REFERENCE AS A PRAGMATIC ACHIEVEMENT

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Abstract:
Consideration of an example of successful reference gives rise to two important insights. The first is that reference should be understood most fundamentally in terms of the pragmatic success of each individual utterance. The second is that linguistic conventions need to be understood as on a par with the non-linguistic regularities that competent language users rely upon to refer. Syntax and semantics are part of what Barwise and Perry (1983) call the context of the utterance, contributing to the pragmatics of the utterance.
We show why reference should be understood in pragmatic terms and point out that, since success is often achieved in non-standard, creative ways, any formalization of pragmatics can
only be partial. We show that the need for such an inventive approach to referring traces back
to the need for language to be highly efficient, with expressions underdetermining their
interpretation. Our second step is to argue that the semantic and syntactic regularities, which
might seem to be independent of the context of an utterance, should actually be understood as
also being part of that context. In doing so, our account spells out some of the possible
implications of Millikan’s (1998) account of conventions and how it makes the creative use of
language possible.

Keywords: pragmatics, situation semantics, context, conventions, reference
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Linguistic communication is one way, the most productive and flexible way, of conveying information from one person to another. Utterance tokens constituting information disambiguate among possible understandings (propositions or thoughts) held explicitly or tacitly by the communicators.\(^1\) Successful reference, by which we mean selecting a thought in the recipient sufficiently similar to the thought intended to be communicated by the originator to count as communication of a thought, involves much more than the conventional semantics of the terms in an utterance and the formalizable pragmatics of those terms. Furthermore there are many ways to achieve the same reference, often including ways that have no obvious common patterns. People can and do use the context of communication creatively to achieve reference. Often this is necessary to express novel ideas, or to get ideas across in novel ways when it is difficult to express the same proposition otherwise. Our concern in this paper is not reference as some abstract relation between expressions and objects (the interpretation of expressions), but in how language is used to communicate. The former concern has led to great advances in the formalizable aspects of reference; we want to look at the limits of these advances for formal methods in the study of communication. These limits suggest a radical inversion of the usual role of utterances and their contexts.

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\(^1\) Some technical points: 1) In speech communication we can refer to the speaker and listener as the participants. This terminology emphasizes the active role of both participants. For written language, we have the author and the reader. In mathematical communications theory we refer to the transmitter, the receiver and the channel between them, but these terms are much too passive to fit our intentions in this paper. There are no general terms to refer to the active generator of information and the active receiver. Rather than introduce special technical terms, we will refer to the speaker and listener, with the assumption that the points made generalize beyond speech communication, or to the originator and receiver, with the understanding that both participants are active in the communication process. 2) The context plus physical medium is the analogue of the channel in mathematical communications theory (and is the role that it plays in Barwise and Perry 1983). The concept of channel is formalized in (Barwise and Seligman 1997). 3) In information theory a message disambiguates the common context of a transmitter and receiver. We will be using this model of message transmission for the role of utterances. Lastly, 4) we do not address this issue here, but our approach allows the recovery of traditional semantics as an abstraction from utterances once reference has been achieved and their meaning fixed (Collier and Talmont-Kaminski 2005).
Looking out across a stretch of forest it can be quite hard to spot a deer in the undergrowth. A young hunter may spend quite some time staring at the greenery, hoping to spot some movement that does not look like leaves moving in the wind. It must be even more frustrating when the more experienced hunter crouching beside them sees something and whispers, “There it is,” and yet they still can not see where the deer is hiding. Only once they also notice the crows which, startled, had flown up into the branches will the young hunter realize that the deer’s hiding-place must be near there, making it possible to start thinking about the best path for the hunters to sneak up on their prey.

In this way, the elder hunter has been successful in informing the younger one of the location of the deer simply by drawing their attention to the presence of the crows and counting on the other’s knowledge of animal behavior. In effect, they were relying on the younger hunter being aware of a number of regularities, some of which are natural and physical, and some that are constituted by linguistic conventions, all of which, however, can be identified, learned about and used in a fundamentally similar manner.

Two vital points arise in considering this example of successful reference. The first is that, as the title – a phrase Mark Bickhard has used (at the Kazimierz Naturalized Epistemology Workshop in 2007) – suggests, reference ought to be understood as a result of the pragmatic success of each individual utterance or set of related utterances. The second is that linguistic conventions need to be understood as on a par with the other non-linguistic regularities that competent language users rely upon to refer. Conventional (and perhaps innate) syntax and semantics become part of what Barwise and Perry (1983) call the context of the utterance – an inversion of the traditional approach to language that retains many of the connections of traditional approaches, but radically reinterprets their significance.

We begin by showing why reference cannot be properly understood except in pragmatic terms and point out that, since success is often achieved in non-standard, creative
ways, it cannot be possible to fully formalize pragmatics as Montague tried to do. The need
for such a radical approach to referring traces back to the need for language to be highly
efficient (Barwise and Perry 1983), with expressions underdetermining their traditional
interpretation (which on the Barwise and Perry approach is an abstraction from regularities in
particular utterances and their use). Our second step is to argue that semantic and syntactic
regularities, that might seem to be independent of the context of an utterance, should be
understood as being part of the complete context. In doing so, our account spells out some of
the possible implications of Millikan’s (1998) account of conventions while retaining a
standard formal semantics.²

I. Successful reference

As Barwise and Perry (1983) observe, language is highly efficient – a single
expression can be used to say an infinite number of different things depending upon the
circumstances. This is clearly the case with indexical expressions such as “I am here now”,
whose utterances state something different every time the expression is used. However,
Barwise and Perry also believe that linguistic expressions in general need disambiguation by
context. As examples, they discuss names and descriptive phrases such as ‘the dog’, both of
which can refer to different things at different times depending upon the exact context in
which the relevant utterance is made. Such cases involving singular terms are well known in
the literature, but Barwise and Perry extend the principle to general terms as well. Otherwise
their point about efficiency would hardly be novel.³ The extension to general terms is required
if we are to avoid an unmanageably great number of linguistic terms to cover different and
divergent language games, or discourses. There may be a family resemblance across uses in

² It can be also considered as a way of showing what it might mean to call language ‘scaffolding’ on which we
build thought in the way that Andy Clark (1997) argues.
³ In line with this, note specifically that we are not using ‘reference’ here restricted to the sense sometimes given
to ‘referring expression’, whose sense is perhaps better called ‘singular term’ in order to avoid a number of
confusions (see, for example, Bach 2008).
different discourses, but this similarity does not imply a common reference for the general
terms used in the discourses. So much should be obvious, if not immediately so. The same
general terms can be used in subtly and not so subtly different ways in differing discourses.
An extreme case of this occurs across paradigm shifts as described by Kuhn (1970), resulting
from systematic but open-ended divergent classifications (Kuhn 1974). Collier (1984) called
this *pragmatic incommensurability*, incommensurable due to the lack of available explicit
linguistic resources to allow complete reconciliation of the classifications. More generally,
terms need not be incommensurable to be used with differing references in discourses
distinguished by their history, ideology or theoretical presuppositions, and, perhaps, subject
matter. Reference can be achieved only if the speaker’s and listener’s classifications are
sufficiently aligned. This can take a bit of work, minimal in the hunter case, and considerable
or practically unachievable in Kuhnian cases.

Furthermore, completely preset meanings for terms and phrases would make it
difficult to express novel ideas, or even to create new ideas. Darwin, for example, used
‘species’ in a way that was incompatible with the essentialist concept of Aristotle, whatever
he thought he was doing. He remarked to Joseph Hooker that he thought the term to be
indefinable (F. Darwin 1887: December 24, 1856), but he used the term in the title of his most
famous book. It is still debated to what Darwin was actually referring, if anything, but
whatever it was it was definitely *not* Aristotelian species.

The flip side of the efficiency of language is the way in which the semantics of a
linguistic expression underdetermines the information provided by its utterance. Thus, the
expression ‘the dog’ (grammatically a singular reference) could be used to refer to any one of
the dogs that have ever existed or could possibly exist. The conventional semantics of the

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4 As Donnellan (1966) pointed out, the reference of ‘the dog’ need not even be a dog. Apparently ‘species’ need
not even have a reference, if Darwin was right. If so, then it is reasonable to ask what the term’s pragmatic
function is in Darwin’s writings. Barwise and Perry’s point and our argument go well beyond the peculiar case
of definite descriptions.
expression alone is not up to the task of disambiguating which dog was being referred to. So it is also with general terms. As Barwise and Perry put it:

The linguistic meaning of an expression in general greatly underdetermines its interpretation on a particular occasion of use. Or, for short, meaning underdetermines interpretation. (p. 36-7)

The crucial difference between an utterance and the expression which is uttered is that the utterance takes place in a specific context which helps to determine exactly what information is communicated by that utterance of the expression.\(^5\) In other words, the information communicated by an utterance of a linguistic expression is determined by the conventional meaning of the expression together with the context of the utterance. It may seem that this is only another way of expressing the denoting/connoting distinction. However, this is far from true since even the denotation of an utterance can only be disambiguated with the use of the context. Indeed, the denoting/connoting distinction is undermined, as the only relevant distinction to be drawn at the level of the utterance is that between what information the speaker intended to convey and what other information was conveyed by the speaker. The usual denotation/connotation distinction depends on literal meaning, which we believe is an abstraction and reconstruction (either explicit or implicit) from actual communication acts.

Crucially, the variety of things that might be relevant parts of the context of an utterance depends only upon human ingenuity in using the context to assist in communication.\(^6\) And, as we have seen in the example of the hunters with which we began, this ingenuity is capable of leading to surprising solutions. In general, however, the context of

\(^5\) Barwise and Perry distinguish between three elements of the context; the discourse situation, the connections and the resource situation. These distinctions are useful, but our approach requires much more extensive analysis of contexts. Given the very broad notion of context we end up arguing for, it will be vital to draw reasoned distinctions among its elements. These distinctions will often follow previously identified but retheorised lines. Going into full detail here would take us too far away from our main focus in this article.

\(^6\) In Bach’s (2008, footnote 2) terminology, we are claiming that – due to human ingenuity – it is the broad context that it is generally necessary to attend to in order to determine reference. Narrow context can be a useful fiction if there is agreement between speaker and listener (and theorist!) about classifications and other aspects of the discourse situation, and novelty/creativity is limited.
an utterance may include such things as the physical situation in which the utterance is made, the ways in which the participants are located within that situation, as well as the beliefs the participants hold. The ingenious way in which we can make use of various elements of the context is particularly relevant to the question of the formalizability of pragmatics. To fully formalize pragmatics would remove the creative element that is so central to our linguistic practice at this level: *if pragmatics were fully formal language would not be inventive*. Still, this does not mean that pragmatics cannot be formalized in certain contexts as a result of certain practices becoming conventional so that, among other things, we can simplify/speed up the cognitive process of interpreting utterances. Thus, the often used example of uttering “The roast beef at table three needs a drink of water” might be thought of as a result of certain ways of referring to customers having become conventionalized in the exchanges between waiters. Of course, the conventions that do exist may in turn be used as the context for further inventive language use – such as the possibility that upon reaching table three the waiter finds, to the amusement of his colleagues, a leg of roast beef in one of the chairs. This potential for the creative use of conventions is vital for the growth of language.

It might seem that the context of an utterance only occasionally affects what information is communicated. This assumption sits behind the traditional view going back to Montague and his disciples that consideration of pragmatics is necessary only when dealing with certain special kinds of expressions, such as indexicals. That this is mistaken was already shown in the case of terms such as ‘the dog’ and can also be seen when we consider a paradigmatic example of an expression thought not to require any consideration of the pragmatics of its utterances – a mathematical statement such as “1+1=2”. Even in this case, the context of the utterance will have enormous impact upon the information communicated – a point that might be agreed to by supporters of the traditional view but whose significance is not appreciated by them. Consider a first grade teacher doing that sum on the board as
compared to one of their students writing it during a test – in one case we are dealing with the explicit teaching of the sum while, in the other, a student shows a certain level of competence with basic maths. Indeed, given that the example provided is a tautology, it may well be said that all the information in this case depends upon the context.  

Given how we have argued, it may seem that we have slipped from the information communicated by utterances to the meaning of those utterances. The idea behind this objection would be that while the communicated information changes depending upon the context of the utterance, the meaning of the utterances is not affected by their context; avoiding the need for any recourse to pragmatics. This objection assumes that utterance information and utterance meaning can change independently of each other. However – given the pragmatist position we are proposing – we hold that is not the case, as utterance meaning is to be identified with something like the possible practical consequences of the truth of the statement, much as Peirce’s pragmatic maxim (1878, 1905) would have it. Inasmuch as reference is connected to truth, the information conveys any conceivable practical consequences, and therefore fixes the reference of the utterance.

Starting with the context allows a radically different view of what an utterance achieves. A competent language user supplements the available context by uttering an expression which, in that context, communicates the particular meaning they wished to communicate, making it possible for the actions of various individuals to be coordinated. To put it metaphorically, the semantics is the target at which the pragmatics aims. So, when a father says to his daughter “Sophie, please feed the dog”, the fact that the family only owns a single dog, together with a number of commonly known facts about human practices, is enough to disambiguate which dog is to be fed. Thereby, what the father wants is coordinated

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7 This gives a simple solution to the puzzle of how tautologies can have meaning (and how utterances with the same conventional reference can differ in meaning). It does not eliminate the possibility of talking about necessary truths but one has to be careful about what exactly should be considered part of an utterance’s context. We deal with this issue below.
with what the daughter does, assuming she decides to act on the request. That the elemental significance of the context is largely invisible during normal communication is evidence of just how expert we are at projecting and catching meanings.

The relevance of the context has implications for how easy it is to refer to something in particular cases. As John Perry (1994) observes, the amount of information required to disambiguate the referent depends upon both the intended referent and the context we wish to pick it out of. The relevant considerations can be seen using Wittgenstein’s (1953, §2) example of the language employed by builders to identify the building elements that they require. Given a language made up of words such as “block”, “pillar”, “slab” and “beam” a builder can inform an assistant what element is now required by him, so long as any of the available elements of the particular general type would be appropriate. This may be because all of the elements of one type are the same or, equally, because the differences between them are not significant in relation to what the builder requires: in the first case the reason is tied to the complexity of the context; in the second it is tied to the pragmatic needs of the utterer. So, even if we specifically need a pillar which has been painted in barbershop stripes, all we need to say is “pillar”, so long as all of the available pillars have been painted in barbershop stripes. The situation becomes more complex when the variety of elements of any one type is such that not all of them will be appropriate for a particular purpose. In that case more needs to be said to identify the required building element – “two meter long, five by ten centimeter hardened steel beam” is a more realistic requirement but still far from the detail of description required in real construction. Importantly, in real life situations, we actively structure the context in such a way as to make it easier to identify the correct referent. In the case of building, the materials might be stored in such a way that those kept together are sufficiently similar to make it unnecessary to disambigu ate reference to any one of them – as is the case with nails, for example. Alternatively, the building elements might be numbered individually
to make referring to individual pieces easy – something routinely done when relocating historical buildings piece by piece. In fact, ostention (and, as we will discuss later, language, itself) should be understood as another way of enriching the context to disambiguate reference.

Thus far we have mostly kept the discussion to concrete objects such as building blocks. However, the context of an utterance is significant even when reference is made to concepts which cannot be readily identified with anything concrete. A paradigmatic example has already been considered: “1+1=2” being a case of maximum abstraction. This, in itself, shows that the concreteness of the referents is not necessary for the context to be relevant to the interpretation. Still, there are certain intermediate cases which are more problematic, for example sentences such as “Energy is conserved” or “Justice is fairness”. We would argue, however, that the difficulty with knowing how to treat them derives not from the referents being abstract but from our lack of a satisfactory understanding of what these referents are. Some light can be cast on the situation with abstract objects by considering the seemingly more difficult case where the referent of the discussion is actually non-existent. To do that, however, we must first consider the pragmatic aspect of reference in more detail.

What constitutes successful reference depends upon whether the specific utterance has the function of informing, commanding, inquiring or something else. In all cases, however, success will be tied to coordination between the speaker and the listener, with the listener’s reaction completing coordination. Importantly, coordination might only be achieved in practice but not by fully coordinating the understanding of the communicators. So, when a teacher tells a student to get a good grade on a test, the teacher may want the student to learn the necessary material, whereas the student may simply wish to get a grade that will stop the teacher bothering him again. Nonetheless, coordination is achieved if the student prepares adequately for the test (rather than, for example, deciding that cheating is the way to achieve a
good grade). Regardless, though, if coordination is to be non-accidental, the student has to have enough information to be able to adequately identify what the teacher means by “a good grade”; if they think that a bare pass is good enough, coordination most likely will not be achieved. That the identification of the correct referent is a practical question which cannot be settled in any simple, general way was made very clear to one of the authors when, after speaking to a friend for a good half hour about the virtues of Newcastle, they realized they were speaking about two different towns located at the opposite ends of the globe. Reference, just as much as truth, is something that we must remain fallibilist about. Achieving reference requires context coordination, such as in the hunter example. This can be done in myriad ways, limited only by the features of context we can exploit and our imagination.

Similarly to the Newcastle example, we can consider a case in which the referent is nonexistent. Consider, for example, the possibility that the hunters from the example at the start of this paper are mistaken and there is no animal hiding among the bushes. This, in itself, does not immediately make it impossible for them to coordinate their actions – they could quite capably sneak up and simultaneously pounce upon their non-existent prey. Of course, at some point the coordination will break down due to the inconsistency between their beliefs and the world. In their case it will be at the point they try to strike at their prey, but in some cases it will become evident earlier: consider the attempt to meet at the corner of High Street and Market Road when these roads are parallel. On the other hand, the problem may not become evident for a long time, such as was the case with caloric ether. The general point that aspects of the context are used to achieve coordination applies. These aspects need not be concrete, nor do our ideas about them need to be totally correct to achieve at least temporary,

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8 A term like ‘calorific ether’ might seem to refer, but if we follow Peirce’s pragmatic maxim, as we do, it may well involve non-satisfiable practical consequences, consequences that are nonsensical but where this is not immediately evident. For example we might define a centaur as an animal with the torso of a man and the body of a horse. However when we ask questions about how many hearts the animal has, the idea that there is a coherent concept becomes an embarrassment. The rules are different if we define a centaur as an *imaginary* animal with such and such characteristics. (Thanks to David Hull for the example.)
practical coordination. Just as reference is a pragmatic achievement, the case where the
referent is non-existent will (ultimately) be a pragmatic failure.

Considering reference as a pragmatic achievement accomplishes two things:

1) It provides criteria for successful reference – the reference being successful when
   the speaker and the listener are able to coordinate their actions

2) It provides criteria for identifying the referent – the referent being identified by
   interpreting the utterance within its context

The criteria provided by this approach are natural in a very strong sense – they rely
upon concrete cases of successful language use and inherently view language use in general
as a tool for coordinating human cooperation. Coordination requires only that sufficient
distinctions are made through words and context to satisfy 2) above. Any further differences
are not immediately relevant.

A difficult question remains for this approach. Given our focus upon the pragmatics,
the issue of what to do about (formal) semantics has not been sufficiently examined thus far.

Two options appear to be available. One is to try to discount the significance of formal
semantics to a degree even greater than we have done. The other is to accept formal semantics
as an ineliminable element that causes problems for any naturalist take on language. Neither
of these alternatives is attractive to us, however. The first was attempted by Barwise and Perry
who tried to achieve everything through talk of specific situations. The price they paid was
that, because of how in the model reference comes to be tied up with the individual utterance,
they were unable to fully explain how logical relations can hold between the informational
content of utterances – something that is problematic for a fair number of reasons, to say the
least. The alternative of seeing semantics as the bone upon which the naturalizing approach
chokes isn’t what we should hope for either. It is, for this reason, that we now examine how a
formal semantics may be comfortably ‘swallowed’ by a naturalized approach to the philosophy of language.

II. Conventions as habitual patterns

The picture that has been discussed thus far can be thought to consist of three elements: the individual utterance, the context and the formal semantic and syntactic rules. The essential step to be taken next is to show how the conventional rules of language may also be seen to be part of the context of the utterance and to follow through the implications. In doing so, two aspects of how conventions have traditionally been thought of will need to be examined in detail: the first is their status as abstract; the second is their status as intentional. Before turning to these problem areas it is necessary to lay out the basic idea of conventions as regularities which are embodied in habitual patterns of behaviour. We will rely to a certain degree on Millikan’s (1998) account of natural conventions at the same time as we will disagree with her on certain points.

Millikan defines natural conventions as follows:

First, natural conventions consist of patterns that are “reproduced” in a sense to be defined. Second, the fact that these patterns proliferate is due partly to weight of precedent, rather than due, for example, to their intrinsically superior capacity to perform certain functions. That is all. (Millikan 1998)

The last sentence in this quote is, perhaps, the most striking in that Millikan strips conventions of most of the elements that Lewis (1969) would have them burdened with (see Burge 1975 for some specific examples that are ruled out by Lewis’ approach but not Millikan’s). This makes it possible to consider language conventions as part of the context of the utterance. The essential reason is that conventions are learned in fundamentally the same way people learn about other features of the context that they can use:
Hearers learn to believe in conformity with the conventional rules of the language because this often brings the reward of useful knowledge gained. Except for the (probably very large) boost from certain inborn language capacities [...] they learn it much as they learn to interpret natural sign patterns. (Millikan 1998)

Of course, the point about gaining useful knowledge can be generalized to all other benefits of cooperation, associated not with indicative sentences but with imperatives and others. Thus, Millikan (1998) gives the example of a beggar who says “Gimme a dime, lady, just a dime!” with the hope that the hearer will complete the coordination pattern by handing over some change. As she points out, this pattern need not be either de facto or de jure conformed with. All that is required is that it be conformed with often enough for the beggar to feel that it is worth their while to attempt to engage passers-by in this way. Similarly, it is no mystery that the forms and idioms of daily speech can withstand much misuse, many failures of cooperation, and use in a multitude of parasitic or secondary ways, without altering their basic role.

A seemingly terminological difference between our position and Millikan’s is that she would distinguish between conventions and regularities in so far as she analyses regularities in probabilistic terms and conventions in what are ultimately pragmatic terms. However, regularities, in so far as we make use of them, are readily understandable pragmatically (in terms of Peircean semiotics, they are habitual components of the interpretant). Consider the regularity that there are animals at the watering hole. This could be understood in terms of, for example, a sixty percent chance of some animals being there. However, in a realistic situation such as a nature photographer on a photo-shoot what is significant is whether the watering hole is a good place to capture photos of the animals. They might only be there one time in twenty but waiting for them there might still be preferable to hunting for them elsewhere.

The reason why this is important is that it shows that in dealing with the regularities set up by linguistic conventions we are dealing with potentially pragmatically useful features
of what is traditionally considered the context, just as we do when we are dealing with naturally occurring regularities. What is significantly different about the linguistic conventions is that they are specifically set up by us to enrich the context in such a way as to make it easier to identify the referents in our utterances, thereby decreasing both the cognitive resources required and the possibility of misunderstanding. Marking objects is an obvious, simple example. Consider the case where the trees to be cut down are marked with red paint. This situation can be described in two different ways. We could say that red paint is a sign that, by convention, means “Cut down this tree”. On the other hand, we can talk in terms of structuring the context – certain trees are to be cut down; they are easy to recognize as they have red paint on them. The trees would be equally easy to recognize if they were all storm-damaged – a feature of the context that would have arisen naturally and would also necessitate their being cut down.

What makes it possible for linguistic conventions to grow and get progressively more complex is that, once we have set up conventions, we can build upon them by using them as the basis for further conventions (just as we could use naturally occurring regularities). Thus, having marked certain trees with red paint to indicate that they should be cut down, we could then mark some of them with black paint to indicate that these ones ought to be cut down as soon as possible or the wood from them saved for some purpose. Or, to give another example, the word “ball” and “game” can be put together to get “ball game”, whose meaning is a combination of those of the two words. Clark (1997) talks about language in terms of scaffolding that we construct to assist our cognitive abilities: Understanding linguistic conventions as ways in which we structure the linguistic context of utterances provides a way of understanding something of the process by which the scaffolding ‘goes up’. Each established convention opens the possibility for further conventions that depend upon it in much the same way that the upper parts of a scaffold depend upon the parts they are standing
Reconsider the example of tree marking given above: the black marks modify the meaning of the red marks; the meaning of the later convention is logically dependent upon the earlier convention.

What kind of space is this scaffolding constructed within, however? Since the relations between the conventions are logical, the space being explored by the scaffolding is logical space. So linguistic conventions create a formal structure that determines the range of pre-existing logical possibilities that can in turn be examined or expressed as formal syntax/semantics, in addition to allowing further innovations and their conventionalization. Recognizing this means that, unlike Barwise and Perry, we do not have a problem with explaining how a naturalist account of language can account for the logic of standard formal semantics. The price is that we assume the existence of logical space. This is an issue that a naturalist must deal with somehow, but we bracket this broader question for the purpose of this paper.

Importantly, while the relations between conventions are logical, the exploration of the space is creative: language users have to identify the opportunities (most often more expansive, more restrictive or repurposed usages, whether to references or to other ideas) that the existing conventions afford them and to then make use of them in various ways that will be more or less novel. Given that the exploration of the logical space afforded by the linguistic conventions is creative, it may sound like we are dealing here with much the same situation as with pragmatics. However, in the case of pragmatics we were dealing with specific situations whereas semantics abstracts away from them. Pragmatics deals with specific situations within a rich environment, so it has a much larger range of relations to work with. This means that semantics and pragmatics differ in the degree of freedom afforded by the space of possibilities that can be explored. On the one hand, conventionalization is far

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9 See also Bill Wimsatt’s (2007) work on generative entrenchment for another take on this idea.
more powerful in the case of semantics than in pragmatics. On the other, richer environment makes any novel approaches that can be found more likely to be worthwhile.

III. Semantics and pragmatics

From what has been said it may seem that it ought to be easy to distinguish between semantics and pragmatics: Semantics abstracts away from specific situations and explores the logical relations between linguistic conventions whereas pragmatics focuses upon the specific situations, allowing it to make use of the rich environment in which individual utterances are made. In practice, however, the difference is normally less clear-cut. We can see why when we consider the seemingly straightforward example of “ballgame”. As we have already seen, whenever someone utters any term, including “ballgame”, it is necessary to consider the pragmatics of the situation. It may seem, however, that the input due to the semantics is nonetheless readily distinguishable. Yet, what is it to be identified with? When it was thought that pragmatics only sometimes enters the picture, it could be thought that semantics is what remains when pragmatics in unnecessary. We do not have that luxury. What, then, about the general meaning of “ballgame” such as might perhaps be seen in a dictionary? In certain areas (and, possibly, seasons) this will mean a baseball game. Yet, is the general meaning to be identified with that or with the broader meaning obtained by combining “ball” and “game”? The question is one that only has a pragmatic answer – it depends on the purpose for which we are making the distinction. The general meaning is, in effect, an abstraction away from the individual utterances and just how far we want to abstract depends upon our needs. One could just as well try to distinguish between the way a hunter holds their spear in a particular instance and the prototypical way of holding a spear. Of course, most hunters hold their spears in much the same way much of the time but the prototypical spear-hold is just an abstraction from the individual instances of spear-holding which can be made thanks to certain
regularities in the natural world. Vitally, however, once the pragmatic decision has been reached it ought to be possible to construct a standard formal semantics within the bounds that have been distinguished: This situating of a formal element within a pragmatic practice is the basic strategy pursued in this article.

It could be objected that by “pushing everything into the context” we are losing sight of a useful distinction close to, if not identical to, Saussere’s (1966) distinction between *langue* and *parole* (but see Vololoshinov 1973 for a reversal similar to ours). However, our decision is motivated by the desire to look at language from the point of view of utterances: individual acts of communication. Once individual utterances are given primacy semantics and conventionalized pragmatics fall into place as habits used to structure the context in a way that makes communication possible. Language use comes to be seen as the skilful and often creative employment of linguistic and well as non-linguistic regularities to achieve coordination in concrete circumstances. The purposes to which those regularities can be best employed will naturally differ depending upon the specific character of the regularities. To a large degree existing work on aspects of pragmatics and semantics has already explored these issues and can be reinterpreted within the new theoretical framework.

The hunters from our initial example need to coordinate their efforts to successfully catch their prey. Each of them is aware of various regularities that hold often enough in their environment to make worthwhile using them in order to achieve the necessary coordination. Importantly, to understand how they do this it is not necessary to assume the existence of a logico-linguistic realm that is more or less independent of actual linguistic practice. Perhaps most importantly, however, our approach can explain the spontaneous creativity of language in particular circumstances, and through entrenchment by regular and habitual use can explain linguistic change.
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REFERENCES


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