

Grice in the wake of Peirce

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I argue that many of the pragmatic notions that are commonly attributed to H. P. Grice, or are reported to be inspired by his work on pragmatics, such as assertion, conventional implicature, cooperation, common ground, common knowledge, presuppositions and conversational strategies, have their origins in C. S. Peirce's theory of signs and his pragmatic logic and philosophy. Both Grice and Peirce rooted their theories in normative rationality, anti-psychologism and the relevance of assertions. With respect to the post-Gricean era of pragmatics, theories of relevance may be seen to have been geared, albeit unconsciously, upon Peirce's pragmatic agenda.

1. Introduction: Peirce's pragmatic agenda

1.1 Grice the misplaced pragmatist?

A good deal of present-day pragmatics is due to Grice: this much is plain. Nevertheless, in 1972, Schiffer wrote: "Not only is Grice's account highly illuminating, it is also, as far as I know, the only published attempt ever made by a philosopher or anyone else to say precisely and completely what it is for someone to mean something" (Schiffer 1972: 7).

Some might wish to argue that the crux of the matter is how to quantify 'precisely' or 'completely'. This is irrelevant: according to Sextus Empiricus (*Adversus Mathematicos* 8.11), the Stoics already observed that "the barbarians do not understand, although they do hear the sound", and that "what is conveyed by the sign is the matter of discourse indicated thereby, which we apprehend over against and corresponding to our thought". What the Stoics brought up, according to him, was the idea of truth and falsity subsisting in the 'expression', which belongs to the speech, not only to the proposition

(*ibid.*, 2.70). (Sextus Empiricus himself rejected the view that the true and the false were attributes of speech.)

I wish to point out that there is another grand figure to be drawn up.

1.2 Assertions and energy

The American philosopher Charles S. Peirce (1839-1914) noted in 1904 that there was

the most serious error involved in making logic treat of “judgments” in place of propositions. It involves confounding two things which must be distinguished in a real comprehension of logic is to be attained. A *proposition* ... is not to be understood as the lingual expression of a judgment. It is, on the contrary, that sign of which the judgment is one replica and the lingual expression another (MS 517: 40; NEM 4:248; EP 2:311, *New Elements*).¹

In one of the many places in which Peirce criticised the German tradition of logic, he added, “The German word *Urtheil* confounds the proposition itself with the psychological act of assenting to it” (MS L 75: 43, 1902). In a related place: “Every assertion has a degree of energy” (MS L 75: 324). What Peirce is communicating here is that there is no assertion and no judgement unless there is someone or something for which an assertion or judgement is to be a proposition. If this someone or something accepts a proposition, a judgement is made, and if he, she or it accepts the judgement, then an assertion of the proposition is made.

Peirce’s *prima facie* casual statement that every assertion has a degree of energy nonetheless conveys a definite and significant idea. Acts of asserting should be considered analogous to action between objects in a concrete, physical sense. My assertion, by virtue of being a claim about its validity with reference to a situation, system or model of a suitable kind, exerts force upon you, the interpreter, largely because such validity is mutually testable or verifiable. Thus assertions become binding. Accordingly, I, the assessor, transmit a degree of energy to you via such assertions.

Assertions, conventional utterances, interpretants, rationality, cooperation and habits were Peirce’s everyday wherewithal in his philosophy. These are recognised as not only the key factors in pragmatic philosophy, but also as the main blocks upon which the later science of pragmatics was largely built during the 20th century. For instance, as far as

assertions are concerned, Peirce noted several things that appeared much later in speech-act theories.²

Assertions as such may be re-interpretable as linguistic acts, but the consequences that Peirce assigned to their use are perhaps best interpreted along the lines of what the later dialogical or game-theoretic approaches to discourse and conversation have advocated. Accordingly, what Peirce's "degree of energy" in assertions suggests is that they possess utility, measuring their successes and failures in conversational contexts.

However, this idea is not to be implemented in the above-board sense that assertions *cum* assertions were to be assigned some utilities. Rather, utilities are something that should be assigned to the *habits* that guide agents' behaviour and their appliance and control of assertions.³ Only much later, due to the influence of game theory and the sociological movements of the early 20th century, the vernacular changed so that people started to refer to strategies rather than habits. Nevertheless, the concept of information, viz. of any force, such as that implicit in assertions was taken to illustrate, was codifiable as the payoffs assigned to the total strategies of the players. For sure, payoffs in game theory typically do not represent any degree of linguistic information. They are numerical values referring to virtual prices or commodity that exists in the market as a primitive notion, and used in evaluating the activities of trading.⁴

1.3 Austin's dichotomy

John L. Austin, an archetype of the Oxford 'run-of-the-mill-language' philosophers, had an idea of what the prefiguring semioticians and semiologists were after at the time he was embarking on his performative edition of the speech-act theory. As far as Peirce was concerned, Austin did not consider his statements to be particularly adequate: "With all his 66 divisions of signs, Peirce does not, I believe, distinguish between a sentence and a statement" (Austin 1960: 87n). By 'statement', Austin means assertion, "the utterance by a certain speaker or writer of certain words (a sentence) to an audience with reference to an historic situation, event or what not" (*ibid.*: 87-88). Needless to say, Peirce brought out such a division forcefully decades earlier.

What is implicit in the concept of assertion is what Austin identified not as some generic assertoric force, but as the dichotomy of illocutionary vs. perlocutionary force. This dichotomy identifies components of expressions exceeding the mere descriptive and immutable content of (declarative or non-declarative) propositions. Formally, they

could be seen as functions from a proposition to some degree or quantity of force that the assertion produced in discourse possesses. These refined notions of force, over and above any semantic analysis of the ‘sense’ of utterances, present us with one of the recurrent points that have been made in favour of pragmatics as a self-standing discipline separate from the goals of semantics.

2. Morris betwixt Peirce and Grice

2.1 Two trichotomies

Following scholastics, Peirce proposed a three-part division of semeiotic inquiry into *speculative grammar*, *logic proper (critic)*, and *speculative rhetoric (methodeutic)*. Charles W. Morris, accompanied by Rudolf Carnap, advocated the distinction of linguistics into *syntactics*, *semantics* and *pragmatics*, by masking these classes on Peirce’s trichotomy. True, the division between logic proper and speculative rhetoric drives a wedge between two perspectives on logic that have typically been addressed in different theories and using different conceptual resources in formal linguistics. Morris and Carnap notwithstanding, however, that line does not fall where the so-called semantic/pragmatic interface is presumed to loom. The reason for this lies in the vastly more expansive breadth of Peirce’s division. Methodeutic studies the general conditions of the reference of signs to their interpretants, and in this sense supersedes the notion of meaning given by the translational (semantic) account. Logic proper, in contrast, studies the general conditions of the reference of signs to their objects, and in this sense aims at providing a theory of truth. Speculative grammar concerns the general characters of the signs themselves, and in this sense does not refer beyond the signs that are its object matter.

What, then, was the route by which Peirce’s pragmatic ideas found their way into studies of language in the early 20th century? Linguistics, a relatively new field of investigation, was of course much more closely intertwined with philosophically and semiotically oriented cultural and anthropological studies than with any self-standing field of inquiry with its own theories and methodology.

The official story goes something like the following. It was the trichotomy coined by Morris that introduced the notion of pragmatics as a legitimate scientific field. Morris was heavily influenced by Peirce, and more often than not, the underlying triad

from which Morris derived his own version has been assumed to refer to one of Peirce's three grand divisions of inquiry, namely that of phenomenology (*phaneroscopy*), within which his trichotomy of speculative grammar, critic, and speculative rhetoric subsists. (The other two are the normative sciences and metaphysics). However, even if Morris would have preserved Peirce's intentions (which he did not), the match could not have prevailed in the subsequent era of linguistics. For, in mapping the Peirce trichotomy onto the Morrisian one, not only a vast residue exists but the fields also overlap. Different varieties of meaning that, from the contemporary perspective, would be more or less semantic, or perhaps revolving around the semantic/pragmatic interface, would, in Peirce's distinction, pertain to critic and methodeutic. Moreover, what from the received perspective appear as terminological oddities such as Peirce's 'diagrammatic syntax' is mostly semantics and even deals with many pragmatic issues.⁵

2.2 Meaning and interpretants

The above story is thus contestable on several counts. Historically, Peirce did not draw any dividing line between the meaning of the sentence and the differences the sentence may give rise to in terms of force. He simply could not have done that, because meaning was for him a multifarious concept that revealed several faces depending on whether the emphasis was on the interpretants created in the minds of the speaker or on the interpretants created in the minds of the hearer, or possibly on those that both the speaker and the interpreter share. Such a mutual interplay between the speaker and the hearer, or theoretically speaking between any entity that puts forward a sign and the other that interprets it, accommodates practically any facet that pragmatics has. Examples of the first kind of interpretant include *intentional interpretants*, which among other things embody the later-popularised idea of speaker-meaning. Examples of the second kind include *effectual interpretants* created in the minds of the interpreters, and of the third kind *immediate interpretants*, which give the ordinary meaning of it, revealed in the right understanding of the sign.⁶ The immediate interpretant is what the sign expresses, irrespective of its actual effects on the interpreter.

More to the concerns of modern pragmatics, the extra element that the first two interpretants in this triadic typology of interpretants have, and which is used in differentiating between them, may be compared with the distinction between the illocutionary and perlocutionary force of utterances. Different illocutionary forces create

different effects in the interpreters via the utterer's deliberate ways of putting forth the utterance. Different perlocutionary forces create different interpretants in the interpreters via the utterer actually achieving something by the deliberate act of making the utterance. Since Peirce was merely interested in assertions, for him, utterances typically came with some illocutionary force, and the perlocutionary glut thus measured the coverage in which intentional interpretants were effectual.

2.3 Morris not following Peirce

The view of pragmatics advocated by Morris primarily concerned the origin, use and effect of signs. His theory was fundamentally different from that of Peirce in confining these three functions of signs to contexts defined according to behavioural criteria. The contexts were radically narrower, because only flesh-and-blood organisms were taken to function as sign interpreters, and because only dispositional parameters given by response sequences by signs were approved within the scope of interpretants. His more stringent and deviant approach to Peirce's semeiotics is apparent in his characterisation of pragmatics as "the science of the relation of signs to their interpreters" (Morris 1946: 287). For Peirce, it was the science of the relation of signs to their interpretants, and as noted, provided for the latter a rich analytic classification.

Consequently, Morris had no real use for the concept of a habit, either, and thus contributed markedly to its insolvent demolition from the intellectual genres that followed. The only references to it were suffixed to his Appendix 'Some contemporary analyses of sign-processes' to *Signs, Language and Behavior* (Morris 1946: 285-310), the sole reason being its mockery in favour of behaviouristic stimulus-response models. Also in this respect, Peirce's influence was in reality much wider than just a glimpse at Morris's misplaced promotion of it would have us believe.

In tracing some of the most interesting and most revealing paths by which pragmatics found its way into late-20th-century linguistics, we do not need to rely on the informants who had access to Peirce's posthumously published writings, the first, *Love, Chance and Logic* appearing in 1923. Peirce published an enormous amount of material during his lifetime. He was by no means a neglected figure, even though such erroneous claims have strenuously persisted, and even though proper acknowledgement of his influence has on more than a few occasions been ambivalent.

3. The Peirce-Grice Concourse

3.1 Principles of cooperation

By the end of the 20th century, Herbert Paul Grice (1913-1988) was acknowledged to have virtually redefined the state of pragmatics. This gives a misleading picture of the actual history. A link exists between Grice's views on pragmatics and Peirce's pragmatism. Lest the extent of this resemblance is misunderstood, I will also note some main differences between the two.

To begin with, consider the following passage from Peirce:

Honest people, when not joking, intend to make the meaning of their words determinate, so that there shall be no latitude of interpretation at all. That is to say, the character of their meaning consists in the implications and non-implications of their words; and they intend to fix what is implied and what is not implied. They believe that they succeed in doing so, and if their chat is about the theory of numbers, perhaps they may. But the further their topics are from such precise, or "abstract," subjects, the less possibility is there of such precision of speech. In so far as the implication is not determinate, it is usually left vague; but there are cases where an unwillingness to dwell on disagreeable subjects causes the utterer to leave the determination of the implication to the interpreter; as if one says, "That creature is filthy, in every sense of the term" (5.447, 1905, *Issues of Pragmaticism*).

Now compare this to Grice:

I wish to represent a certain subclass of nonconventional implicatures, which I shall call *conversational* implicatures, as being essentially connected with certain general features of discourse; ... Our talk exchanges do not normally consist of a succession of disconnected remarks, and would not be rational if they did. They are characteristically, to some degree at least, cooperative efforts; and each participant recognizes in them, to some extent, a common purpose or set of purposes, or at least a mutually accepted direction.

This purpose of direction may be fixed from the start (e.g., by an initial proposal of a question for discussion), or it may be so indefinite as to leave very considerable latitude to the participants (as in casual conversations). But at each stage, *some* possible conversational moves would be excluded as conversationally unsuitable. We might then formulate a rough general principle which participants will be expected (*ceteris paribus*) to observe, namely: Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged. One might label this the Cooperative Principle (Grice 1989: 26; *William James Lectures*, 1967).

I am not claiming that Peirce had in mind precisely the kind of Cooperative Principle coined by Grice sixty years later. Nor is it very plausible that Grice formulated his technical principle — according to which the speaker’s contribution ought to be what is required by the accepted purpose of the exchange — while being thoroughly cognisant of the above or similar unpublished passages in Peirce. In fact, some commentators on Grice’s work have over-valued the force of the cooperative principle. For one thing, it by no means singles out competition. Many ordinary conversations are conducted under competitive conditions while preserving cooperation.

Nonetheless, the affinity of the above two samples is more than skin-deep. Both Peirce and Grice are seen to bring out as the main ingredient in successful communication and speech the common and shared purpose of the utterer and the interpreter. An interpreter to whom utterances are addressed is needed in order to be able to even begin a full-scale analysis of the meaning of a sign. It falls on the interpreter to recognise that the utterer is present both *in* the utterance and *as* a deliverer of it. We are at once reminded of another pair of terms from Grice (who certainly was not the first), the distinction between the *literal meaning* of the utterance and the *speaker’s meaning* conveyed by it.

Furthermore, the notion of honesty that Peirce is alluding to in the above quotation is one of the properties needed to satisfy Grice’s maxim of Quality, constituted by principles such as, “Try to make your contribution one that is true”, “Do not say what you believe to be false” and “Do not say that for which you lack adequate evidence” (Grice 1989: 27).

What is equally interesting is that Peirce recognised the meaning of utterances in conversational settings as delivering both intended and non-intended content, and thus including in the overall meaning of such chains of utterances both implied and non-implied information. The more casual the topic of the conversation is, the more effort is required from the part of the utterer to balance between the two ends. As Peirce notes, sometimes, for the sake of expediency, the intention of the utterer is to pronounce things that have deliberately nondetermined implications.

3.2 Common ground and common knowledge

Grice requires the hearer to reply to the following items when working out that a particular conversational implicature is present:

(1) The conventional meaning of the words used, together with the identity of any references that may be involved; (2) the Cooperative Principle and its maxims; (3) the context, linguistic or otherwise, of the utterance; (4) other items of background knowledge; and (5) the fact (or supposed fact) that all relevant items falling under the previous headings are available to both participants and both participants know or assume this to be the case (Grice 1989: 31).

These items constitute the common ground of the speaker and the hearer, referring to the knowledge, beliefs, expectations, and other discourse entities, propositions, presuppositions and attitudes common to the speaker and the addressee. Now compare this with the somewhat more verbose formulation of Peirce, addressing his reader in a characteristically dialogical prose:

There are some points concerning which you and I are thoroughly agreed, at the very outset. For instance, that you know the English language — at least, tolerably. I am positively sure that you cannot deny that; — at any rate, not in English. There is much more that it will not be unreasonable to assume that you will assent to; such as that you know the rudiments of grammar, — meaning, of course, Aryan grammar, which is often called “universal grammar”; — that you have most of the leading attributes of the genus Homo, as set

down in the books of physiology and of psychology. Nay, for more than that, you have had, I will wager, an experience of life quite similar in a general way, as regards the smaller and more elementary items of experience to mine. Among these I can instance this, that you, like me, have acquired considerable control not only of the movements of your limbs but also over your thoughts. If we were to meet in the flesh, we should both take it for granted. I should know that it was so, and know that you knew it, and knew that I knew that you knew it; and so on, *ad infinitum* and *vice versa* (MS 612: 6-7, 2 November 1908, *Book I. Analysis of Thought. Chapter I. Common Ground*. Cf. MS 611: 1).

Peirce took these items to constitute the most important characteristics of the common ground between the speaker and the hearer (or as is the case here, between the writer and the reader). On the notion of common knowledge behind the construction of the common ground, Peirce wrote:

No man can communicate the smallest item of information to his brother-man unless they have ... common familiar knowledge; where the word 'familiar' refers less to how well the object is known than to the manner of the knowing. This manner is such that when one knows anything familiarly, one familiarly knows that one knows it and can also distinguish it from other things. Common familiar knowledge is such that each knower knows that every other familiarly knows it, and familiarly knows that every other one of the knowers has a familiar knowledge of all this. Of course, two endless series of knowings are involved; but knowing is not an action but a habit, which may remain passive for an indefinite time (MS 614: 1-2, 18 November 1908, *Common Ground*).

The adoption of common knowledge in communicative situations is thus not essentially a diachronic process, but represents a habitual state with a structure of attainable form, despite its formally infinitary nature, without having to span any actual period of time. This discredits Schiffer (1972), who doubted the feasibility of *ad infinitum* reciprocity precisely because of its infinitary and thus intractable character. This is a matter that did not worry

Peirce, who had frequent adoptions of infinite constructions in mathematics, especially in relation to continuity and collections. To be sure, beyond the question of how ‘common familiar knowledge’ comes about in conversations or in the interpretation of utterances, semiotically speaking, any interpretation of a sign may take an indefinite time to be attained, depending, of course, on the nature of the interpretants that come into the play.

Nevertheless, ‘common familiar knowledge’, by virtue of being a habit rather than sign-theoretic action, is not on a similar footing.⁷ This has repercussions. For instance, Peirce’s writings are seen to give some historical support to the argument presented by Clark and Carlson (1981). Their argument is that there is a mental primitive (assuming two agents, A and B) that ‘A and B mutually believe that p ’ which, together with the recursive inference rule ‘If A and B mutually believe that p , then: (a) A and B believe that p and believe that (a)’ yields, if the need arises, to possibly infinite sequences of knowledge statements.

The mutually established common ground of familiar knowledge ought also to include primitives that establish not only knowledge but also common beliefs, common expectations, common presuppositions and possibly also other propositional attitudes, for instance concerning those propositions that the subject is *capable* of believing or knowing in addition to *explicitly* believing or knowing them. Peirce did not directly speak about beliefs, expectation and presuppositions, but in establishing a rigorous and broad-enough common ground, he nonetheless made them part of his discussion both in the quoted and closely-related manuscripts.⁸

The qualification of ‘familiar’ in Peirce’s ‘common familiar knowledge’ only serves to reinforce these points, since it suggests that what constitutes the common ground for Peirce are, contra Robert Stalnaker (1978), not presuppositions *as propositions* but the habitually grounded familiarities and attitudes with *entities* of various sorts.

An upshot is that the existence of the common ground based principally on *manners* of knowing rather than the *depth* of knowing does not jeopardise normativity of language, since common beliefs and presuppositions, unlike common knowledge, may well be correct as well as incorrect, in other words defeasible. The entities they refer to are not propositions that are believed to be either true or false, but manifestations (in Peircespeak: what are presented in the *Phaneron*) that constantly come into pass and disappear, often introduced by virtue of the exertion of force given in assertions and fading out as the force tends to an end.

Prompted by Schiffer's suggestion, Grice considered the question of the infinitely regressive character of analysing meaning in conversational utterances.⁹ His conclusion was that, even if it were tempting to think that no indefinite regress is involved in getting the requisite representations of the speaker's and the hearer's knowledge right, it is difficult to know what the proper cut-off point is when the iteration of intentions that the utterer wishes the addressee to recognise is no longer desirable. Notably, this conclusion was reached before the infinitary accounts of common knowledge by David Lewis and others came into market.

Grice (1989: 65) also remarked about expressions having "common ground status" if they "conventionally commit the speaker to the acceptance" of propositions. Here Grice is in agreement with Peirce's familiarity thesis concerning common knowledge not depending upon propositional presuppositions but upon conventional and habitual manners in which we become acquainted with objects.

3.3 Interpreting signs

The aforementioned passage in Grice's *Utterer's Meaning and Intentions* (pp. 96-100) also refers to a three-way characterisation of "modes of correlation", for which Grice uses the terms "iconic", "associative" and "conventional". It is not difficult to see, quite apart from the exact terminological match of "iconical" with Peirce, that associative correlation is very close in meaning to Peirce's indexical relation between a sign and its objects, and that conventional correlation is in very close agreement, both substantially and etymologically, with Peirce's symbolic sign relation. Grice's choice of terms was influenced by the trends in psycholinguistics at that time.

Furthermore, in speaking of the "utterer's occasion meaning in the absence of an audience", Grice undertakes an elaboration of the issue that Peirce discussed in terms of situations in which there is no infinite collection in the series of utterers and interpreters, in which case a sign may fall short of having an interpreter. Situations in which utterances do not have interpreters do not necessarily lack interpretants, however, even though a "human interpreter is wanting" (MS 318; EP 2:404, c.1907). Grice's rejoinder to what people have sometimes used as an objection to his surgery of speaker-meaning was that all utterances are performed as if there were an audience. This is a counterfactual reply to objections voiced against Grice's theory. Peirce's reply would have been along similar lines: he held that even if an interpreter was not essential to a sign, its *quaesitum*, its essential ingredients,

had to be present for the sign to fulfil its function. Since every sign gives rise to an interpretant of it, and since the interpreter and the interpretant will merge in cases in which there is no separate interpreter, the *quaesitum* of the interpreter is the determination of the object of the sign, that is, its interpretant.

3.4 Mystery interpretants

The preceding couple of parallels may not yet represent conclusive proof that Peirce influenced Grice's work on issues of mutual interest. They may have just been investigating varieties of meaning in similar conversational settings, their views converging only coincidentally.

However, there is smoking-gun evidence that this was not the case on page 36 of *Logic and Conversation*, in which Grice discusses an example intended to flout the supermaxim "Be perspicuous".¹⁰ According to Grice, this is taken to happen in cases in which one interpretation is notably less straightforward than another:

Take the complex example of the British General who captured the province of Sind and sent back the message *Peccavi* [this was in 1843]. The ambiguity involved ('I have Sind'/'I have sinned') is phonemic, not morphemic; and the expression actually used is unambiguous, but since it is in a language foreign to speaker and hearer, translation is called for, and the ambiguity resides in the standard translation into native English. Whether or not the straightforward interpretant ('I have sinned') is being conveyed, it seems that the nonstraightforward interpretant must be (Grice 1989: 36).

Grice goes on to refer to the distinction between the straightforward and the nonstraightforward interpretant several times in the corresponding paragraph.¹¹ The term 'interpretant' is, of course, exclusively of Peircean origin. Unfortunately, Grice fails to cite Peirce, or for that matter whomever the term was taken from (not atypical!). Apart from this single paragraph, the term 'interpretant' is to be found nowhere else in Grice's published works.¹²

Even so, the sobering possibility remains that part of Grice's above-mentioned terms came from Morris, who was thoroughly and unhesitatingly inspired by

Peirce's theories, but who came to give them some unfortunate and misleading behaviouristic and psychological twists. This is dubious, however, primarily for two reasons. First, there is no mention of 'straightforward' or 'nonstraightforward' interpretants in Morris. Second, unlike Morris, Grice did not link these interpretants with the psychological dispositions of speakers and hearers. Besides, even if he had read Morris, the bulk of terminology Morris was using is still traceable to Peirce, a fact that cannot be missed in reading Morris.

3.5 Conventional implicatures and rationality

Grice's term for an implicature that lacks the inferential demand for the interpreter to work out the implied content of the utterance was 'conventional implicature'.¹³ In this sense, what is at the same time equally interesting and baffling is his argument concerning the central status of the principle of the *economy of interpretation* (Grice 1989: 69). It is about the amount of energy, time or space spent by rational speakers and interpreters engaged in a rational dialogue. It states that, for roughly equal outcomes, it is rational to employ strategies that consume less energy, time or space even if such strategies were less "ratiocinative" than those that consume more (*ibid.*: 83). Again, a game-theoretic flavour is discernible.¹⁴ An obvious question that arises, then, is exactly how one is to understand the difference between ratiocinative and non-ratiocinative processes, so vital for Grice in terms of upholding the principle.

My response is that, as previously for Kant, for Grice, too, the concepts of rationality and reason were the assumptions from which all other principles, including the maxims emanated. However, what is ratiocinative needs to be distinguished from what is rational and explained in terms of the latter. If taken in its scholastic sense, namely as the inferential reasoning process that takes one from the known to the unknown, a mental passing or inner act of argumentation from the cognition of premisses to the cognition of consequences, Grice's meaning of 'ratiocinative' would be that it is sometimes rational to interpret assertions in a less inferential manner compared to interpretations that are not essentially inferior in terms of their consequences to the interpreter.

The question that remains is precisely what kind of reasoning process is admissible in this understanding of ratiocination. Did Grice, like John Stewart Mill much earlier, intend it to be confined to necessary reasoning, or does it also take probabilistic and other non-deductive forms of inference into account? Grice does not answer these

questions, but it is plausible that, broadly conceived, ratiocination may, unlike ideal rationality, bear a relation to presumptive reasoning that is non-monotonic and retracts conclusions in the presence of new information.¹⁵

What follows from the above reply is that, for rational agents, guided by their reason, heeding the cooperative principle is primarily a moral, not empirical decision based on the realisation of utilities assigned to linguistic actions. Hence, cooperation, and thus ultimately the whole of pragmatics becomes grounded on normative principles. Pragmatics falls within the same main branch of science as logic (in the broad sense) and ethics. Moreover, the principle of economy of effort falls broadly within the class of principles that Peirce strenuously advocated. For, according to his account, “Knowledge that leads to other knowledge is more valuable in proportion to the trouble it saves in the way of expenditure to get that other knowledge” (1.122, c.1896). Even though Peirce was speaking of knowledge in a general scientific and epistemological sense, the principle applies to, among others, to the interpretation of presuppositions in pragmatic contexts.

3.6 Grice’s programme not psychological

What also supports these conclusions is that Grice’s programme of pragmatics turns out to be much less psychological than is typically thought. The first reference he actually makes to psychology occurs only on page 137 of the *Studies*, in the concluding notes to the essay *Utterer’s Meaning, Sentence-Meaning and Word-Meaning*, published in *Foundations of Language* in 1968. This is considerably later than his first outlines of a pragmatic theory of logic and language. The reason for this apparent mitigation is not difficult to point out. Reducing the speaker’s meaning to propositional attitudes does not imply reducing the speaker’s meaning to propositional attitude psychology. Speaker’s meaning may refer to the mental, but does not commit its theories to any outright psychologism. Since Grice was mainly interested in the connection between logic on the one hand, and beliefs and intentions on the other, there was no need for him to embark on excess psychological theorising.

Thus the alignment of Peirce and Grice is no anachronism. This, despite the fact that since Grice was sympathetic to the logical formalists’ programme of the Frege-Russellian kind, there is little, sight unseen, in his thinking to be associated with thoughts of the grand pragmatists of the earlier era. Yet the methodological agenda that he laid out is not alien to pragmatic concerns in the least. For one thing, his anti-psychological and

common-sense stance towards logic is unmistakable. Shreds of pragmatism also show up in the wish to root acts of communication in human rationality and have shared goals for members of linguistic populations.¹⁶

4. Post-Gricean pragmatics: the emergence of relevance

After Grice, the science of pragmatics saw furcations in multiple directions. One influential theory, that of *relevance* (Sperber and Wilson 1995) took up just one of Grice's particular maxims of cooperation, originally termed that of Relation, and moulded it into an attempt to actually establish what it means for an utterance to be relevant to the context and to previous chains of utterances. In Grice, this had remained an unanalysed primitive to be taken at face value.

It would be make-believe to claim that the core component of relevance in conversations was something novel with Grice, let alone Sperber and Wilson. Peirce, the great contextualiser of the 19th century, offered the following:

If the utterer says "Fine day!" he does not dream of any possibility of the interpreter's thinking of any mere desire for a fine day that a Finn at the North Cape might have entertained on April 19, 1776. He means, of course, to refer to the actual weather, then and there, where he and the interpreter have it near the surface of their common consciousness (MS 318: 32-33, c.1907, *Pragmatism*).

The answer to what relevance theorists have been after is implicit in this example: the *collaterality* of what is given in observation for both the utterer and the interpreter of the utterance determines relevance. Given Peirce's phenomenology, 'what is given' naturally refers not only to real, dynamic, or physical objects, but to the ideas that signs produce in consciousness. They consist of both factual and conceptual elements. There is no analytic/synthetic division in such collaterality. However, it needs to be borne in mind that ideas evoked by conscious minds depend on the situations or environments in which collateral observations can be made, even in the cases in which assertions are context-independent in that they can as well be made elsewhere, whereby the interpretants produced are, of course, likely to be different.¹⁷

Relevance theory may have emerged in the wake of Grice, but it subsequently redefined its goals to the extent that it is now somewhat of a rival. The emphasis on the search for the key principles of cognitive processing from which it is hoped that implicatures and other pragmatic notions ensue has had the effect of diminishing the force and depth of the all-powerful rationality postulate upon which Grice's programme was built. In so doing, relevance theorists have rubbed shoulders with the computational sciences, sciences for the efficient accounting of information transmission and manipulation, while de-emphasising conceptual analyses of information. Accordingly, in fields such as economics and interactive epistemology, relevance theory has gained in status much in the manner of theories of less-than-hyper-rational reasoning and action. These all share the methodological concern that effort spent on any act of uttering and interpreting, or believing and decision-making, should be weighed against the practical consequences of such acts, and thus continue the venerable 'economy of research' methodology originated by Peirce. Similar methodological attitude was also one of Grice's main preoccupations.

Given Peirce's pragmatism, what are its consequences to current theories of relevance? Maybe relevance is being drawn in opposing directions by attempts to build the notion upon the psychological and cognitive theory of the competence of intelligent agents, while simultaneously trying to provide support to its inferential and logical dimensions. In contrast, Peirce's goal was not to spell out any theory of cognition of intelligent agents, let alone their psychology, but to dispense with these as much as possible. This may not have been an undertaking invariably realistic, but at least he claims the priorities he felt were needed in the brands of rational inquiry concerning language and thought.

5. Conclusions

Peirce's true relevance to pragmatics has been invariably missed or downplayed, even a hundred years after his most prolific period of such investigations. Just to expose a by no means uncommon sentiment, Clark (1996: 156) writes, "Peirce applied his theory to a wide range of philosophical issues, including logic, inference, belief, perception, and metaphysics, but oddly enough, not directly to communication or language use". As I hope

to have shown, nothing could be further from the truth. Not only was the notion of communication a central concern in his theory of signs, it was also a strikingly articulate and versatile account of language use.

Clark continues: “Peirce also didn’t distinguish between the type of thing a symbol (like “give” or “bird”) could potentially signify and the type of thing a person actually uses it to signify on a particular occasion. Peirce was missing several distinctions that were made only fifty years later” (*ibid.*: 159-160). In so far as we can make sense of this opinion at all, it is misguided for similar reasons as the previous one was. Peirce identified speaker-meaning and distinguished it from other types of meaning in terms of different notions of interpretants. I also think that ‘potential signification of a symbol’ was no part of Peirce’s nomenclature.¹⁸

What is significant is the affinity between countless ideas that have prevailed since Peirce’s semeiotic studies. However, Peirce’s influence was greater on the early semanticists and pragmaticists of the 20th century than on the overall analytic movement that took off from the philosophy of logical empiricism. Logical empiricism limped along just about to reach Grice, while analytic philosophy was enjoying its heyday. However, they both reached an impasse soon afterwards. The semeiotic foundation of pragmatics was almost entirely suppressed from mainstream analytical philosophy for the better part of its survival in the post-Gricean era (Pietarinen 2004e).

To wit, let us observe what happened to the notion of the common ground after Grice. It was well recognised in Peirce’s pragmatic agenda, but was never in full blossom in Grice’s writings. Stalnaker (1978) was singularly successful in suggesting that the common ground should be modelled as a set of possible worlds. He argued that it was a set of propositions, the presuppositions of agents, and could thus be represented by a possible-worlds framework, because presuppositions are claims about what the agent knows or assents to by means of some suitable propositional attitude. Stalnaker holds that any assertion nurtures the common ground by adding the content of the assertion to the set of presuppositions. This is the effect, the pragmatic bearing if you like, of assertions. The problem is that it is difficult to make sense of the idea that the common ground is *constituted* from assertions, which obviously are bound to the particular situations in which they are made. Stalnaker holds that it is the content of the assertions that is added to the common ground — their propositional core or essence — and that this addition of content allows for manipulation and modelling by possible-worlds semantics.

From the Peircean perspective this perspective appears too rigid. It remains unclear what the non-assertoric content of utterances could amount to. How could sentences or expressions coinstantaneously be sufficiently similar to assertions and hence added to the common ground, while apparently retaining the notion of meaning that is non-truth-functional, be retractable and defeasible, perhaps merely manifested, implicit, potentially believable or residing in long-term memory, and yet function as a bridge between assertions and propositions?

Notes

¹ The reference MS (and MS L) is to Peirce (1967) by manuscript (manuscript letter) and page number; NEM is to Peirce (1976) by volume and page number; EP 2 is to Peirce (1998) by page number; CP is to Peirce (1931-58) by volume and paragraph number.

² Among others, Brock (1982) and Hilpinen (1995) study Peirce's account of assertions in relation to speech-act theories. Schmitz (1984) has revealed a further prefigure in the Dutch mathematician Gerrit Mannoury, who during the inter-War period was singularly successful in bringing the notion of speech acts to bear not only on psycholinguistic studies and experiments but, more foundationally, on the analysis of meaning in various communicative acts. Unlike the later speech act theorists, his viewpoint was not confined to speaker's acts on the hearer, but recognised the need for accounting acts of the interpreter as well. He was influenced by Peirce's pragmatism via Lady Victoria Welby's writings (Pietarinen 2004e).

³ Aspects of Peirce's game or dialogue-like logic and semantics are studied in Pietarinen (2003a,b; 2004a,b).

⁴ The analogy that can be made between evolutionary game theories for the emergence of communication and Peirce's concept of habit is nonetheless unmistakable (Pietarinen 2004c).

⁵ See e.g. MS 500, 6–9 December, 1911, *A Diagrammatic Syntax*, A Letter to Risteen on Existential Graphs.

⁶ Peirce makes the distinction between effectual and intended interpretants in his correspondence with Lady Welby (Hardwick 1977). Their merger is the *communicational interpretant*, serving the key sign-theoretic notion for later Peirce (MS 318, 1908; 4.536, 1905).

⁷ Peirce termed 'common familiar knowledge' occasionally 'common acknowledged information', affording us to act upon each others' opinions "to enable us to come forthwith to agreement upon all ordinary topics, or, at least, upon questions concerning our meaning in using familiar words such as knowledge, truth, and reality" (MS 612: 7, 1908, *Common Ground*).

⁸ For instance, in the fascinating manuscript 596, *Reason's Rules* [c.1902-03], Peirce lists several initial beliefs that ought to be assumed that any reasoner possesses. These beliefs are natural assets in the common ground of ordinary language users (Pietarinen 2004d).

⁹ Grice (1989: 96-100), *Utterer's Meaning and Intentions*, 1967.

¹⁰ Flouts of this kind may be needed in order to breach the conversational maxim of Manner for the purpose of getting in a conversational implicature, thus revealing that the speaker, while breaking the rules of conversation on a superficial level, tries to ascertain that he or she is obeying them on a deeper, mutually agreed and understandable level of language.

¹¹ I owe the observation to Mats Bergman.

¹² Hans Reichenbach (1947) was another early user of Peirce's term 'interpretant'.

¹³ Peirce recognised the existence of conventional utterances, subspecies of symbolic signs (mostly legisigns) in language (or icons the likeness of which is guided by conventional rules), which imply special habits or rules of interpretation affecting the conduct of the interpreter (4.431,1903). According to Peirce, unlike other assertions, "upon [the falsehood of conventional utterances] no punishment at all is visited" (5.546, c.1908).

¹⁴ Language and economics have indeed been congenial, and to some extent complementary, concerns of human behaviour since Adam Smith and the observation that they both attempt to explain regularities in human interaction and the design of social systems. Several attempts have been made recently to revive this insight through the study of Gricean pragmatics from the viewpoint of game theory and econometrics (Hintikka 1986; Parikh 2001).

¹⁵ Presumptive accounts of conversation have since been studied by Levinson (2002) as an elaboration of Grice's conversational implicature.

¹⁶ Peirce also anticipated views put forward later by Donald Davidson in support of a 'triangulated' view of interpersonal communication, a necessary condition for language and thought: "When two people are in heart to heart conversation, each is aware of what is passing in the other's mind by substantially the same means by which he is aware of what is passing in his own, though I do not say he is as completely cognizant of the one as of the other., He no more thinks about the other's mind than he does of his own" (MS 612: 27-28, 11 November 1908). Similar triadic formulations followed in Karl Bühler's semantic studies, and were later absorbed by behaviouristically inclined linguists and psychologists working, for the most part, on decision-theoretic aspects of language use.

¹⁷ Such context-independence is an aspect of compositionality of languages. See Pietarinen (2004f) for a fuller account of to what extent we may regard Peirce's logical systems to have endorsed compositionality as well as non-compositionality of meaning for the purposes of semantics and the composition of concepts. This discussion also points out the link between the contemporary notion of relevance and Peirce's pragmatic maxim.

¹⁸ 'Potential signification of a symbol' could perhaps be charitably reconstructed as referring to unsaturated predicate terms. However, if this were to be the case, it would give us yet another reason to suspect the validity of Clark's assertion, namely that a person actually uses a symbol to produce its intended signification by filling out blanks of such unsaturated terms and selecting suitable objects from the universe of discourse in question, which of course would be a process dependent on a particular context of symbols.

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