

A properly pragmatist pragmatics

Peircean reflections on the distinction between semantics and pragmatics

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Although most contemporary philosophers of language hold that semantics and pragmatics require separate study, there is surprisingly little agreement on where exactly the line should be drawn between these two areas, and why. In this paper I suggest that this lack of clarity is at least partly caused by a certain historical obfuscation of the roots of the founding three-way distinction between syntax, semantics and pragmatics in Charles Peirce's pragmatist philosophy of language. I then argue for recovering and revisiting these original roots, taking indexicality as a case-study of how certain questions connected with the distinction which are currently considered complex and difficult may be clarified by a 'properly pragmatist pragmatics'. Such a view, I shall argue, upends a certain priority usually accorded to semantics over pragmatics, teaching that we do not work out what terms mean in some abstract overall sense and then work out to what use they are being put; rather, we must understand to what use terms are being put in order to understand what they mean.

Keywords: indexicality, semantics, pragmatics, pragmatism, Peirce

The actual world cannot be distinguished from a world of imagination by any description. *Charles Peirce (1885)*¹

1. Introduction

The first published mention of philosophy of language's now familiar distinction between "syntax", "semantics", and "pragmatics" was made in 1938 by Charles Morris. Key ideas for this three-way distinction were gleaned from Morris' read-

1. (Peirce 1931–1958, 3.363)

ing of pragmatist philosopher Charles Peirce, and Peirce's characteristic thought can be discerned in Morris' definitions of syntax as concerning the relationship between *signs themselves*, semantics as concerning the relationship between *signs and their objects*, and pragmatics as concerning the relationship between *signs and their interpreters*. Due at least partly to Morris' collegial relationship with Carnap (whom he assisted to migrate to the United States in 1936), the three labels came to play a fundamental structuring role in analytic philosophy of language.² Yet if one examines how the terms have been used since then, the exact borderline between semantics and pragmatics seems unclear.³ "Pragmatics" seems to have shifted from Morris and Carnap's initial definition as primarily concerning relations between signs and their *users* (thereby covering phenomena such as performative utterances, for instance promises). Now it is often taken to concern relations between an utterance's meaning and its *context*, where context is taken in a much broader sense which encompasses, for instance, the functioning of the term *that* in a specific utterance of *that man*.⁴ In this broader conception of 'context', what interlocutors are *doing* (or intending to do) with their utterances is not necessarily important, or attended to.

Indexicality – also known as deixis⁵ – is often argued to fall between the two stools of "semantics" and "pragmatics", so this paper will explore the question of the proper relationship between them, using indexicality as a case-study. In the course of this investigation I will suggest that in order to clarify what "pragmatics" could or should mean, it is no mere genealogical pedantry to return to the original *pragmatism*. Although Morris was very influenced by Peirce's pragmatism, he looked equally to logical positivism, and attempted to bridge the two philosophies. Today it is not always remembered⁶ that Morris' book *Foundations of the Theory of Signs* was first published as part of volume 1 of the logical positivists' notorious *Encyclopedia of the Unified Sciences*. Now that philosophers have become more aware of logical positivism's limitations, it is arguably a good time to consider certain paths not taken in mainstream philosophy of language, and ask

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2. Interesting further details regarding this lineage are given in Allwood (1981).
 3. Over the past couple of decades a number of high-profile publications have attempted to resolve this issue, such as Gendler-Szabo (2005) and Horn and Ward (2004), but consensus still seems elusive. Criticism of the distinction itself goes back at least to Allwood (1981) – see also Rommetweit (1988).
 4. See for instance Stalnaker (1970), Gazdar (1979), Kempson (1988) and Bach (2004). A more detailed catalogue of contemporary definitions of pragmatics is presented below, in Section 4.
 5. The former term seems more commonly used by philosophers of language, the latter by linguists. As the author is a philosopher, the former will be used for the rest of this paper.
 6. For rare discussions of this intellectual context and its implications for current philosophy of language, see Bergman (2009), Champagne (2015) and Houser (2020).

whether more possibilities for analytic philosophy of language might emerge from Peirce's detailed triadic taxonomy of signs than Morris and Carnap saw.

2. What is indexicality?

In order to inquire into the proper relation between semantics and pragmatics in the light of pragmatism, using indexicality as a case-study, a good first question to ask is: "What *use* is indexicality?"; "What would we be unable to *do* with language without it?". I will ask this question, but first I will conduct a brief survey into the meaning and scope of the term.

One currently popular definition of an indexical is a term whose reference shifts between contexts (Braun 2015). So, for instance, *tiger* is thought to invoke the same mammalian natural kind in every context of utterance, and thus to be non-indexical, whereas *I* refers to whoever utters the word in the relevant context of utterance (in standard, non-opaque contexts), and thus to be indexical. Similarly, *here* is said to refer to the place where it is uttered, *now* to the time at which it is uttered.⁷ I will call these last three terms *classical indexicals*.

Yet if we define an indexical merely as any term whose reference may shift from context to context, the category is potentially much broader. The *Stanford Encyclopedia* entry, "Indexicals" (Braun 2015) also suggests the following:

- *demonstratives*, e.g. *this* and *that*, which rely on pointing behaviour in context
- *personal pronouns*, e.g. *he is dirty*, said in the presence of a dirty person
- *certain adjectives* such as *rich* and *local*, as someone might truly be said to be rich in one context and not rich in others
- *vague expressions*, e.g. *bald* which different contexts might require to be precisified in different ways.

Yet current understandings of indexicality in mainstream philosophy of language seem much narrower than this. For instance, Perry and Kaplan argue that demonstratives are distinct from classical indexicals because some further "demonstration" in context is needed to secure the reference of *that*, unlike *I* where, they claim, merely uttering the word is generally sufficient to indicate the speaker (Kaplan 1989; Perry 1997). Brandom points out that when I pick an object out of a crowded room by saying *That thing...*, which object is thereby picked out can depend greatly on the rest of what I say about *that thing* (*That thing has a finely worked lid*, as opposed to *That thing should be eaten as soon as possible*), as well as

7. Indexicals are thus sometimes referred to as *token-reflexive expressions*. The list also includes *actual*, for those who follow David Lewis.

“a great deal of social stage-setting” which lies behind our mutual understanding of the practice of pointing (Brandom 1994: 460–461; see also Recanati 2001). He goes so far as to reserve the term *index* for classical indexicals, claiming that only these provide an input to an independently determinable “character-function” (Brandom 2008: 58). Yet whether defined more widely or more narrowly, through the second half of the 20th century, indexicality was treated as an addition to analytic philosophy of language which was both fundamental and troubling.

3. ‘Pre-indexical’ analytic formal semantics: The downfall of ‘pure’ semantics

Analytical philosophy of language began to seriously grapple with indexicality through the 1960s and 70s (although its importance was already highlighted and described as “nothing new” by Bar-Hillel in the 1950s).⁸ This engagement posed a profound threat to an apparently elegant vision of formal semantics whose shaping role in analytic philosophy was significant.

We may define such a “pure”, or “pre-indexical” formal semantics schematically, roughly following (Tarski 1933),⁹ as follows. Assuming:

- L is our language
- U is the set of all existent things (frequently assumed to exhaust reality)
- I is an interpretation function which connects every constant in L with an element in U, and assigns to every predicate in L the appropriate subset of U

Then:

- a sentence ϕ in L is true iff every individual denoted by the sentence *does* lie in the extension of the predicate in L to which it is assigned by the interpretation function.

It was initially hoped that such a model would provide a complete account of truth-conditions, and thus meaning. Yet it cannot account for a classical indexicality.

8. (Bar-Hillel 1954, Reichenbach 1947). In fact the idea is clearly present in the early 20th century, both in Husserl’s discussion of “occasional expressions” (Husserl 1913: 315) and Russell’s discussion of “egocentric particulars” (e.g. Russell 1948: 101). I am grateful to an anonymous reviewer for pointing this out.

9. Of course, in many ways Tarski may now be regarded as ‘ancient history’. Nevertheless, I wish to argue that a certain broad approach which has sedimented into certain lineages in philosophy of language can be seen here in usefully unqualified form. A very similar – more anonymised – schema is laid out in Allwood (1981: 2–3).

cal such as *here*. *Here* cannot be represented using bound variables, as it does not mean ‘some place’, but ‘this place’. But given the way its meaning shifts between utterances, it cannot be a constant either.

It was initially thought that this problem could be solved by somehow planting indices into truth conditions themselves. Thus Davidson wrote:

The theory of meaning undergoes a systematic but not puzzling change: corresponding to each [indexical expression] there must in the theory be a phrase that relates the truth conditions of sentences in which the expression occurs to changing times and speakers. Thus the theory will entail sentences like the following: ‘I am tired’ is true as (potentially) spoken by *p* at *t* if and only if *p* is tired at *t*.

(Davidson 1967: 312)

In other words, truth-conditions for L must contain free variables ranging over actual persons, times and places (Voss & Sayward 1976). We might call this an ‘externalist’ semantics of indexicality. Similarly, Quine wrote:

[...] the logical theory which the canonical framework makes possible treats [...] the indicator words as having fixed references, supposed intended, even where we do not need to say which.

(Quine 1960: 183)

But then along came the problem of the so-called *essential* indexical. As Perry (1979) famously noted, in certain cases one cannot explain a person’s behavior in terms of his beliefs unless at least some of those beliefs are somehow “essentially” (here we might more usefully say ‘internally’) indexical. In one legendary example, Perry chases a mystery shopper around the supermarket, trying to tell him that he has a torn sack of sugar spilling out of his trolley, finally stopping because he realises that the shopper with the torn sack *is himself*. Perry claims that one cannot explain the shopper’s stopping without attributing to him a belief literally expressible only in the form “*I* am the one making a mess”. Here *I* cannot be shorthand for some “concept which I alone ‘fit’”, such as “the only bearded philosopher in a Safeway Store West of the Mississippi” (Perry 1979: 8). For the shopper can mistakenly believe that he doesn’t satisfy this description, or he can believe that he satisfies the description but not know that he is the only person who satisfies it, or perhaps there is no description which would uniquely identify him, even under conditions of complete general knowledge. In all such cases, an explanation of his stopping under the above description will fail (Perry 1979: 7).¹⁰

10. Here it is useful to distinguish two claims: that terms are *essentially* indexical – their indexicality is irreducible to non-indexical semantic functions – and that terms are *purely* indexical – that indexing is the terms’ sole function. (For a similar distinction drawn with respect to iconicity see Legg (2008)). Signs such as *here* and *now*, being *words*, are not purely indexical as they

The Davidsonian semantic framework gives the wrong answer for such cases. For following the formula we get:

'I believe I am making a mess' is true as (potentially) spoken by p at t if and only if p believes p is making a mess at t .

Perry does believe that p is making a mess at t , insofar as he believes that the man pushing the trolley with the sugar-trail is making a mess, and the man pushing the trolley with sugar-trail *is* in fact Perry. Yet *he does not grasp that identity*, so he cannot truly be said to have the belief, "I am making a mess". Perry diagnoses the problem as undermining the idea, which he claims descends from Frege, that "propositions are individuated *via* 'concepts'" (Perry 1979: 6), where concepts are understood as descriptions whose meaning is entirely "general" (which Perry takes to mean context-independent).

4. 'Post-indexical' analytic formal semantics

There is now a bewilderingly rich variety of attempts to incorporate indexicality into analytic formal semantics. An influential early account is Kaplan (1989), in which reality is envisaged to consist of not only a set U of individuals, but also a set W of (possible) worlds, and a set C of contexts. These contexts possess features such as times, locations (both intra- and inter-world) and 'agents'. In Kaplan's terminology, the meaning of an indexical term such as I consists in a certain *character*, which takes into account the particular *context* in which it is uttered, in order to deliver an overall *content* to a proposition. Thus character is a function from contexts to contents: I is a function whose value at any context is the context's agent.

The interpretation function now not only assigns constants and predicates in L to elements and sets of elements in U respectively, but also performs a remarkable range of further tasks. It delineates a context of utterance, determines a unique agent for that context, and maps the reference of I onto that agent – not only in this world but in all other possible worlds in which it might be appropriate to identify 'the same agent'. In short, the original semantic theory has

have a symbolic component which must be learned (e.g., that the word *here* in English indicates place, not time). An entirely *pure* indexical, if such there be, would need to be some kind of direct pointing, or if verbal utterance is required, at most some kind of grunt. Nevertheless, the terms *here* and *now* are *essentially* indexical as their meaning cannot be re-expressed in non-indexical terms. This distinction deals with an objection that essential indexicality is an incoherent notion in Millikan (1990).

now accreted substantial epicycles. This new semantics has also given rise to a “two-dimensional modal logic”, whereby a ‘secondary intension’ corresponds to Kaplan’s content, and a ‘primary intension’ to his character,¹¹ which has been mobilised in a wide variety of philosophical contexts.¹²

The standard analytic approach to indexicality may be usefully characterised in a certain answer to the following question. According to this approach, what would language *without* indexicality be like? The standard approach assumes that *sans* indexicality, a large portion of language would be entirely unchanged: the part that corresponds to so-called ‘regular declarative sentences’. Examples include:

- P1 “Ice floats in water.”
- P2 “Wellington is the capital of New Zealand.”

Here, in Kaplan’s terms, character and content are thought to coincide. *Ice* refers to ice and *Wellington* refers to Wellington, no matter who utters those words, when and where. We *would* be unable to say certain other specific things in a language without indexicality, for instance:

- P3 “I’m floating now!”
- P4 “We are in Wellington.”

However, on the standard approach *the character of P3 and P4 is antecedently expressible, even if the content is not*. P3’s character consists in a determinate meaning, something like ‘The speaker is floating now’, where the meaning of the predicate – *is floating* is determinately given, independently of whatever terms will be ‘plugged into’ it.¹³

Thus it is envisaged that semantics determines meaning proper, and the sole function of pragmatics is to map certain special-case utterances, corresponding to certain special non-assertoric functions, onto the meanings already laid down by semantics. *Essential* indexicality is commonly supposed to hold only in modal and epistemic contexts. In his John Locke lectures, Brandom attempts to drag even such cases back into the fold of analytic formal semantics, writing:

11. Also influential in the development of this framework were Davies and Humberstone (1980).

12. In contrast to Kaplan, Perry wishes to avoid making sentences true only at a times and places. His solution to the problem of the essential indexical is rather different, involving a complex distinction between ‘belief-states’ and ‘objects of belief’ (Perry 1997, 1998). However, Kaplan’s arguably less intensional solution has been more popular.

13. This has been referred to as the “linguistic meaning of a sentence-type” (Recanati 2001).

[...] purely non-indexical vocabulary *can* serve as an adequate *pragmatic* metavocabulary for indexical vocabulary. That is, one can *say* (that is, describe), in wholly non-indexical terms, everything one needs to *do* in order to *use* indexical vocabulary. (Brandom 2008: 33)

All of this has greatly influenced mainstream understanding of the relationship between semantics and pragmatics, where it is generally assumed that semantics gives a complete account of “what is said”,¹⁴ whilst pragmatics effectively constitutes a kind of side-issue which pertains to how a minority of non-standard assertions may acquire pre-given semantic resources in non-standard ways. This attitude is evident at the end of the *Stanford Encyclopedia of Philosophy* entry “Pragmatics” (Korta & Perry 2015), where the authors helpfully list what they see as the term’s most influential definitions in the literature. Here are some examples:

- Kempson (1988:139). “Semantics provides a complete account of sentence meaning for the language, [by] recursively specifying the truth conditions of the sentence[s] of the language [...] Pragmatics provides an account of how sentences are used in utterances to convey information in context.”
- Fotion (1995). “Pragmatics is the study of language which focuses attention on the users and the context of language use rather than on reference, truth, or grammar.”
- Bach (2004). “Pragmatic information is (extralinguistic) information that arises from an actual act of utterance, and is relevant to the hearer’s determination of what the speaker is communicating. Whereas semantic information is encoded in what is uttered, pragmatic information is generated by [...] the act of uttering it.”

Also, Katz (1977) offers an interesting criterion of pure semantic content as “only those aspects of the meaning of the sentence that an ideal speaker-hearer of the language would know *in an anonymous letter situation* [my emphasis].” Meanwhile, Kaplan himself (1989) displays some thoughtful ambivalence about how pragmatics should best be demarcated from semantics, writing:

The fact that a word or phrase has a certain meaning clearly belongs to semantics. On the other hand, a claim about the basis for ascribing a certain meaning to a word or phrase does not belong to semantics [... Perhaps, because it relates to how the language is used, it should be categorized as part of [... *pragmatics* [..., or perhaps, because it is a fact about semantics, as part of ... *Metasemantics*.

(Kaplan 1989: 574)

14. It should be noted that there has been extensive wrangling in the literature over the exact extension of precisely this phrase. See for instance Recanati (2001, 2012).

It is intriguing to speculate on the reasons for this choice by mainstream 20th century philosophy of language to so ‘cordon off’ pragmatic from semantic considerations. I will now subject the choice to radical critique.

5. Indexicality in a semeiotic context

Let us now return to *pragmatism* and confront the earlier promised question: what *use* are indexicals, according to Peirce? In his introductory logic text “What is a Sign?” (1998: 4–10), Peirce answers the question metaphorically by invoking the skeleton’s function in the human body – to “hold us stiffly up to reality” (Peirce 1998: 110). But what does this analogy mean?

Peirce drew a triadic distinction between signs regarding how they pick out their objects, that is, signify. *Icons* signify by resembling their objects, resemblance being a monadic property – something that the sign has whether the object exists or not, *indices* pick out their object by means of some brute dyadic relation, such as pointing, and *symbols* pick out their object *via* some kind of ‘third’, semantically arbitrary, convention or habit.¹⁵ It is important to recognise that Peirce’s distinction between icon, index and symbol is *functional* rather than *sortal*. Any given sign found in reality may display a mix of iconic, indexical and symbolic functioning,¹⁶ enabling considerable subtlety of analysis. For example, the indexical term *now* indexes a particular time by virtue of being uttered at that time, but it simultaneously serves as a symbol, insofar as one needs to learn the convention that it is the word *now* which plays the time-indexing (as opposed to, say, the place-indexing) function in English.

So what is the logical function of indexicals? Essentially it is – through their characteristic existential connection – to determine what in the world our language-use is about. Crucially, it is the only one of Peirce’s three sign-types that can perform this function. Thus Peirce writes:

[...] pure likenesses, can never convey the slightest information. [An icon] leaves the spectator uncertain whether it is a copy of something actually existing or a mere play of fancy. The same thing is true of general language and of all *symbols*. No combination of words (excluding proper nouns, and in the absence of ges-

15. Peirce experimented with many alternative definitions of *icon*, *index*, and *symbol* through his career. Examples may be found in Peirce (1931–1958: 2.304, 2.92, 2.247–9, 3.363, 4.531, 5.73–4 and 8.335). See also Peirce (1992, 1998).

16. Champagne (2015: 535) usefully explains how if a distinction between these sign-types is wanted, it must be “formal” in the old Scotistic sense, which lies somewhere between a “distinction of reason” and “a real distinction”. See also Champagne (2019).

tures or other indicative concomitants of speech) can ever convey the slightest information. (Peirce 1998:7)

Albert Atkin has given a usefully detailed account of Peirce's theory of indexicality (Atkin 2005). This account extends beyond the pure pointing of so-called classical indexicals; Atkin criticises an earlier influential paper by Goudge (1965) for first attempting to read Peirce's account of indexicality on this anachronistic model, then criticising Peirce's account for not fitting the model. By contrast, Atkin analyses the distinctive functionality of Peircean indexicals into five separate criteria, as follows.

Indexicals:

- (1) are signficatory. (This is analysed as having two parts: *physical contiguity*¹⁷ and *directing our attention*.)
- (2) have their characteristics independently of interpretation
- (3) refer to individuals
- (4) assert nothing
- (5) do not resemble or share any law-like relation with their objects.

So for instance the word *I* functions to direct our attention (criterion (1)) towards the particular individual person (criterion (3)) who utters the word, and it arguably issues this particular direction whether or not the actual interpreter correctly understands the usage of *I*, and succeeds in identifying the relevant person (criterion (2)).¹⁸ The word also says (criterion (4)) or shows (criterion (5)) nothing *about* the person designated – it merely picks out that person.

Within this broader functional story, Atkin, following Peirce, identifies three kinds or 'stages' of indexicality, as follows:

- i. The *index proper*. This is a direct existential connection (generally consisting in physical contiguity or causality, but not always) whereby one object draws the attention to another in a manner that is entirely unmediated by shared

17. Just here Atkin's interpretation is arguably too narrow: it would be better to replace this criterion with "existential connection", and I have corrected accordingly below. I am grateful to Mats Bergman for pointing this out to me. See also Bergman (2009).

18. Criterion (2) does require some further unpacking, insofar as it might be argued that some interpretation is required to distinguish the different functioning of the two indexical words *I* and *here* in English. However once conventions are laid down that *I* refers to the speaker's person, and *here* refers to the speaker's location, linguistic functions are established whose deliverances transcend interpretation. Thus these considerations do not undermine Criterion (2). See the discussion of the sub-index below.

convention. As such, examples of such relatively ‘pure’ indexicality are generally found outside of linguistic communication. A good example is the weather-vane, which signifies wind direction insofar as the wind physically pushes the vane in that direction.

- ii. The *sub-index*. This is the kind of indexicality found in demonstratives such as *this* and *that*. This index is more symbolically mediated than the previous one, for reasons acknowledged by Perry and Kaplan in their discussion of demonstratives,¹⁹ namely that its deployment requires some linguistic knowledge,²⁰ for instance the difference in English language meaning between *this* and *that* (not to mention the difference between *that* and *cat*). Nevertheless, in these cases the object indicated by the demonstration will be in the interlocutors’ sphere of immediate experience, *albeit* possibly extended through technology such as telescopes that allow us to make statements such as *That is Alpha Centauri*, as well as mental faculties such as memory insofar as they enable interlocutors to call items directly to mind.
- iii. The *precept*. By contrast to the sub-index, these are indications that are mediated or guided by *descriptions*. Examples include: *the person with the big hat* and *stuff that floats*. Here, rather than putting the sign-interpreter in contact with an object in their sphere of immediate experience, the indexical sign presents a *set of instructions which, if followed* (and sometimes this means followed *out* of the interpreter’s immediate experience) will put the interpreter in epistemic contact with the object. So for example, the precept *the person with the big hat* effectively issues the instruction “Look for a big hat and then locate the person under it”.

It is important to note that the precept does not fit the final two criteria of indices above, namely that they assert nothing, and share no law-like relation to their object. The precept *the person with the big hat* implicitly asserts that someone is wearing a big hat, and this implicit assertion enables certain general predictions to be made (e.g. that the person’s head is at least partly covered). However Atkin claims, arguably rightly, that precepts nevertheless count as indices as they fit the first three criteria so well. Thus, in functional assertoric discourse, successful use of a phrase such as *the person with the big hat* depends crucially on the speaker having the capacity to put the interpreter in existential contact with (by directing their attention towards) some individual person who at least *appears* to be wearing a big hat.²¹

19. ...although Perry and Kaplan arguably missed seeing that this same point applies to classical indexicals, too.

20. ...or knowledge of another conventional sign-system, such as musical notation.

21. It must be admitted of course that the precept’s implicit assertions are *fallible*, like (almost) all assertions.

Now that we have defined this third kind of index, the precept, we may note that it has potentially extremely wide application in language and thought. Consider its role in *inquiry*. Inquiry into a given topic may usefully be understood (and is so understood in pragmatist philosophy) as the development of a very general set of instructions for directing the attention of a thinking being, so that they can, if they choose, have certain known experiences which correspond to current beliefs, extend those experiences into areas which are less well-known, thereby testing a hypothesis, and record the results of that test for the benefit of future thinking beings. Indeed, Peirce's famous Pragmatic Maxim (Peirce 1931–1958: 5.394) encapsulates the process of inquiry in its statement that our conception of something's consequences in possible experience is our whole conception of that thing. This, Peirce claims, constitutes the “experimentalists' view of assertion” (Peirce 1931–1958: 5.411). Moreover, precepts do not just consist in *explicit* sets of instructions for directing the attention of a thinking being, as in *the person with the big hat*. A *natural kind term*, such as *water*, may also be understood as an *implicit* set of instructions for so directing the attention. In the case of water, these instructions currently crucially include whichever chemistry lab procedures are able to isolate H_2O , or (it should be admitted, although it frequently isn't) some related liquid such as H_3O , which is considered by appropriate experts to be ‘close enough’ to water in its functioning.

In fact, the classical indexicality that is envisaged to have a pure pointing (or ‘token-reflexive’) function is called by Peirce “degenerate”. ‘Genuine’ indices require “iconic involvement” (Atkin 2005: 178). This is just a way of saying that the logically structured sets of instructions that are embedded in the meanings of our precepts vastly increase the range of items that a given speaker can indicate, from those present in the immediate context of utterance to the entire world of possible experience (*The person with the big hat standing on Platform 8 at Moscow Leningradsky Railway Station*). Such a possibility of expanded functioning of course vastly increases the index's usefulness. It has been widely accepted since Frege that a proposition's truth-aptness derives from its embodying a certain unique logical structure, which consists of some specific subject which determines what the proposition ‘is about’, copulated with some general predicate which determines what the proposition ‘says about that subject’. *We may now see that the breadth of the definition of Peirce's precept enables it to coincide with the subject of any proposition*. This paper began with analytic philosophy's apparently clear contrast whereby *I am a mammal* is an indexical sentence, while *Tigers are mammals* is a non-indexical sentence. The matter is no longer that simple. The latter sentence can be understood as equally indexical insofar as by *tiger* we mean a precept such as ‘the feline natural kind with orange fur and black stripes which is observable in pen 25 at the Melbourne Zoo’.

6. Indexical purpose

What use is indexicality? What would we be unable to do with language without it? The Peircean perspective claims that indexical signs are required for *any proposition to have a subject* – in other words: for us to be able to talk *about* anything. In Section 4, we saw that Katz suggested, ingeniously, that the purview of pure semantics may be isolated by considering whatever meaning is understood in “an anonymous letter situation”. Let us test this idea. Imagine that we find the words *The table is solid* written on a piece of paper abandoned in the street.²² This is a perfectly grammatical indicative sentence in English. But what fact does it report? Just as stated, nothing. The sentence seems to be describing a table, but which table? This is indeterminate. The point is not that the writer must have had some specific table in mind and we do not know which one – but if we did know, then we would know the meaning of the sentence. The point is that the writer may not have had any specific table in mind, and *even if they did*, this arguably does not grace the sentence with any meaning in our context.

This meaning-failure arguably illuminates what happens when a sentence does succeed in expressing a proposition. Consider the sentence *Uluru is solid*. If I utter the sentence now, it expresses a proposition ascribing a distinctive property to a particular, unique Australian landmark (previously known as *Ayers Rock*). However, the sentence only achieves this end insofar as its interpreters have come into existential contact (whether directly or mediated by TV, the testimony of friends, and so on) with the actual Uluru. Consider a possible world in which every neighbourhood contains a large rock which the locals call *Uluru*. In such a world, if the sentence were uttered outside of a local neighbourhood context, there is no way in which its audience could determine which rock is meant. My interlocutors and I unwittingly rely on the fact that *this* world is not like that when we successfully interpret the sentence *Uluru is solid*. Peirce makes the same point as follows:

It is true that if a new island were found, say, in the Arctic Seas, its location could be approximately shown on a map which should have no lettering, meridians, nor parallels; for the familiar outlines of Iceland, Nova Zemla, Greenland, etc., serve to indicate the position. In such a case, we should avail ourselves of our knowledge that there is no second place that any being on this earth is likely to make a map of which has outlines like those of the Arctic shores. (Peirce 1998: 8)

22. This example is presented in Lefebvre (2010), and Lefebvre’s analysis of it will be explored further below.

Martin Lefebvre suggests that the unindexed sentence *The table is solid* on the paper should be understood to express a “pre-proposition”, or (in Fregean terms) a propositional function. Logically speaking, the sentence is equivalent to, – *is a solid table*.²³ Peirce calls this a *rheme*. Lefebvre writes:

[...] in hearing someone state “this table is solid” in a room where there is no table to be seen, and in the absence of any further contextualization [...] the statement will cease being a proposition for it cannot be connected to any particular object in any universe of discourse; it lacks sufficient indexicality. Of course the demonstrative article will continue to play its syntactic role and, supposing that the hearer or reader possesses collateral knowledge regarding language and tables, the sentence will excite in his imagination some composite image of tables such as one of them should be (i.e. solid) were it to determine the proposition to represent it. In this sort of situation, however, the statement doesn’t refer to a fact any more, but rather to the mere *possibility* of a fact. Such a sign [...] Peirce called a *rheme*.
(Lefebvre 2010: 13)

Lefebvre goes on to consider the question of how a rheme “grows into” a proposition. (Lefebvre, following Peirce, means the organic terminology to be taken literally).²⁴ He writes that the growth is “assured” by the particular context of utterance, which forms a vital part of such a “semiotic movement”. Thus far, he is arguably not in conflict with mainstream philosophy of language, insofar as it holds a general externalism about meanings. But Lefebvre also claims that a proposition can grow into an *argument*. For instance, if a courier arrives with a heavy parcel, asking where to put it, and is told, *The table is solid*, there is an implicit syllogism of the form, “If an object is solid then it is a good resting-place for a heavy parcel. This table is solid. Therefore this table is a good resting place for this parcel”. This move beyond merely assertoric to argumentative functioning arguably remains relatively untheorised in mainstream philosophy of language, except by recent work in inferentialism.²⁵

Analytic formal semantics assumes that an “interpretation function” performs assignments which transform rhemes into propositions as if by magic. Recall how according to our Tarskian schema the function *I* is claimed to map all constants and predicates in the language *L* onto elements and sets of elements in *U*. *How*

23. The extent to which this constitutes a non-mainstream view in philosophy of language is indicated by a throwaway comment in a well-cited paper on the New Theory of Reference, where Wettstein dismisses the idea that if a sentence’s subject does not refer then no complete proposition has been expressed as “apparently absurd” (Wettstein 1986: 187).

24. Peirce wrote, “Symbols grow. They come into being by development out of other signs [...]” (Peirce 1998: 10).

25. ...such as Brandom (1994), which will be discussed further below.

does this happen? Can we determine any principles to predict how these mappings might fall in particular cases? It seems that philosophers of language have not been terribly interested in these questions. Although all scientific models must perforce contain some idealizations, this particular insouciance arguably puts some of the most interesting features of language out of sight, theoretically. It is *we sign-users* who match terms with objects, and I would argue that there is a rich variety of ways we do this, which repays study.²⁶ Moreover, semiosis does not stop with any given word-object relation (pace Quine). A significant further tranche of meaning consists in the way that continual interpretative usage enables the meanings of our terms to *develop over time*. Such a diachronic perspective is also elided from the Tarskian framework. Yet it is essential for understanding, for example, the activity of *science*, which is arguably needful if philosophy of language wishes to continue to accord natural kind terms the special status (as so-called “rigid designators”) which it has done over the past 30 years.

To sum up, then, for Peirce, a language without indexicality would be devoid of all propositions, and would not be ‘about’ anything. This would not be much of a language.

7. A properly pragmatist pragmatics

What conclusions may we draw from the foregoing discussion of indexicality regarding the proper relationship between semantics and pragmatics? I suggest that the fact that the borderline between these two fields is currently subject to confusion and dispute is no accident, as the project of dividing the two as currently conceived is incoherent.

Kaplan’s (1989) neat equation of “character” + “context” = “content” will not wash because character as a pre-existing, independent building-block of meaning does not exist. Rather, our reference to objects using signs, which is traditionally seen as the domain of semantics, depends upon each and every proposition being “*about*” – i.e. containing some indication of – some item in a possible existential context, which is traditionally seen as the domain of pragmatics. This indication may consist in directly pointing to something in the sign-interpreter’s immediate experience, or it may be mediated by a set of instructions which invites the interpreter to think beyond that experience. Either way, the indication cannot be made fully explicit in what Perry (1979: 7) called “general” terms. In that sense we might say, contra Russell (1948: 101), that *no entirely definite descriptions are possi-*

26. Some preliminary empiricist sounding of the matter, with particular focus on the question, “What determines the name given to a child for a thing?” may be found in Brown (1958).

ble. Rather, all language-use revolves around precepts which ultimately only provide instructions by means of which our interlocutors can come into existential contact with the same objects that we have come into contact with. At the same time, this is not to deny that these instructions are usually accompanied by some kind of general description of the experiences that our interlocutors should expect in those contexts. (To put the point in Peircean terms, there is always a symbolic component to our propositions as well as an indexical one.)²⁷

In short, then: we do not work out what signs mean in some abstract overall sense and then work out to what use they are being put. Thus Kempson's claim cited above, that semantics can provide "a complete account of sentence meaning for the language" (1988: 139) must be denied as mere wishful thinking. Similarly, we can now see that Bach's (2004: 486) claim that (pregiven) semantic content is "encoded" in sentences is most theoretically unhelpful, as is his description of pragmatics as "extralinguistic". Rather, one has to understand to what use signs are being put in order to work out what they mean. And in order to understand to what use signs are being put, we need to consider Morris' original framing of pragmatics as concerning *the relationship between signs and their interpreters*. Once again, Lefebvre puts this particularly well:

[...] we cannot distinguish between a sign and its usage. To be a sign already implies being interpreted, already implies fulfilling a semiotic function [...]. Within a Peircean conception of semiosis there is no zero degree of the sign except in methodological fictions. (Lefebvre 2010: 15)

This work is timely given that moves to 'upend' the traditional priority of semantics to pragmatics are currently also gaining ground in thinkers, such as Brandom (1994), who seek to explicate meaning in terms of moves made in context by humans in a "game of giving and asking for reasons" – seeking to spell out thereby how semantics and syntax might be reduced to pragmatics. However the current perspective is sceptical of Brandom's characterisation of his project as a *reduction*. Peirce's triadic model of sign-action would rather build a full explication of meaning from theorising separate and mutual interaction between the sign itself (the purview of syntax) *and* its object (the purview of semantics) *and* its interpretation

27. This (aforementioned) functional rather than sortal approach to Peirce's three sign-kinds of icon, index and symbol, arguably shows how the dispute over externalism and internalism concerning reference, that was very extensively debated in late 20th century philosophy of language, may usefully be viewed as a false dichotomy.

(the purview of pragmatics). As Champagne has well noted, “delete any component in the triad and the action proper to signs ceases” (Champagne 2015: 526).²⁸

A related, and particularly interesting, comparison with current arguments may be found in Kukla and Lance’s excellent book (Kukla & Lance 2009), which argues that “the space of reasons” has a fundamentally pragmatic topography, since “speech acts alter and are enabled by the normative structure of our concretely incarnated social world” (Kukla & Lance 2009: 1). These authors explicitly note that their own pragmatics produces a typology of speech acts that is orthogonal to received systems of categorization, and “can make some seemingly impenetrable philosophical questions appear quite straightforward” (Kukla & Lance 2009: 3). However it’s worth noting that there are some important differences between Kukla and Lance’s project and the Peircean approach explored here. They themselves claim their own qualified adherence to “Pittsburgh School Pragmatism” to be different from the “American Pragmatism” of Peirce in that the latter, they claim, privileges embodied practice over conceptual discourse and thought, leading it to “undervalue the philosophical centrality of language and discursive judgment in making possible our status as epistemic and moral subjects” (Kukla & Lance 2009: 5). Thus it is suggested that where American Pragmatist philosophy of language mires itself in ‘muddy’ bodily contingency, the Pittsburgh School takes a suitably general (in the Fregean sense) perspective on that crowning human achievement – the construction of logical space.

I would urge that this claim about relative lack of embodiment is correct, but what it means in practice is that Kukla and Lance are unable to accord indexicality the fundamental role that they sketch for it precisely as existential anchor for our discourse. They do come tantalisingly close to Peirce’s *precept* with their concept of “Observatives”. These are “recognitive episodes that provide direct, non-inferential, receptive knowledge of the empirical world” (Kukla & Lance 2009: 46–47). Observatives include utterances such as *Lo! A Rabbit!*, whose sole purpose is to pass a recognition of something in the speaker’s immediate environment into the space of reasons as a first premise for further inferences. Yet the authors seem to conceptualise such utterances in a Cartesian light as invoking the subject’s *own experience* of rabbithood, rather than as existentially invoking *the actual rabbit*, when they claim that although Observatives have an “agent-neutral output” (i.e. they may be understood and used for further inference by any agent in the space of reasons), their input is “agent-relative”, i.e. first-person-

28. These musings may point towards a fuller diagnosis of a certain felt unsatisfactoriness expressed in the research literature, concerning whether Brandom successfully recapitulates *objectivity* in his attempt to reduce semantics to normative pragmatics. See for instance Levine (2010) and Swindal (2007).

incorrigible. Thus, although they note that “[t]o perceive is to be uniquely placed, indexically, with respect to what I see” (Kukla & Lance 2009: 48), this index seems to merely ‘point into’ the seer, granting her a special “first-personal uptake of entitlement” (Kukla & Lance 2008: 50) to assert that a rabbit is present. Although Kukla and Lance do concede that Observatives are not themselves *truth-claims*, which must be public, they nonetheless hold that such utterances “ground justified declaratives” (Kukla & Lance 2009: 58), and that objectivity requires that “declarative truth-claims are not essentially indexed to any particular speaker or audience – they are inherently ‘impersonal’” (Kukla & Lance 2009: 59).²⁹

In closing, then, I claim that Peirce’s pragmatism can usefully clarify and redefine pragmatics, and its priority to semantics, thereby playing a supporting role to debates in philosophy of language that is so much more than a mere etymological holdover from the now century-old innovations of Charles Morris. Again, the point is elegantly summarised by Lefebvre:

That we should define things through their use rather than through a metaphysical quest for essence surely constitutes one of the most important legacies of Peirce’s pragmatist philosophy. (Lefebvre 2007: 14)

Acknowledgements

For the initial stimulus to write this paper, and valuable discussions on its key arguments, I am indebted to Chiara Ambrosio, Mats Bergman, Giovanni Maddalena, Albert Atkin and Martin Lefebvre.

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29. This of course raises the important coordinate issue of the nature and status of objectivity under Peircean semiotics. Here I would urge that although Peirce’s concepts of truth and reference are not ‘impersonal’ in the sense of Kukla and Lance above, but rather are always indexed to the experiences of the language-using community that frames its relevant precepts, nevertheless they do succeed in scaffolding an alternative account of objectivity, grounded in the community of inquiry’s capacity for indefinite increase, and thereby, self-correction (Legg 2014).

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Publication history

Date accepted: 9 December 2020