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An Inferentialist Approach to Semantics: Time for a New Kind of Structuralism?

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Abstract

The perennial question – *What is meaning?* – receives many answers. In this paper I present and discuss *inferentialism* – a recent approach to semantics based on the thesis that *to have* (*such and such*) *a meaning* is *to be governed by* (*such and such*) *a cluster of inferential rules*. I point out that this thesis presupposes that looking for meaning requires seeing language as a social institution (rather than, say, a psychological reality). I also indicate that this approach may be seen as a new embodiment of the old ideas of structuralism.

What is Meaning?

One of the most basic questions anybody who deals with language must – sooner or later – face is the question: *What is meaning*? i.e., *what is it that makes some types of sounds or inscriptions meaningful?* (It is therefore somewhat surprising that a name for the 'science of meaning', *semantics*, did not materialize until the late nineteenth century.)[1] Moreover, even in the twentieth century, investigation into the nature of meaning was held as a more pressing task by philosophers than by linguists (particularly, of course, following the *linguistic turn* which took place in the first half of the twentieth century,[2] and which stimulated the idea that to understand meaning might be *the* task of philosophy).

Hence, what *is* meaning? It is helpful first to distinguish between various senses this question may have. Let us start with the most obvious: taking it to ask about the *substance* of which a meaning is made. What kind of stuff makes up the chunk that must be glued to a type of sound or inscription to make it *meaningful*?

The most exposed cases of such an alleged gluing are evidently the events of baptism, through which a (proper) name becomes associated with a tangible object (typically a human infant), and thus we may be tempted to think that meanings are *generally* tangible things, elements of our physical world. This answer, however, soon falls into disrepute; for the physical world can not provide enough suitable entities to furnish all our

linguistic expressions with meanings. (Problems arise already with common nouns, since the *meaning* of a general word like *table* cannot be any one tangible thing, any one concrete table; and the situation is exacerbated when we move to verbs, not to speak of prepositions and the like.) Nevertheless, though meanings cannot be *generally* identified with tangible things, it may still seem that naming these things, or referring to them, is a central function of language in the first place; and indeed many philosophers have used this to argue that at least some expressions of our language (besides proper names also natural kind terms) cannot but mean tangible things;[3] or alternatively it has been used to argue that we should build semantics around the relation of reference or designation, by-passing the concept of meaning altogether.[4]

However, admitting that naming/referring/designating is a semantically important enterprise does not alter the fact that if what we want to capture is the concept of *meaning* (an entity that makes the difference between a mere shriek and a word), then the physical world does not offer us sufficient types of entities. This may prompt us to turn to another world for assistance, one that would be more generous in this respect. And here the obvious candidate seems to be the world of the mental. It contains inexhaustible riches of entities, and, moreover, of entities apparently qualified to be seen as meanings; for surely it is the human mind that effects furnishing expressions with any semantics they may have. Many theoreticians of language do embrace this answer;[5] but there are others who argue vigorously that meaning *cannot* be mental.[6] The trouble with mental entities is that they lack an important property that meaning requires, namely intersubjectivity. The very point of meaning seems to lie in its ability to be shared by many;[7] whereas mental contents are inevitably subjective, locked in one's own mind.[8]

If we want to say that the sentence *London is huge* expresses the thought that London is huge, it can be neither *my* thought (an episode within my brain), nor *your* thought, nor indeed the thought of any other one individual, it must be a *type* of thought which can be instantiated within *many* minds. Hence the thought must exist somehow outside of the minds, possibly with the capacity of being included into them, but so that such an inclusion would not compromise its intersubjective existence and its readiness to be included into other minds.

More generally, if the physical world is suitable in respect to its intersubjectivity but insufficient as to its richness, and if the mental world is, *vice versa*, suitable in respect to its richness but insufficient as to its subjectivity, we would need a world that combines the positive qualities of these other two worlds. And many philosophers have concluded that such a world is the world of ideal entities, so colorfully described at the dawn of philosophy by Plato and, during the last century, largely re-housed under the legislation of set theory. Hence, many semanticists inferred that meaning must be an ideal entity of the kind of, say, a

number. Principal promulgators of this tradition were Frege, Carnap and Montague.

Semantic Structure and Its Explication

But notably in the last quarter of the twentieth century, a different answer to the question what kind of stuff meanings are made of started to flourish: no stuff at all, for the talk of meaning is metaphorical, it is a mere *façon de parler*. What we mean when we say that a word means something is not that it has an entity glued to it, but rather that it has a property, for example that it is employed by members of a society in a certain way.

This answer has been endorsed by various kinds of theoreticians: by the later Wittgenstein and his followers; by ordinary language philosophers following Austin and Grice; and by those who, like Quine, revived American pragmatism. I think that an apt name for the onslaught of this heterogeneous movement is *the pragmatic turn*.[9]

However, although these philosophers and linguists agreed that the question *what is meaning?* in its substantial sense was unanswerable, this did not mean they thought nothing could be asked about meaning – or at least about semantics. An alternative to the substantial construal of the question is one that I will call *structural* – it interprets the question as asking not what meanings are made of, but rather how meanings (whatever these may be) of grammatically related expressions are related to one another. An example of a crucial statement belonging to the semantic enterprise corresponding to this interpretation is the celebrated *principle of compositionality*:[10] 'The meaning of a complex expression is uniquely determined by the meanings of its components and the mode of their combination'.

But wait; is this supposed to be a construal of the original question? Is it not, at most, only its *part*? Surely, to inquire what is meaning, is not to call for a response citing how meanings relate one to another? It seems that we must *first* find out what meanings are, in the substantial sense, before being able to inquire about their properties and relations, e.g., whether they do compose.

However, there already exists a strong tradition which claims, in effect, that this is *not* the case, and, indeed, that the structural reading of the question is the *only* viable reading. Classical Saussurean structuralism was the prototype for this stance; but as I have argued elsewhere (see my *Meaning and Structure*), certain semanticists quite unrelated to the structuralist tradition, such as W. V. O. Quine or W. Sellars, can also be read as endorsing views which are structuralist in the broad sense entertained here. And the idea I will pursue for the remainder of this article is that insofar as there is something as meaning, it is a *purely structural* matter. But I will zoom in on a particular place on the structuralist landscape; a place where *semantically relevant* structure amounts to *inferential structure*.

Before I do so, let us illuminate the structuralist outlook by an analogy with numbers. Over the last one and a half centuries, many philosophers have wrestled with the question *what is a number?* (usually because they take this to be a reduction of the question *what is mathematics about?*). Many answers have been proposed. Thus, Edmund Husserl ventured that numbers are general ideas, devoid of any qualitative properties and reduced to pure quantity. Gottlob Frege and Bertrand Russell proposed, in effect, seeing numbers as classes of equinumerous classes of things. John von Neumann and Ernest Zermelo both identified the number zero with the empty set, but von Neumann went on to identify any other number with the set of its predecessors whereas Zermelo identified it with the one-element set constituted by merely its predecessor. But as time passed, it became increasingly clear that none of the answers really tell us what natural numbers *are*, but only how to *explicate* them, in the sense of *explication* introduced by Carnap (and elaborated by Quine).

This is worthy of attention. In his *Foundations of Arithmetic*, Frege, before dealing with the question *what is a number?*, considers a simpler question, namely *what is a direction of a line?* His conclusion was that though there is no substantial answer to this question, what we may do is identify the *direction of the line a* with the set of all lines parallel with *a*. Saying that the direction of *a* is a set brings about some problematic consequences (for example the direction then 'contains' lines), but, Frege insists, if we are aware of this fact, in other contexts this identification would be not only unproblematic, but helpful. And analogously, Frege claims that, with this proviso, we can identify the *number of objects falling under a concept C* with the set of all concepts *equinumerous* with this *C* – i.e., such that the objects falling under them can be mapped, in the one-to-one manner, on those falling under C.

Carnap then generalized this method of attacking concepts and introduced the term *explication*.

> The task of explication consists in transforming a given more or less inexact concept into an exact one or, rather, in replacing the first by the second. We call the given concept (or the term used for it) the explicandum, and the exact concept proposed to take the place of the first (or the term proposed for it) the explicatum. The explicandum may belong to everyday language or to a previous stage in the development of scientific language. The explicatum must be given by explicit rules for its use, for example, by a definition which incorporates it into a well-constructed system of scientific either logicomathematical or empirical concepts . . . A problem of explication is characteristically different from ordinary scientific (logical or empirical) problems, where both the datum and the solution are, under favorable conditions, formulated in exact terms (for example 'What is the product of 3 and 5?', 'What happens when an electric current goes through water?'). In a problem of explication the datum, viz., the explicandum, is not given in exact terms; if it were, no explication would be necessary. Since the datum is inexact, the problem itself

> is not stated in exact terms; and yet we are asked to give an exact solution. (*Logical Foundations of Probability* 3–4)

Applied to meaning, it gives us the approach articulated by David Lewis: 'In order to say what a meaning *is*, we may first ask what a meaning *does* and then find something which does that' (173).

Above we have considered four kinds of answers to the question *What is meaning?* construed in the 'substantial' way: (1) meanings are physical entities; (2) meanings are entities of the mental world; (3) meanings are ideal entities of a Platonic realm; and (4) there are no such entities as meanings, talk about them is a metaphor. Now it is important to realize that structuralism, broadly construed, can be seen as embracing answer (4), as its message can be interpreted as *there are no meanings, there is only semantic structure*. But the concept of explication alleviates the tension between this answer and answer (3); the fact that there are, strictly speaking, no such objects as meanings, does not prevent us from *explicating* meanings as objects. And in many contexts it is not unreasonable to simply *identify* a meaning with its explication.

However, it is important to keep in mind the basic difference between answer (3) and the combination of answer (4) with explication, both of which may foster a picture of language as a system of expressions mapped onto a system of objects. If we embrace answer (3), then we will see the interconnection between an expression and the corresponding object as a result of activities of language-users and consequently we will want to ask how the interconnection was established and how it is sustained (and here we are likely to invoke concepts like *naming*, *representing*, etc.).[11] On the other hand, if we accept that the object is merely the result of explication, then we will see the interconnection as fall-out from the theoretician doing the explication, and will recognize that the pursuit of its inauguration by language users is misguided.

EXPLICATUM VS. EXPLICANDUM

Consider what may happen if we *forget* that the object we are referring to as meaning is in fact its mere explication. Returning to the Fregean example, imagine, for instance, how somebody who might have forgotten that *the set of all parallels of a* is not the direction itself, but its explication, might then wrestle with the question of how the direction of a line could possibly have come to contain other lines. We may analogously imagine a semanticist who forgets that an object is merely an explication of meaning and subsequently feels the need to research how the speakers manage to interconnect that object with the corresponding expression.

To flesh out this idea, let us consider the thesis, taken by many semanticists for granted, that the English connective *and* denotes the truth-function characterized in the well-known truth table

A	B	$A \wedge B$
T	T	T
T	F	F
F	T	F
F	F	F

(Disregard for now that the functioning of the English *and* has additional complexities, that it, for example, often expresses temporal succession. The point would remain the same even if *and* were taken to denote some more complicated function, such as that proposed within various versions of dynamic semantics.[12])

The trouble is that this assumption could delude us into thinking that *and* is the name of such a function in an analogous sense to which the name *Julius Caesar* is the name of the historical person. And from this it takes only a small step to wondering whether there is an act of baptizing of the above truth-function by *and*, analogous to the act by which Julius Caesar was baptized. (Not, of course, that anyone would be suggesting an act quite analogous to Julius's christening; but the usual wisdom is that the interconnection of the word and the truth table is a matter of *convention*, which *does* indicate some act of deliberate decision.)

The same may be the case if we move from merely logical words, like *and*, to other parts of the vocabulary. Frege proposed explicating the meaning of a predicative expression like (*to be a*) *dog* as a function mapping individuals onto truth values, dogs on *the truth* and every other individual on *the falsity*; a function that may obviously be identified with a set of individuals, in the case of (*to be a*) *dog* with the set of all dogs. Carnap urged that this would not yield us a feasible explication of *meanings* and added *possible worlds*: the explication of the predicative expression became a function mapping possible worlds onto their respective sets of dogs. And then came others who have tried to further improve on this proposal.

In any case, Frege's proposal clearly reflects the fact that a predicate like (*to be a*) *dog* forms *true* sentences with some names (namely, names of dogs), and false with others. Carnap's improvement is then exposed as reflecting the fact that what is and what is not a dog depends on the state of the world; and further improvements may then reflect further semantic aspects of predicates. Whatever the resulting function may be, it is not to be seen as something that came to be *named* by the predicate, but rather as something that tries to capture the functioning of the predicate.

Hence, asking how an expression has come to name the entity like the truth function or the Carnapian intension is precisely the kind of misguided question that might be engendered by not observing the distinction between the *explicatum*, the explicating object, and the *explicandum*, the explicated phenomenon. A function is a *thing*, and what comes naturally when we consider the establishment of a relationship between an expression

and a thing is some relation of the kind of naming. This may lead to the idea that the whole language is simply a huge system of interconnected *names*. And indeed this view has informed the notion of language held by many theoreticians of language (originally more philosophers and logicians than linguists, but recently probably mostly linguists influenced by logic).

Meanings, Rules, and Inference

What alternative did the pragmatic turn offer? Ludwig Wittgenstein, whose early *Tractatus* significantly contributed to the notion of language as a great system of names, stimulated the turn when he later concluded that we should see the meaning of an expression as the way in which the expression is used by speakers, i.e., as its role within our language games: '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' (*Philosophische Untersuchungen* §43). He also pointed out that what is crucial to the constitution of our language games are (various kinds of) *rules*. In this light, we can compare language with chess: the 'meaning' of the wooden pieces we use to play the game, their being *pawns*, *rooks*, *bishops*, etc., is also determined by the rules of chess. This indicates that meaning can be conceived of as a role conferred on an expression by the rules of our language games. But what kind of rules are these?

Let us return to the connective *and*. What is it that we must grasp to understand its meaning? The most straightforward answer may seem to be that what we must grasp is that a complex sentence, arising from connecting two sentences by its means, is true only when both the subsentences are (which is what appears to be reflected by the truth table). But what has truth to do with our language games? If what we are after is a role with respect to the rules of these games, then this characterization is helpful only in so far as it can be read as referring to the rules.

But it seems that truth may be seen as a sort of a *correct assertability*. This should not be controversial: it seems that there is a sense of correctness in which an assertion of a sentence is correct iff it is true (needless to say, there are also other senses of the correctness of assertions – an assertion of a false statement may, for example, be correct in the sense that it saves somebody's life).[13] If we admit this, then we can say that *and* is characterized by the rule that

A and B is correctly assertible if both *A* and *B* are,

i.e., by the pair of rules

if *A* and *B* is correctly assertible, then both *A* and *B* are

if both *A* and *B* are correctly assertible, then *A* and *B* is

If we now write, as usual,

$A_1, \ldots, A_n \vdash A$

in the sense of A is correctly assertible whenever $A_1, \ldots, A_n$ are, we may further rewrite this as

A and B $\vdash A$

A and B $\vdash B$

$A, B \vdash$ *A and B*

Now the truth table above can be seen as summarizing these rules: the first row says that if A and B are true, i.e., correctly assertible, then also *A and B* is; whereas the other three say that if either A or B is false (not correctly assertible), then also *A and B* is (not correctly assertible); in other words that if *A and B* is correctly assertible, then both A and B are. Hence the claim may be that seeing the connective as a *name* of the truth function is misguided (though in many contexts it does not raise any problems), for in fact the truth function is merely the explication of the expression of the inferential role.

Considerations of this kind are well known from the philosophy of logic, where we have been witnessing, for several decades, discussion between those who are convinced that the semantics of logical constants is essentially inferential (and is to be studied by *proof theory*) and those for whom the constants must be seen as standing for something (and hence must be accounted for by *model theory*).[14] This, however, is not what interests us now; our interest is whether the inferential paradigm can be extended outside the boundaries of logical constants.

Perhaps And*; But What About* Dog*?*

It may seem that the proposal to construe the meaning of even empirical expressions in inferential terms is preposterous. What may work for *and* would hardly work for *dog* – it would seem imperative that empirical vocabulary, to become meaningful, must represent something. Whereas with logical words there may be an issue over the relative merits of grasping their semantics in inferentialist or in representationalist terms, for empirical words there seems to be only the latter option.

However, is this truly so? Consider a person looking into the sky and saying 'The sky is blue' and a parrot repeating the same sounds. What makes the difference between the former act, which is an *assertion*, and the latter one, which is a mere emitting of sounds? One answer might be that what makes something an assertion, rather than just the sounds, is the fact that it is a move in a certain game, namely a language game. Just like what makes kicking a ball through the goal posts *scoring a goal* is the fact that it was an act within the space constituted by the rules of a football game.

However, the obvious objection is that what makes the difference between the asserter and the parrot is that the former is *thinking* and hence can associate his sounds with a certain *thought* – and thus gives them their meanings. But even if we waive the doubts of the possibility of the mentalist construal of meanings voiced at the beginning of this paper – what does it mean *to think*? As Alan Turing observed, there is really no way to find out whether somebody is thinking other than to check whether she behaves in a certain way ('reasonably'), i.e., whether she talks and behaves so that it 'makes sense'. So, though the claim that what differentiates between a human speaker and a parrot are the former's thoughts, is surely true, it is problematic to use it as an answer to our question (*what makes one's emitting of sounds into an assertion?*), for we may need to proceed with the explanation the other way around.

So this is why we may prefer the answer that to talk meaningfully is to take part within certain language games. What kind of language games? It is clear that not any would do. Shouting 'Go, go!' at an ice hockey match, though perhaps a kind of a language game, clearly would not be acceptable as a hallmark of thinking. Also, reciting poems would be easily imitable by a non-thinking device, such as a tape-recorder. It seems that if we want to know whether we face a thinking being, we should check whether it is capable of *reasoning*. Hence we would probably ask questions, and along with receiving the answers, we would check whether the adept of thinking is able to give reasons for what she says. And we would try to challenge some of her claims to find out whether she is capable of defending them. In the course of this, we would probably expect her to challenge *our* claims (our challenges to her claims) and to require *us* to give reasons.

In short, it seems that a particularly suitable language game for the role of a touchstone of a thinker would be the game Brandom calls *giving and asking for reasons*. It is this game that seems to 'bring thinking into the open'. For this reason, Brandom considers this game the very basis of our language; and thus he moves *inferential rules*, i.e., rules that lead us from a reason to what it is a reason for, to the centerstage of our on-going language game jamboree.

This indicates that even contentfulness of empirical words must be underpinned by certain inferences. No empirical word is meaningful in the distinctively human way (i.e., expresses a *concept*) unless it is a potential token in the game of giving and asking for reasons. A word does not express the concept of *dog* unless it can be used as part of sentences which can in turn be used for reasoning, i.e., from which other sentences can be inferred and which can be itself inferred from other sentences. The English word *dog* would not express our concept of dog if it could not be used to reason from *This is a dog* to *This is not a cat* etc.

Hence I have argued that there is no meaning without inference. But it may still seem that there is, at least for empirical words, also no meaning

without a representation. For how could a word like *dog* come to express the concept of dog without, at least *inter alia*, representing dogs? And though there is undoubtedly some truth in this, the inferentialist answer is that the concept of *representing* leads to a very odd way of capturing what is going on between our empirical vocabulary and the world.

As it is only *sentences* that may be used to make a move in a language game, any contact between a word and (a part of) the world must be mediated by sentences. Beside this, what matters is not what the speakers really do with the sentences, but what they take to be *correct* to do – the relation is normative. Thus, the link between the word *dog* and the world is a matter of such facts as that it is correct to use the sentence *This is a dog* in certain situations, and incorrect in others.

True, the usage of *This is a dog* may be 'non-inferential' in the sense that its correctness is a matter of directly the extralinguistic circumstances, and hence what is in question is not an inference in the standard sense (from language to language), but an 'inference', as it were, from the world to language. (Similarly, at the other 'end' of language, there are 'inferences' from language to action.) This means that if we want to extend the inferentialist treatment of meaning from expressions like *and* to expressions like *dog*, we have to generalize the concept of inference.

But talking about 'generalized inferences' may not be the best way of seeing the situation. Imagine chess. The move I make responds exclusively to the moves made by my opponents. It cannot respond to anything else, for there is, in fact, nothing else to respond to. The pieces, board and other equipment, strictly speaking, are not necessary – it is clear that we can play chess completely without them. Thus, the rules of chess spell out a pure, disembodied structure. However, as Lance pointed out, language is more similar to a *sport* like football than to a *game* like chess. Notice that football is less 'disembodied' than chess, in that its rules must take into account the physical properties of the ball or the goalposts. Similarly, the rules of language must reflect the fact that our language games are not games in the sense of being self-contained; they are an important way for us to interact with the world. Thus most of our language games *involve* the world, and hence also the rules reflect the involvement.

As a result, even if you construe semantics in the inferentialist way, we must keep in mind that the inferential rules governing it and conferring meanings on expressions will involve the world. (Brandom stresses that our linguistic practices cannot be seen as 'hollow, waiting to be filled up by things', but rather as 'as concrete as the practice of driving nails with a hammer' (332).) Hence, to understand *dog*, we must know not only how the sentences containing *dog* (*This is a dog*, *Every dog is a mammal* and others) can be correctly played within the game of giving of asking for reasons in response to utterances of other players (that *This bird is a dog* counts as a challenge to *Every dog is a mammal*, which than can be defended by *But this bird is not a dog*), but, more broadly, how they are

correctly used also *vis-à-vis* non-linguistic circumstances (that *This bird is not a dog* is correctly played only when what one is pointing at is a bird etc.).

Where Does Semantic Structure Come from?

Talking about the structuralist attitude to semantics I stated that, according to this view, there is no meaning over and above an explication of *semantic structure*. But, we may now ask, where does semantic structure come from? Especially with Chomsky's publishing of his path-breaking *Syntactic Structures* and his subsequent increasing conviction that the structures are implemented by nature within the language faculty of our mind/brain, many theoreticians of language simply took for granted that a semantic structure, or a 'logical form', must be another kind of such implementation.

However, though it is undoubtedly important and fruitful to investigate the structures of the human mind/brain that underlie human linguistic competence, we have come to the conclusion that it may be useful to see language as a *social institution*. We concluded that from the viewpoint of semantics it is essential to disclose the nature of our language games, and especially the game of giving and asking for reasons, as a basically inter-subjective enterprise. It is clear that though the rules of football exist only insofar as there are thinking humans who engage in this game (and in so far as their brains are wired up in such a way that they are able to do so), studying the rules is far removed from studying the minds/brains of the players; and studying the rules of language and the semantic structures they institute may be equally far removed from studying our language faculty.

De Saussure claimed that every important linguistic structure is based on binary oppositions; but where do they come from? An answer may be that they are simply the similarity standards that natural selection has implemented into our brains and that make us find both some pairs of sounds (or inscriptions) and some pairs of worldly things, in contrast to others, alike. Then all that is needed to create a language is to connect the types of sounds/inscriptions with the types of things. But obviously this would lead to a mere caricature of language, lacking the sophisticated structure that any real language undoubtedly has.

Many theoreticians of language would surely say that it is not the oppositions, but rather the whole sophisticated structure that is inborn. But this answer is less satisfactory than it may seem at first sight; unless it can be supplemented by a story of how the structure would wander from the brains into the open, where language is at home. On the one hand, it is quite clear that the fact that we use the complex kind of language we do must be largely supported by the wiring of our brains, achieved by natural selection. But on the other hand, this is not to say that the structure of the public language is a mere copy of a structure present within our brains. It is clear that, for example, the structure of a football game (the fact that it consists of two halves, that it is played by two teams

of eleven players etc.) has clearly *something* to do with human brains, but nobody would pursue the idea that it is a mere imprint of a structure of the brain we are born with. The question is why the case of language should be any different.

Moreover, we must distinguish between syntax (which has to do with the individuation of the potential vehicles of meaning) and semantics (which is a matter of different vehicles carrying the same or different meanings). And even if the former might be seen as closely connected to the very structures of our brain (it is true that the individuation directly rests on the wired up similarity standards), the situation is very different for the latter. It may be inborn that we perceive two sounds as instances of the same word, but surely not that we perceive two different types of sounds as meaning the same.[15] So what is the basis of the oppositions, or of the structure, which make up semantics?

The answer the (neo)structuralists – who were also (neo)pragmatists, like Quine or Sellars – were bound to give is that it is the sameness and difference of usability, of the role that a word is able to play within our language games, that any semantic structure must rest on.[16] Two sentences are semantically alike or synonymous if they can be employed to make similar or the same moves within our language games. And then two words can be said to be synonymous if their replacement within a sentence never changes the way the sentence may be employed within the games.

Inferentialism, which gives the use-theory of meaning a normative twist, is based on the assumption that the role of a word within our language game is not a matter of the actual moves their players make, but rather of the rules governing the permitted usage of these words. (Of course, the rules are also a matter of what the players do; however, not of the moves they choose to make, but of their 'taking' certain moves as correct, whereas others as incorrect. In chess, the rules are also not a matter of the moves the players tend to make, but rather of the fact that they take some moves for legal and others for illegal.)

The notion of synonymy, which results from these considerations, is vague, and hence also the resulting semantic structure, and consequently its materialization into meanings, is vague. Therefore we must be aware of the fact that making the step from the structure to an explication of meaning is a non-trivial one – it amounts to drawing sharp boundaries there where there are really none. However, this should not be read as saying that explication is a dubious enterprise. Replacing fuzzy phenomena by their non-fuzzy explications, using idealized models, is a standard part of the methods we use to account and make sense of our world.

Thus the resulting picture is that our linguistic games, especially the central *game of giving and asking for reasons*, are governed by certain rules which are implicit in our practices and hence are not distinct in the way explicit rules can be, but which are nevertheless essential. What we call meanings, then, are the roles individual expressions of our language acquire *vis-à-vis* the rules.

Conclusion: Language as a Social Institution

This brings us to an important moral: inferentialism is not mere preference for one fundamental semantic concept (*inference*) over another (*reference*, *representation*, or something else). It involves the conviction that to understand language in its semantic aspect we must turn our attention to the *social background* of language. Hence the idea is that though it is undoubtedly interesting and important to study the psychology of the participants of communication, to understand what semantics is about we must turn our attention to language as a *social institution*.

Let us return to Wittgenstein, whom I listed among the initiators of the pragmatic turn and who also stressed the key role of *rules* within our language games. Why did he abandon the earlier elegant system of his *Tractatus* and settled for his later haphazard theory of language games, as presented in his *Philosophical Investigations*? One answer might be that while in *Tractatus* he saw his whole language as a gigantic system of *names*, later he was to realize that the concept of *naming* is too complex to be used as an unexplained explainer.

What does it take to be a name? It is often assumed that a name of a thing is something as a label stuck to the thing. But imagine a society with a habit of doing literally this: sticking labels with inscriptions onto things. By doing so, are they actually *giving names* to the things? Surely not by the labeling alone: the labeling means various other things: the labels may serve as mere decorations, they may bear advice for people encountering them etc. So what decides whether they be considered as names, or as something different? Undoubtedly the ways in which they are treated by the members of the society, the larger practices into which the practice of sticking labels is embedded. And hence I think that Wittgenstein realized, in Coffa's words, that

> the ultimate explanatory level in semantics is not given by references to unsaturation or to the form of objects or meanings, but by reference to the meaning-giving activity of human beings, of activity embodied in their endorsement of rules. (267)

And it is just in this spirit that Brandom, the initiator of contemporary inferentialism, sees semantics as underlain by inference: inference is what is needed to oil the wheels of the social practices that make us rational, content-mongering creatures. Inferential structure is crucial (and not only for the logical, but for *any* vocabulary) because it reflects the social background of language. Brandom is convinced that the inferential structure of language is the result of the interplay of *commitments* we undertake and *entitlements* we acquire when engaging within our language games. It is from this viewpoint that it is important to look at language as a social institution – for it follows that what we usually call *meaning* is a matter of this very aspect.

Many initiators of the pragmatic turn, notably Quine, were quite hostile to the very concept of meaning – they praised the turn for ridding us of the concept as an excessive baggage and for letting us concentrate directly on our linguistic practices. In the same spirit, Sellars criticized Carnap for his inclination towards 'formal semantics'.[17] However, in this paper I have indicated that the two enterprises, inferentialism as one of the outcomes of the pragmatic turn, and formal semantics as a project of a logico-mathematical explication of meaning, need not be seen as incompatible. Indeed I am convinced that the interconnection of the two projects may help us make sense of many traditional ideas on the boundary between linguistics and philosophy: it may throw new light on some of the ideas of the classical and newer structuralism, it may provide for a new and illuminating way of representing semantics yielded by normative use theories, and it may lead us to a reinterpretation of the Frego-Tarskian formal semantics such that it survives the pragmatic turn.

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Short Biography

Jaroslav Peregrin's research is located at the intersection of logic, analytic philosophy, and semantics; he has authored papers in these areas for *Australasian Journal of Philosophy*, *Erkenntnis*, *Journal of Philosophical Logic*, *Pragmatic and Cognition*, *Semiotica*, *Studia Logica*, and the Elsevier's *Handbook of the Philosophy of Science* (see his bibliography at <http://jarda.peregrin.cz/mybibl/mybibl.php>). His book *Meaning and Structure* (Ashgate, 2001) argues that recent and contemporary (post)analytic philosophy, as developed by Quine, Davidson, Sellars, and Brandom, is largely structuralistic in the very sense in which structuralism was originally tabled by de Saussure; it also indicates that this view of language is not incompatible with formal approaches to semantics. His current research focuses on both logical and philosophical aspects of *inferentialism*, namely, the view that meaning is essentially a matter of inference. He is a researcher at the Institute of Philosophy of the Academy of Sciences of the Czech Republic and a professor of logic at the Faculty of Arts and Philosophy of the Charles University in Prague. As a visiting scholar, he worked at the University of Konstanz in Germany and the University of Pittsburgh in the USA.

Notes

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[1] The first appearance of the term is usually taken to be Bréal.
[2] See Rorty.
[3] See Kripke; Putnam.
[4] See, e.g., Devitt.
[5] An important current semantic school favoring this line is the 'cognitive' school originating with Schiffer and with Fodor, 'Psychosemantics'.
[6] The arguments go back to Frege ('Der Gedanke'). Quine (*Ontological Relativity*) criticizes the idea that semantics consists in the mind's linking of signs to objects as the 'museum myth'.
[7] As Davidson puts it, 'that meanings are decipherable is not a matter of luck; public availability is a constitutive aspect of language' (314).
[8] Recently, there have been attempts to develop 'externalist' theories of mind according to which this is not the case. But this attitude usually blocks the order of explanation from mind to language, for it comes to rest mind on language.
[9] Egginton and Sandbothe have employed this term is a slightly narrower sense.
[10] See Peregrin, 'Is Compositionality an Empirical Matter?'
[11] Note that unlike in the case of the theories mentioned in the introduction of this paper, which invoke such concepts to characterize relations between words and their referents, in this case they would have to amount to the relation between words and their *meanings*, which is much less feasible.
[12] See, e.g. Dekker, 'The Semantics of Dynamic Conjunction'.
[13] As we seem unable to specify the kind of correctness in play here without recourse to the concept of truth, this does not amount to a reduction of the concept of truth to other concepts, hence to a theory of truth. Cf. Peregrin, 'Brandom and Davidson'.
[14] Its point of departure was the discussion between Prior and Belnap, where the former pointed that an unrestricted trust into the ability of inferential patterns to generate meanings may lead us astray, the latter opposed that indeed we do need a restriction, however, this restriction can derived from the inferentialist framework itself. As for the opposite ways of formulating the view of what logic is about, see Hacking (the proof-theoretic perspective); Tarski (the model-theoretic one).
[15] For discussion of the concept of semantic structure from the viewpoint of inferentialism, see Peregrin, *Meaning and Structure* ch. 9; 'Nature of Meaning'.
[16] Quine's views of language are most clearly expressed in his seminal *Word and Object*; for Sellars's see especially 'Language, Rules and Behavior'; 'Some Reflections on Language Games'; 'Language as Thought and as Communication'.
[17] See Peregrin, 'Semantics without Meaning?', for a detailed discussion of this movement towards 'semantics without meanings'.

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