one commits oneself to "There is a time at which you stopped beating your wife". Since this is a substantive commitment – the other person need not have a wife, let alone ever have beaten her – the rules for answers to such questions need to provide that among the valid responses to the question must be the denial or expression of doubt about such a commitment; see Aristotle, *Soph.El.* 5 (167b38–8a16) and 30 (181a36–b24); and Hamblin, 1970, pp. 38–40, 215–8, 262–3, 268–9.

^{8} Where a question is formed by use of more than one interrogative-pronoun analogues, a sequence of noun phrases may be necessary to answer it. "Who dragged what, at the wheels of what, how many times, round the walls of where?" should be answered "Achilles, the corpse of Hector, his chariot, three times, Troy" (Homer, *Il.* xxii, 395–405; xiv, 14–22).

^{9} Quotation, play-acting, story-telling, joking, are all special circumstances which may render the utterance of a statement not an assertion of the speaker. They are contexts in which one may utter a statement without becoming committed to it.

^{10} "A syllogism is discourse in which, certain things being stated, something other than what is stated follows of necessity from their being so", Aristotle, *An.Prior.* i. 1, 24b19–20. This already makes explicit the requirement that $s \notin \Gamma$.

^{11} See further Hofstadter's discussion of how it is possible that Lewis Carroll's "Jabberwocky" (1871, ch. 1, pp. 191–7) and other nonsense verse can be translated into other languages, 1979. pp. 372, and the examples on pp. 366–8.

^{12} Deleuze says:

> "In short, the conclusion can be detached from the premises, but only on the condition that one always adds other premises from which alone the conclusion is not detachable. This amounts to saying that signification is never homogeneous; or that implication never succeeds in grounding denotation except by giving itself a ready-made denotation, once in the premises and again in the conclusion." (Deleuze, 1990, p. 20).

Sokal & Bricmont do not cite this passage in their chapter on Deleuze and Guattari (1998), but as they admit their lists of references to misuse of scientific language in Deleuze's works "are by no means exhaustive" (p. 158).

^{13} Here "$\Gamma \vdash s$" may be read "from the set Γ of statements, the statement s may be derived". The term "sequent" is used in English to translate Gerhard Gentzen's *Sequenz*, because the English "sequence" was established as the translation for the German *Folge*. (On Gentzen's work on natural deduction and its relation to that of Stanisław Jaśkowski, see Indrzejczak, 1998.) The turnstile symbol "$\vdash$" comes ultimately from Frege's assertion sign (1879).

^{14} Suppose I am committed to "Every human is mortal" and to "Socrates is human". These have as an immediate consequence "Socrates is mortal". (*a*) I do not need to say "Socrates is mortal", but if someone asks me "Is it the case that Socrates is mortal?",

I must answer affirmatively; and I should not ask that question myself. (*b*) I should not deny, or assert anything immediately inconsistent with, the conclusion "Socrates is mortal". To do so would result in my having immediately inconsistent statements in my commitment store. (*c*) I should not express doubt in the conclusion by saying "I'm not sure that Socrates is mortal", or ask for evidence for it by saying "How do we know that Socrates is mortal?" or say anything else which removes commitment to "Socrates is mortal". Though it would not add anything to my commitment store, for me to do something of this kind is as much immediately inconsistent as my saying "It is not the case that Socrates is mortal", and I can be called to account for it in the same way.

When justly called to account for an immediate inconsistency, I must say something which restores immediate consistency to my store. I might withdraw "Every human is mortal" or withdraw "Socrates is human", or (if I denied "Socrates is mortal"), withdraw my denial, or (if I expressed doubt about "Socrates is mortal" or in some way removed it from my store), affirm it and thus put it in my store. The same holds for other sets of locutions related by an implication which is immediate in that context.

[15] The sceptic Sextus Empiricus said, "As regards all the sophisms which dialectic seems peculiarly able to expose, their exposure is useless; whereas in all cases where the exposure is useful, it is not the dialectician who will expose them but the experts in each particular art who grasp the connexion of the facts" (*Pyrr. Hyp.* II, § 236 = vol. 1, p. 309).

[16] This example is, of course, too obvious to cause real confusion, but other cases of ambiguity can be harder to detect. Medieval philosophy relied heavily on distinguishing different senses of terms.

[17] Kacprzak & Yaskorska (2014) relate Hamblin's analysis to other systems of dialogue.

[18] It is also often not noticed that a cogent argument may exemplify a form not all instances of which are valid. Thus "If Michelle is going to the picnic, then everybody who lives at the house where Michelle lives is going to the picnic. Michelle is not going to the picnic. So, not every body who lives at the house where Michelle lives is going to the picnic." is a good argument even though it is an instance of Denying the Antecedent.

[19] The history of many scientific concepts, such as *temperature*, is interesting in this respect. "As new ways of measuring temprature are introduced, and new consequences of temperature measurements adopted, the complex inferential commitment that determines the significance of using the concept of temperature evolves" (Brandom, 1994, p. 127).

[20] Leibniz, though he did not live as we now do surrounded by devices depending on isomorphic relations for the storing and reproduction of melodies and images, nevertheless understood the point later to be made by Wittgenstein (1921, § 4.014). As Leibniz said, "But these means of expression are varied; for example, the model of a machine expresses the machine itself, a perspective drawing in a plane expresses a solid, a speech expresses opinions and truths, letters express numbers, an algebraic equation expresses a circle or some other figure; and it is because these means of expression have something in common with the other conditions of the thing expressed and studied, that we come to know the corresponding properties of the thing expressed. Hence, evidently the means of expression need not be similar to the thing expressed, so long a a certain analogy holds among the conditions of both" (1676, p. 282). And again, "For it is sufficient for the expression of one thing that there should be a certain constant relational law, by which particulars in the one can be referred to corresponding particulars in the other" (1712, § 11, pp. 176–177).

[21] This is of course the order of explanation followed in typical presentations of model-theoretic semantics. Each singular term of the language is taken to represent a particular in some domain, and each *n*-adic predicate is taken to represent a set of *n*-adic sequences of the particulars. The construction of well-formed formulae, the definition of quantification, the generation of sentences, the Tarskian definition of their truth in terms of satisfaction, the construction of arguments, and the definition of their validity in terms of set-theoretic

inclusion between truth conditions, are all then straightforward. Inferentialism reverses this order of explanation to derive representation from inference, returning to Frege's approach in the *Begriffsschrift* (1879). Compare the "inversion algorithm" of Hamblin (1971, p. 149), which provides a schema for defining semantic properties in terms of the set of legal dialogues.

[22] Arguments that objectivity in the sense of having a God's eye view is unattainable consequently miss the point, despite their widespread popularity.

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