1. INTRODUCTION

Traditionally, the following claim is made about ‘I’:¹

[r1] A token of ‘I’ refers to the utterer.

However, to uphold the traditional view, certain uses of ‘I’ must be ignored. This strategy has started to seem less appealing of late, and semantic theorists have sought a theory that can accommodate the problem cases. In this paper, I will offer such an account. To begin with, I will present some uses of indexicals that are prima facie in conflict with [r1] and discuss some recent attempts to deal with them. An examination of the difficulties such proposals face will both demonstrate the need for a new alternative and reveal the requirements that such an alternative must satisfy if it is to be an adequate account of ‘I’-use. With these requirements in mind, I will then suggest how we should deal with the problem cases. Finally, I will consider some objections to my account.
2. THE TRADITIONAL ACCOUNT OF INDEXICAL REFERENCE

Claim [r1] is not an isolated thesis; it is part of a general account of indexical reference that generates analogous principles for ‘here’ and ‘now’. I will begin by sketching this theory before presenting a counterexample to [r1].

What is widely considered to be the standard model is Kaplan’s. He holds that each indexical expression is associated with a rule of use which he calls its character, and which he identifies with what is generally regarded as the term’s linguistic meaning. Character determines the term’s reference on any occasion that it is used, given a particular context – where a context is understood as “a sequence of the items needed for the treatment of the indexical expressions occurring in the language” (Predelli 1998, 107), e.g., time, place, speaker, etc. Given a particular context, the characters of ‘I’, ‘here’ and ‘now’ respectively yield the agent, the location, and the time of that context as the referents of these expressions. It is naturally assumed by most people that the reference-determining context (i.e., the context to which the character of the indexical should be applied) is the context of utterance. If the character of ‘I’ is such that the referent of ‘I’ is always the agent of the context, and the context that determines the reference of an indexical is the context of utterance, it follows that the agent of the context will always be the utterer (U). Thus
claim [r1] – the claim that a token of the first-person pronoun refers to the utterer – can be seen as a consequence of the following premises:

[c1] The characters of ‘I’, ‘here’ and ‘now’ respectively yield the agent, the location, and the time of the context as the referents of those expressions.

[c2] The reference-determining context is the context of utterance.

Claims [c1] and [c2] also yield analogous principles for ‘here’ and ‘now’:

[r2] A token of ‘here’ refers to the location of the utterance.

[r3] A token of ‘now’ refers to the time of utterance.

3. A COUNTEREXAMPLE TO [R1]

Kaori asks Penelope to record her answering machine message for her. Penelope records the message,

(1) I am not here now.
on Kaori’s answering machine. Since Penelope speaks the words, she is the utterer of ‘I’ in (1), which according to [r1] makes her the referent. But when callers hear the message, they will understand on this basis that Kaori is not in her office. Furthermore, it seems that the truth-value of (1) will be determined with respect to Kaori, not Penelope: the utterance will be true if Kaori is not in her office, whilst Penelope’s whereabouts are irrelevant. This strongly suggests that Kaori – not Penelope – is the referent of ‘I’ in this case. Thus we apparently have a counterexample to [r1]. Notice that (1) is not an unusual use of ‘I’. We use answering machine messages all the time, often messages that have been recorded for us by others. Since (1) is a perfectly ordinary use of ‘I’, a satisfactory account of indexical reference should be capable of explaining how the reference of ‘I’ is fixed in this case.³

4. ALTERNATIVES TO THE TRADITIONAL ACCOUNT

As shown above claim [r1] – a token of ‘I’ refers to the utterer – is a consequence of:

[c1] The characters of ‘I’, ‘here’ and ‘now’ respectively yield the agent, the location, and the time of the context as the referents of those expressions.
[c2] The reference-determining context is the context of utterance.

To reject [r1] is therefore to abandon [c1] and/or [c2]. There are thus three obvious strategies one might employ to explain the case of Kaori. First, one might try to deal with the counterexample without rejecting either [c1] or [c2], and thus preserve [r1]. Second, one might accept that the Kaori case requires us to abandon [r1], on the grounds that [c1] is false. The third option is to reject [r1] by abandoning premise [c2].

Preserving both [c1] and [c2] – Sidelle and deferred utterances

Sidelle (1991) offers an account of how the reference of indexical expressions occurring in written notes and recorded messages is determined, which preserves both [c1] and [c2]. If his account can be upheld, the example above will not force us to reject claim [r1], which states that a token of ‘I’ refers to the utterer.

According to Sidelle, when someone records a message/writes a note, what she is doing is arranging to make an utterance at some later time – the time when the audience (A) hears the message or reads the note. Sidelle calls such utterances deferred utterances. Under this proposal, indexical reference is still determined by the context of utterance, but in the case of deferred utterances, this will be the context in which A hears the
message/reads the note, rather than the context in which U records the message/writes the note. Sidelle does not consider recorded messages and written notes with respect to the reference of ‘I’, but it seems that his proposal can deal with cases such as that of Kaori. Above, it was assumed that the utterer is Penelope, as it is she who records the message. But we can instead understand Kaori as arranging to make a deferred utterance; as part of her arrangements, she arranges for Penelope to produce the utterance. In this case, Kaori is the utterer insofar as she is the person who has arranged to make the utterance. Hence in this case, a token of ‘I’ still refers to the utterer.

However, a piecemeal account of indexical reference is undesirable. We should thus only accept Sidelle’s proposal if it can deal satisfactorily with the other problematic uses of indexicals, and it is clear that it cannot. There are cases that are in apparent conflict with [r1], [r2], or [r3] that do not fit the model of deferred utterance. Suppose that Balthazar is presenting a programme about the life of the Buddha. It is broadcast live so the television audience hears his words at the same time that he says them. By way of introduction, Balthazar tells the viewers about Siddharta’s birth and early life of luxury, before he becomes a wandering ascetic in 534 BCE. After introducing the subject matter Balthazar says,
Now Siddharta leaves the palace.

Intuitively, the referent of ‘now’ is the time when Siddharta left the palace. i.e., 534 BCE, and Balthazar’s utterance is true. This means that the referent of ‘now’ cannot be determined by applying the character of ‘now’ to the context in which Balthazar produces his words, or else ‘now’ would refer to 2003. Hence this case is in apparent conflict with [r3], which states that a token of ‘now’ refers to the time of utterance. But it is clear that (2) cannot be treated as a case of deferred utterance. To do so, one would have to claim amongst other things, that Balthazar does not intend to utter (2) at the time that he produces (2) – i.e., when he speaks – instead he intends to utter (2) in 534 BCE. But it is impossible that Balthazar’s utterance should actually take place at the intended time, because the utterance had not then been produced, so cannot be received by A in 534 BCE. Only the most deluded of speakers would be ignorant of these facts. To treat (2) as a case of deferred utterance would hence involve supposing that Balthazar intends to do something he knows to be impossible, which is highly problematic.\textsuperscript{4}

One might object that we should not expect a theory of indexical reference to deal with uses of indexicals such as (2) in the same way as recorded messages and written notes on the grounds that (2) looks like what might loosely be called a ‘fictional’ use, insofar as it seems intuitively to be of the same kind as the use of
indexicals by actors on a stage. The fact that it does not fit the model of deferred utterance should not, therefore, prevent us from accepting this model in the case of answering machine messages, written notes, etc. We should merely seek a different account of the semantics of fiction. However, there are two serious problems with this line of reasoning. First, it seems highly doubtful that ‘fictional’ uses of indexicals can be properly distinguished from ‘non-fictional’ ones. Balthazar’s utterance, e.g., deals with a historical event that actually took place. Thus it is not the case that ‘fictional’ uses of indexicals are those uses that pertain to fiction. Neither would we want to say that ‘fictional’ uses of indexicals are those that conflict with [r1], [r2] or [r3], since this would leave us with the vacuous conclusion that these claims about reference are true for those cases where they are true. In any case, Balthazar’s utterance of ‘now’ is not intuitively different from a use of ‘now’ which refers to the time of utterance. In both cases, the referent of ‘now’ is determined by applying the character of ‘now’ to a particular context. What is at issue is which context is the one that determines reference in each case. Again, this tells against treating the occurrence of ‘now’ in (2) as a ‘fictional’ use to be explained by some special ‘fictional’ semantics.

The second problem is that even if we were to allow that Sidelle’s proposal should only be applied to written notes and recorded messages, there are still cases that it cannot adequately
explain. Consider this case: suppose Kaori is coming over to England from Japan to teach Japanese. Penelope is a secretary at the university where Kaori will be working. Unbeknownst to Kaori, and before she arrives in England, Penelope records the message,

(3) I am not here now.

on the answering machine in the office which Kaori will use whilst she is teaching. Intuitively, there does not appear to be any important difference between this, and the first version of the Kaori case. As before, it seems that ‘I’ in this utterance refers to Kaori – any students who ring her office before she arrives in England will understand on the basis of the answering machine message that Kaori is not in her office at the time when they call. Furthermore, it seems that the truth-value of (3) will again be determined with respect to Kaori, not Penelope. But this version cannot be treated as a case of deferred utterance because Kaori has not arranged to make the utterance. As in the previous example, Sidelle’s model of deferred utterance cannot adequately explain what happens in this case. His proposal thus cannot be endorsed. Since it is the best attempt to deal with examples like the case of Kaori whilst preserving [r1] – the claim that a token of ‘I’ refers to the utterer – it seems likely that an account capable of accommodating the problematic uses of indexicals will be one that does not preserve
As we saw above, [r1] is a consequence of [c1] – the claim that the characters of ‘I’, ‘here’ and ‘now’ respectively yield the agent, the location, and the time of the context as the referents of those expressions, and [c2] – the claim that the reference-determining context is the context of utterance. If we reject [r1], we will thus have to abandon at least one of these claims. 5

Rejecting [c1] – Smith and alternative characters

The second way in which we might try to accommodate the problematic uses of indexicals is by rejecting claim [c1] – that the characters of ‘I’, ‘here’ and ‘now’ respectively yield the agent, location and time of the context as the referents of these expressions. Instead, it might be supposed that each indexical has a set of different characters, one of which will determine reference on each occasion of use. So, e.g., Smith suggests that one character of ‘now’ is the time when “the reproductions of the utterance are heard by the audience” (1989, 172). Although this would solve the problem, Predelli objects to the suggestion on the grounds that is ad hoc, commenting that “the introduction of lexical ambiguities should be left as a last resort, and that it is desirable to explain written and recorded messages without postulating the presence of special meanings for the expressions occurring in them” (1998, 109). It must also be noted that this proposal raises the not insignificant problem of how we should decide which character
determines reference on any particular occasion that an indexical is used. These comments do not constitute a decisive argument against the elimination of [c1], but I will assume that intuitively, this proposal is sufficiently unappealing for us to follow Predelli in rejecting it if a better solution can be found. It follows that the preferred way of accommodating the problem cases will involve a rejection of [c2] – the claim that the reference-fixing context is the context of utterance.

Rejecting [c2] – Predelli and intentions

A rejection of [c2] requires an account of which context determines indexical reference. Predelli argues that we should distinguish between the context of utterance and ‘the intended context of interpretation’, which is the context with respect to which U intends her utterance to be interpreted. The context that determines the reference of an indexical is not the context of utterance, but the intended context of interpretation (although sometimes these two coincide). Hence in the above two versions of the Kaori case, Penelope is the utterer, as it is she who records the message, but she intends her utterance to be interpreted in a context where Kaori is the agent. Kaori is thus the referent of both Penelope’s utterances of ‘I’. Similarly, Balthazar’s utterance takes place at the time at which he speaks, but he intends (2) to be interpreted with respect to 534 BCE. His utterance of ‘now’ thus refers to 534 BCE.
Predelli’s account gives the right results for the cases considered so far. However, it is still open to counterexample. Suppose that Ben leans out of a window and shouts,

(4) I am not here today.

intending his utterance of ‘I’ to be interpreted in a context where ‘I’ refers to his colleague, Joe. Predelli is apparently committed to the claim that Ben’s utterance of ‘I’ refers to Joe on the basis of Ben’s intention, but this is extremely counterintuitive (Corazza et al 2002, 9). Predelli has recently responded to counterexamples of this sort. He makes two suggestions; neither is satisfactory. One proposal is that we distinguish between the reference of an uttered expression and what that utterance can be used to convey (2002, 315). According to this suggestion, Ben’s utterance of ‘I’ in (4) refers to Joe on the basis of Ben’s intention; (4) thus semantically encodes the information that Joe is not at work today. But Ben cannot use (4) to communicate this information because no-one who hears the utterance will understand that ‘I’ refers to Joe. Predelli can thus accommodate our intuition about the case of Ben by claiming that it concerns what Ben’s utterance can be used to communicate, rather than the reference of the indexicals occurring in it. The problem with this move is that we should be extremely wary of any theory of language which divorces reference from communication in this way.
The sort of language with which we are dealing here is public language, the uttered sentences of which have public meanings. Surely what it means to say that an utterance has a public meaning is just that the meaning can in principle be grasped – i.e., the utterance can in principle be understood – by more people than just the utterer. To claim, as Predelli does, that there are utterances which cannot communicate anything because no-one apart from the utterer knows the reference of expressions occurring in them, is to say that only the utterer can understand them, and this is to deny that those utterances have a public meaning. Since we are theorising about public language, this conclusion is unacceptable.

Predelli’s second proposal is that indexical reference is not determined simply by U’s intentions in every case, but rather U’s intention “together perhaps with other factors” (Predelli 2002, 311). It is not overly clear what he takes these “other factors” to be nor what role he takes them to have, but in light of the foregoing discussion, we might suppose that the other factors place limits on the range of contexts that could fix the reference of the indexical utterance in question; for U’s intended context to determine indexical reference, it must fall within this range. The suggestion is that Predelli could be understood as holding that U’s intended context can only determine indexical reference, if U reasonably supposes that A will recognize it (Romdenh-Romluc 2002, 37). If Predelli takes this line, he can respond to the case of Ben by holding
that Ben’s intended context – one where Joe is the agent – is not one that he reasonably supposes A will recognize. His utterance of ‘I’ in (4) hence fails to refer. Intuitively, this is correct.

However, even with this qualification, Predelli’s account is still open to counterexample. Consider this case: suppose that Simeon presents a history programme. He is also a newsreader. Simeon is always on television on Thursdays at four o’clock, but his slot alternates between a history programme and the news. One week he is due to present the news, but he gets muddled, and thinks it is the history programme he is due to present. He goes on air, and thinking of the Norman Conquest says,

(5) Now the French are invading England!

Simeon intends his utterance to be interpreted with respect to 1066. But everyone listening to his news programme identifies 2003 as the context of interpretation, thus taking ‘now’ to refer to 2003. They are subsequently horrified as they think that France has declared war on England. Since Simeon falsely believes that he is presenting his history programme, he reasonably supposes that A will recognise the intended context of interpretation. Under the proposal we are considering, the reference of ‘now’ is thus determined by his intended context, which is a discussion of the Norman Conquest on his history programme; 1066 is thus the
referent of his utterance of ‘now’ and he has said something true. But this is extremely counterintuitive. In seems, contra Predelli, that Simeon’s utterance of ‘now’ refers to 2003 and he has said something false, despite the fact that he reasonably supposes that A will recognise his intended context of interpretation.

In any case, it does not seem that this second proposal has escaped the problem encountered by the first. Even though U must reasonably suppose that A will recognise the intended context of interpretation for that context to determine indexical reference, U may have false beliefs about this matter – as in the above case. It is thus still possible on this version of Predelli’s account, for there to be utterances whose meanings are obscured from the audience due to false beliefs on the part of U. Such utterances will only be comprehensible to the utterer, but as noted above, this is destructive of the claim that they are utterances of a public language. As Gorvett has forcefully argued in his forthcoming paper on these issues, Predelli can only avoid this objection by allowing that indexical reference is determined by factors which are publicly available and independent of U’s intentions and other mental states.\(^8\) But in this case, Predelli has to give up the claim that U’s intentions have a role in determining indexical reference. It follows that Predelli’s account of indexical reference must be rejected.

Rejecting [c2] – Corazza et al on conventions
Corazza et al (2002) offer an account of indexical reference which both accommodates the counterexamples to the traditional view and avoids the problems encountered by Predelli’s. However, as I shall demonstrate, it faces other difficulties and cannot be endorsed.

They begin by introducing the notion of a setting, or broad context of utterance. A setting includes but is not restricted to, such non-semantic features as “speaking English, belonging to a given community, hearing an answering machine message, sarcastically imitating someone, acting in a piece of theatre” (Corazza et al 2002, 12). The utterance setting, they contend, delivers a convention, or set of conventions that apply to the utterance; these convention(s) then fix the reference-determining context. Their account can be summarised like this:

setting $\rightarrow$ conventions applying to $\rightarrow$ reference-determining context

Corazza et al deal with the problem cases presented above as follows. In both of the Kaori cases, the setting for Penelope’s utterance on Kaori’s answering machine includes the fact that it is heard on such a device. This determines that the conventions governing the use of answering machines apply to her utterance; these conventions fix the reference-determining context in both
cases as one in which Kaori is the agent. In the case of Balthazar, the setting for his utterance includes the fact that he is telling the story of the Buddha’s life, has a backdrop behind him which says, ‘India, 534 BCE’, and so on. Together these determine that he is using ‘now’ in accord with the convention to use it to refer to the time in the narrative. When Ben leans out of the window and proclaims, "I am not here now", the setting for his utterance delivers no conventions to fix the reference-determining context, and so his utterance of ‘now’ fails to refer. Finally, Simeon’s utterance takes place in a setting which determines that he is using ‘now’ in accord with the convention to refer to the present time, although he falsely believes that his utterance takes place in a setting which determines that the relevant convention is to use ‘now’ to refer to the time in the narrative. Thus his utterance of ‘now’ refers to 2003.

There is, however, something rather suspicious about Corazza et al’s claim that the utterance setting delivers a convention, or set of conventions. They imply that which conventions are delivered by a particular setting will be a straightforward and unambiguous matter, but it is not at all clear that this is the case. Suppose that instead of uttering (2), Balthazar finishes his programme about the life of Buddha by uttering,

(6) Now, finally, Siddharta leaves the palace – of course, now tourists from
all over the world come to see Siddharta’s home.

Intuitively, the first occurrence of ‘now’ in (6) refers to 534 BCE, whereas the second one refers to the present. This means that on Corazza et al’s picture, different conventions must govern the two occurrences of ‘now’ in (6). But the setting for both is surely the same – they both occur in the same utterance, on the same history programme, etc. Thus the setting does not unambiguously deliver the conventions needed to fix the reference-determining context for each occurrence of ‘now’ in (6). Moreover, it seems that there will be plenty more cases like this.

Corazza et al’s analysis faces another problem. They accord convention a pivotal role in determining indexical reference. The problem with this view is that it cannot adequately explain how reference is fixed in cases where the utterer uses an indexical expression in an unconventional – but intuitively acceptable – way. That there are such cases can be shown if we reflect a little on how conventions arise. There is room for disagreement over what exactly counts as a convention, but one thing is clear: a convention is an established way of doing things; to do something in a certain way on only one or two occasions does not constitute a convention. Established ways of doing things do not spring up over night. At some point, the conventional way of doing something has to be introduced, and it is not until it becomes established that that way
of doing things can be considered conventional. Simply doing something a certain way intending for that to become the conventional way of doing things is not sufficient to introduce a convention, since one’s method might not catch on. Notice, in any case, that Corazza et al cannot allow a speaker to introduce a convention just by intending to do so, or their account becomes vulnerable to the problem faced by Predelli’s – their account would allow for the possibility of indexical utterances whose meaning can only be grasped by the utterer on the grounds that only she knows the convention(s) governing the indexical expressions occurring in it.

It follows that there are cases where the utterer uses an indexical expression in a way that will become conventional, but which has yet to be established as such. Suppose, e.g., that Leviathan loves household gadgets. As soon as answering machines are available, he rushes out to buy one. They are extremely expensive, and only a handful of household gadget enthusiasts such as Leviathan have purchased the new machines. At this point in their development (let us suppose), they are only available with a pre-recorded message. Erin calls Leviathan’s house and hears the message,

(7) I am not here now. Please leave a message after the tone.
Since answering machines are still very rare at the time of utterance, it cannot yet be said that there are any conventions governing the use of indexicals occurring in messages left on them. Nevertheless, like all his friends, Erin knows Leviathan’s love of gadgets. She guesses that he has bought some kind of answering device and understands on the basis of (7) that Leviathan is not at home. Intuitively, Leviathan is the referent of ‘I’ in (7).  

Corazza et al, however, cannot give us this result. They have two options when dealing with this case. On the one hand, they can claim that the utterance of ‘I’ that occurs in (7) is governed by conventions that have been established by this point. Since there are not yet any conventional ways of using answering machines, the only conventions to which Corazza et al can appeal will be conventions which have nothing to do with the use of such machines. Obviously, conventions unconnected with the use of answering machines will give counterintuitive results. Either they will not yield Leviathan as the referent, or will do so in an ad hoc, and thus unsatisfactory, way. The other option available to Corazza et al is to accept that the occurrence of ‘I’ in (7) is not governed by any of the existing conventions on the grounds that the results obtained by applying any of them are counterintuitive, but claim that as there are not yet any conventional ways of using answering machines, ‘I’ as it occurs in (7) simply fails to refer. It is, of course, possible for information to be conveyed when there is reference
failure, thus the fact that Erin understands that Leviathan is not home on the basis of (7) is compatible with the claim that ‘I’ does not refer to Leviathan. Nevertheless, the claim that there is reference failure is counterintuitive. Utterances where reference failure occurs are typically cases where U makes a mistake or has a false belief. Information is conveyed anyway because A realises that U has made a mistake and is able to guess what she meant to say. But Leviathan’s answering machine message is not like this. It does not appear to involve a mistaken use of language; when Erin (A) understands that Leviathan is not at home on the basis of the message, she does not realise that there is an error, and guess what the utterance is supposed, but fails, to say. This strongly suggests that the use of ‘I’ in (7) does not fail to refer despite the lack of appropriate conventions to determine its reference.

It might be supposed that Corazza et al can simply claim that our intuition about the case is incorrect, and the occurrence of ‘I’ in (7) does not refer to Leviathan. But if they make this claim, it becomes completely unclear how conventions can arise. A conventional way of doing something is established when it becomes common practice. Thus the convention of, e.g., using ‘I’ in an answering machine message to refer to the person whose number has been dialled arose because more and more people started to use ‘I’ in this way. But if initial attempts to use ‘I’ to refer to the person whose number has been dialled resulted in
reference failure of one sort or another, then it is a mystery how the convention could ever have come about. It follows that Corazza et al’s failure to accommodate unconventional uses of indexicals is not only problematic in that it leaves some uses of indexicals unexplained. It also poses a grave difficulty for them as it leaves them with no account of how the conventions, which determine indexical reference on their view, can come about in the first place. Corazza et al may have overcome the problems encountered by Predelli, but their account of indexical reference is far from adequate.

5. A NEW THEORY OF INDEXICAL REFERENCE

Certain uses of indexicals cannot be accommodated by the traditional account. We have examined some attempts to deal with them, but all of those considered are beset with serious problems. Our discussion of the difficulties faced by the various proposals, however, reveals the shape that a satisfactory account of indexical reference should take. As stated above, on the traditional account of indexical reference claim [r1] that a token of ‘I’ refers to the utterer is a consequence of:

[c1] The characters of ‘I’, ‘here’ and ‘now’ respectively yield the agent, the
location, and the time of the context as the referents of those expressions.

[c2] The reference-determining context is the context of utterance.

To reject [r1], we must, therefore, abandon [c1] and/or [c2]. The discussion of Sidelle’s model of deferred utterance revealed that [r1] can only be preserved if we accept a piecemeal account of indexical reference, which I take it is undesirable. A brief consideration of Smith’s proposal suggested that the best strategy is to give up [r1] on the grounds that premise [c2] is false. Hence we need to know which context fixes the reference of an indexical expression. Predelli suggests that the reference-determining context is the one intended by U, but as we saw, his proposal cannot be endorsed because it allows the utterer too much freedom to use an indexical to refer to anything she pleases. In contrast, Corazza et al propose that the reference-determining context is fixed by conventions delivered by the setting in which the utterance takes place. A major problem faced by their view is that it does not allow the utterer enough freedom to use indexicals in new and unconventional ways. The respective failings of these proposals thus show that an account of which context determines the reference of an indexical expression must satisfy two prima facie conflicting requirements. It must allow speakers to use indexical
expressions in novel ways, but at the same time prohibit speakers from using them to refer to anything they choose.

As we saw above, the problem with the claim that the reference-determining context is the one intended by U is that it leaves open the possibility of there being utterances which only U can understand. This is in conflict with the claim that they are uttered sentences of a public language, since what it is for a sentence to be part of a public language is for its meaning to be comprehensible to more than just the utterer. Instead, the meanings of the utterances with which we are concerned must be accessible to an audience. It follows that what an audience can understand must play some role in an adequate account of indexical reference. Notice, however, that although the conventional ways of using indexicals will have some bearing on what an audience can understand, the ability of an audience to grasp what is meant by an utterance is not limited by conventions which have already been established. Erin, e.g., understands on the basis of the message recorded on Leviathan’s answering machine that he is not at home when she calls, despite the lack of conventions governing the use of such machines. It follows that an account which takes indexical reference to be constrained in some way by what can be comprehended by an audience, should be able to accommodate the fact that indexicals can be used in new ways, without those uses involving a mistake, or reference-failure of some kind.
With these remarks in mind, we can begin to develop a new account of indexical reference. Plausibly, in making an indexical utterance, more than just one intention can be attributed to U. As well as intending that her utterance be interpreted with respect to a particular context, U also intends A to recognise the relevant context. U cannot reasonably expect A to recognise the intended context of interpretation unless she supposes there are cues available as to which this context is. When U makes an indexical utterance, she therefore has the intention that A should identify a context as the context of interpretation using a certain means. These cues can take various forms. U can exploit her audience’s beliefs, interests and history; previous conversations between U and A; conventions between U and A; and so on, to indicate the context of interpretation. Based on these comments, one might suppose that the context which determines the reference of an indexical is the one that A identifies on the basis of the cues intended by U – regardless of whether or not this is the context which U intends as the context of interpretation.

But this account is open to counterexample. Suppose Melchior wants to ring Cain. He picks up the phone, dials what he thinks is Cain’s number and hears the following answering machine message:

(8) I’m not at home now. Please leave a message.
Melchior thinks on the basis of the message that Cain is not home. Suppose, however, that Melchior is half-asleep, and in his somnolent state has mistakenly dialled his friend Jeremiah’s number, rather than Cain’s. U (who unbeknownst to Melchior is Jeremiah) intends A to identify the reference-determining context for ‘I’ in (8) on the basis of the telephone number that A has dialled. Melchior (A) identifies the relevant context on this basis, but since he is half-asleep, the context he identifies is one in which Cain is the agent. Under the present proposal, ‘I’ in (8) therefore refers to Cain. However, this is counterintuitive. We feel, instead, that ‘I’ in (8) refers to Jeremiah. Melchior makes a mistake because he is half-asleep; the counterexample hence exploits the fact that A is incompetent and inattentive. To rule out such counterexamples, we should hold that indexical reference must be fixed by a competent and attentive audience – Ac. Note that Ac is not just any competent and attentive bystander who happens to hear the utterance. As mentioned above, U will sometimes exploit the beliefs, desires, history, interests, etc. of her audience as a means of indicating the reference-determining context, hence Ac is the audience that it is reasonable to take U to be addressing. We should add that it is this audience made competent and attentive, in the light of the foregoing considerations. Thus ‘I’ in (8) refers to Jeremiah, as a competent and attentive Melchior would identify a
context in which Jeremiah is the agent as the context of interpretation.

It must also be a requirement of the account that the cues U exploits to indicate the reference-determining context are such that Ac can reasonably be expected to realise she is intended to use them to identify the context of interpretation. Suppose, e.g., that Rupert and Miranda are in Sheffield. Rupert turns to Miranda and says,

(9) I really don’t like it here.

intending that his utterance be interpreted with respect to Jamaica. Rupert intends Miranda to identify this context on the basis that he is wearing underwear which bears the slogan, ‘Welcome to Jamaica’. Intuitively, Rupert’s utterance of ‘here’ in (9) refers to Sheffield, rather than Jamaica. This result can be obtained as follows: Rupert can reasonably be taken to be addressing Miranda, but it is not reasonable to expect a competent and attentive Miranda to identify Jamaica as the context of interpretation on the basis Rupert intends. It is instead reasonable for Miranda to take Rupert to be exploiting the fact that they are in Sheffield to indicate the reference-determining context, and on this basis, identify Sheffield as the referent of ‘here’. Thus we should hold that the reference-determining context for an indexical is the one Ac would
identify using the cues that she would reasonably take U to be exploiting.\textsuperscript{12}

This account deals satisfactorily with the problem cases. Two versions of the Kaori case were presented. In the first, Kaori asks Penelope to record the message, "I am not here now" on Kaori’s answering machine. In the second version, Penelope records the same message without Kaori’s knowledge. In both versions, ‘I’ intuitively refers to Kaori; as stated earlier, the fact that Kaori knows about the message in the first version, but is ignorant of it in the second appears to make no difference to the content of the utterance. According to my account of indexical reference, reference is determined in both cases as follows: it is reasonable to take U to be addressing the people who call Kaori’s office. Ac will reasonably take U to be exploiting the fact that Ac has called Kaori’s office to indicate the reference-determining context. On this basis, Ac will interpret the message with respect to a context where Kaori is the agent, thus identifying Kaori as the referent of ‘I’. My account will deal with the Leviathan case in the same way. It is reasonable to take U (Leviathan) to be addressing people who call his house. Erin is one such caller. A competent and attentive Erin is therefore Ac. She will reasonably take U to be exploiting the fact that she has called his number to indicate the reference-determining context, and will thus identify a context in which Leviathan is the agent as the one that fixes reference.
I also presented two versions of the Balthazar case. In the first he utters,

(2) Now Siddharta leaves the palace.

whilst presenting a programme about the life of the Buddha. Balthazar should be understood as addressing the TV audience, Ac is thus the competent and attentive TV audience. Intuitively, Balthazar’s utterance of ‘now’ refers to 534 BCE. My account of indexical reference gives us this result – the TV audience (Ac) will reasonably take Balthazar to be exploiting the fact that he is presenting the story of the life of the Buddha, has a backdrop behind him saying, ‘India, 534 BCE’, and so on to indicate the context of interpretation. They will thus interpret (2) with respect to 534 BCE, identifying this date as the referent of ‘now’. In the second Balthazar case, instead of uttering (2) he says,

(6) Now, finally, Siddharta leaves the palace – of course, now tourists from all over the world come to see Siddharta’s home.

intuitively, the first occurrence of ‘now’ refers to 534 BCE, whereas the second refers to the present. The reference for Balthazar’s first utterance of ‘now’ will be fixed in the same way as the occurrence of ‘now’ in (2). For the second, the competent and attentive TV audience will reasonably take Balthazar to be exploiting such things
as their knowledge of tourism, modern travel, and so on, to indicate
the reference-determining context, which they will identify as the
present day. Thus the second occurrence of ‘now’ refers to 2003.

In the Simeon case, he confuses his two programmes, and
takes himself to be presenting the history programme, when really
he is presenting the news. Thinking of the Norman Conquest he
says,

(5) Now the French are invading England.

Intuitively, it seems that ‘now’ refers to 2003, not Simeon’s
intended context which is 1066. My account gives us this result. It
is reasonable to take Simeon to be addressing the TV audience
when he utters (5), Ac will therefore be these viewers made both
competent and attentive. Simeon intends his audience to identify
the relevant context on the basis that they are watching a history
programme about the Norman Conquest. However, Simeon is
mistaken – his audience is not watching a history programme about
the Norman Conquest, it is therefore unreasonable to expect them
to use this cue to identify the relevant context. They will instead
reasonably take Simeon to be exploiting the fact that he is
presenting a news programme to indicate the intended context, and
on this basis interpret (5) with respect to 2003. Simeon’s utterance
of ‘now’ thus refers to 2003.
Finally, Corazza et al present the case of Ben. He leans out of a window and shouts,

\[ (4) \quad \text{I am not here today!} \]

intending his utterance to be interpreted in a context where Joe is the agent. Intuitively, his utterance of ‘I’ fails to refer to anyone. This is the result obtained by my account. As Corazza et al describe the case, Ben can reasonably be taken to be addressing anyone passing by who hears his words. A competent and attentive person passing by will thus be Ac. There are no cues that Ac can reasonably take U to be exploiting to indicate the reference-determining context for ‘I’. Ben’s utterance of ‘I’ in (4) will hence fail to refer.

**Objections**

Amongst the cases I – and those such as Corazza et al – use to demonstrate the need for an alternative to the traditional account of first-person reference are cases such as that of Penelope and Kaori, where U seemingly uses the first-person pronoun to say something about someone other than herself. The discussion has so far taken it for granted that these really are cases where U makes an utterance about someone else using ‘I’. Penelope, e.g., records the message,
on Kaori’s answering machine; I claimed that since anyone who rings the office will understand on the basis of (1) that Kaori is not there, the occurrence of ‘I’ in (1) refers to Kaori, rather than to Penelope who is the utterer. One may object, however, that understanding such cases in this way boils down to claiming that someone may make first-person assertions about someone else, which looks odd to say the least. The strangeness of this claim can be brought out if we consider cases where the person the audience would identify as the referent of ‘I’ would not assent to what they take U to say about her. Suppose that instead of (1), Penelope secretly records this message on Kaori’s answering machine,

(10) I can’t talk to you right now because I am having sex with the Dean.

Kaori would be horrified if she knew of the message. In this case, it looks counterintuitive to hold (10) is a first-person assertion about Kaori, and so it looks counterintuitive to hold that ‘I’ refers to Kaori – even though people who call her office will take ‘I’ in both (1) and (10) to refer to her.\textsuperscript{13} If audience interpretation is not enough to establish that ‘I’ in (10) refers to Kaori, then it surely cannot establish that ‘I’ in (1) does either. Hence cases such as that of
Penelope and Kaori may not be counterexamples to [r1] – the claim that every token of ‘I’ refers to the utterer.

The phrase ‘first-person assertion’, however, is ambiguous between what can be called a genuinely first-personal assertion, and an assertion which is made using ‘I’. At first glance, one may think that these two things are the same. But this is not so. We can understand a genuinely first-personal assertion as an expression of a first-person thought. Although there is disagreement over what a first-person thought is, it is clear that first-person thoughts are thoughts that are in some sense about oneself. Since one can only think first-person thoughts about oneself, it follows that one can only make genuinely first-personal assertions – assertions that express first-person thoughts – about oneself. Many of those investigating first-person thinking take first-person thoughts to be all those that can be expressed in English using sentences containing tokens of the first-person pronoun. If this were correct, there would be no difference between a first-personal assertion, and an assertion that is made using the first-person pronoun. However, if U could use ‘I’ to refer to someone other than herself, she could make an assertion about that person by using ‘I’. Since this assertion would not be about herself, it would not be a genuinely first-personal assertion; it would simply be an assertion made using the first-person pronoun. Thus writers who take first-person thoughts to be all those expressible in English
using ‘I’-sentences, do so on the assumption that [r1] is true, and every token of ‘I’ refers to the utterer. Since claim [r1] is what is at stake here, genuinely first-personal assertions should be distinguished, pending further discussion, from assertions that are made using ‘I’.

Plausibly, the claim that someone can make first-person assertions about someone else is only odd if we read ‘first-person assertion’ as ‘genuinely first-personal assertion’ – i.e., as an assertion that expresses a first-person thought. But given the above, accepting that someone can use ‘I’ to refer to someone other than herself does not force us to hold that she can make genuinely first-personal assertions about them. It merely requires us to accept that one can make assertions about someone else using ‘I’. Moreover, this latter claim will only be odd if [r1], which states that every token of ‘I’ refers to its utterer, is true. It follows that the objector cannot legitimately appeal to the oddness of claiming that someone can make first-person assertions about someone else to resist my reading of cases like that of Kaori without assuming the very thing that she is trying to establish, namely that each token of ‘I’ refers to the utterer.

The objection hinges on the claim that it is counterintuitive to hold that (10) is a first-person assertion about Kaori. The preceding discussion gave reasons for thinking that this claim implicitly assumes the truth of [r1]. There is thus no obstacle to treating
(10) in the same way as (1). I have argued that audience interpretation plays a key role in meaning, since an utterance can only be an uttered sentence of public language if its meaning is available to more than just the utterer. It follows that since a competent and attentive audience would take ‘I’ in both (1) and (10) to refer to Kaori, she is the referent of both utterances of ‘I’. This reading of the case accords with other intuitions that we have about (10). Kaori would be horrified if she knew about the message. Surely Kaori would be horrified precisely because the message says something scandalous about her. Furthermore, assuming that Kaori is not having sex with the Dean, she could sue Penelope for libel on the grounds that Penelope’s utterance is false and damaging to Kaori’s reputation, which again points to the fact that (10) is an assertion – albeit a false one – about Kaori. It is with respect to Kaori’s doings that the truth-value of (10) is intuitively determined. It follows that both (1) and (10) are counterexamples to [r1] – the claim that every token of ‘I’ refers to the utterer.

A further objection that might be levelled at my account is that since it focuses on what will be understood by/can be communicated with an indexical utterance, it deals not with semantics, but with pragmatics.17 A full answer to this objection requires a discussion of how the semantics-pragmatics distinction should be drawn, which is a subject of much debate, and well
beyond the scope of this paper. However, I will make a few brief remarks here to try and show that the account I offer is properly an analysis of the semantics of indexicals. I have already argued above that a theory of reference should place importance on what can be communicated on the grounds that if an utterance is an uttered sentence of public language, it must have a meaning which can be grasped by more than just the utterer. How an indexical utterance will be understood is thus pertinent when determining its meaning. Notice, however, that it is not what the actual audience will understand that is relevant to the meaning of an indexical utterance on my account. It is instead, how an ideal audience – one that is competent and attentive, and whom it is reasonable to take the speaker to be addressing – would interpret the utterance that fixes reference. What an ideal audience would understand can thus be thought of as what the utterance should communicate. It follows that my account still allows us to distinguish between what is actually communicated – which will be to do with the reactions of the actual audience, and so a matter to be dealt with by pragmatics – and what an indexical reference would communicate (which on my account is what it says, and so what should be communicated) to the competent and attentive audience it is reasonable to take the utterer to be addressing.
7. CONCLUSION

Traditionally, it is claimed that a token of ‘I’ refers to the utterer. In this paper, I argued that certain uses of indexicals conflict with this claim, and its counterparts with respect to ‘here’ and ‘now’, thus it seems that the traditional theory of indexical reference must be abandoned, and with it the claim that a token of ‘I’ refers to the utterer. A discussion of some proposed alternatives revealed that an adequate account of indexical reference should allow the speaker the freedom to use indexicals in novel ways, whilst holding that what a speaker can refer to with an indexical utterance is constrained by what an audience can understand. I developed an account with these requirements in mind, according to which the reference of an indexical is determined relative to the context that Ac (the competent and attentive audience it is reasonable to take the utterer to be addressing) would identify using the cues that she will reasonably take U (the utterer) to be exploiting. This account provides both a principled means of fixing the reference-determining context, and a satisfactory explanation of our intuitions about the problem cases. It also has the advantage of providing a unified analysis of indexical reference, whether these expressions are used in written notes, recorded messages, works of fiction, and so on.
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NOTES

1 This is, of course, not the only claim traditionally made about ‘I’.
2 See Kaplan 1977.
3 Corazza et al present a parallel case involving a note stuck to the front of someone’s door (2002, 5).
4 Notice that this case is quite different from that of Napoleon’s diary, a case discussed by Sidelle. As Sidelle notes, if I read Napoleon’s inscription, ‘We will go for Waterloo tomorrow’, on, say, 31st October 2003, it is not rendered false by the fact that Napoleon will go nowhere on 1st November 2003 (1991, 533). This is because Napoleon’s diary entry should be interpreted with respect to the context in which he wrote it. The diary entry is not, therefore, a counterexample to the traditional account of indexical reference, since the reference-determining context is the context of utterance (inscription). In contrast, the context in which (2) takes place is the time at which Balthazar’s speaks. But this is not the context with respect to which his occurrence of ‘now’ should be interpreted.
5 See Predelli (1998) for more problems faced by Sidelle’s account.
Sidelle (1991) notes that there is more than one use of ‘here’, and so it is plausible to claim that ‘here’ has more than one character. On some occasions, ‘here’ is used demonstratively, e.g., someone may point to a place on a map and say, “I am not here”. In such cases, we may substitute ‘there’ for ‘here’. It may also be possible to argue that ‘now’ is sometimes used demonstratively, and so has more than one character too. However, even allowing that this is the case, it seems that we should prefer an account of indexical uses of ‘here’, and ‘now’ which does not postulate a number of different characters for these expressions, if such an account is available.

As he points out, this is a suggestion he makes in Predelli 1998, 113. Gorvett actually pushes a slightly different objection against Predelli which is that a notion of reference which is divorced from communication in this way is both useless and incoherent.

Although that way of doing things may become a convention if it is repeated a sufficient number of times.

Similarly, Leviathan’s house is the referent of ‘here’, and the time at which Erin calls is the referent of ‘now’. The points made about Corazza et al’s options for dealing with Leviathan’s utterance of ‘I’ apply equally to ‘here’ and ‘now’.

One line they might take, e.g., is that the reference of ‘I’ in (6) is governed by the convention of using ‘I’ to refer to the utterer; the person at the answering machine factory who recorded the message would then be the referent of ‘I’ in this case. This is counterintuitive.

It is worth noting that the account of indexical reference that I offer here is similar to the account of demonstrative reference put forward by Wettstein (1984). Like indexicals, demonstratives vary their reference from context to context. Indexical reference, as we have seen, is determined by applying the character of the indexical in question to a context. However, more is needed in the case of a demonstrative such as ‘this’ or ‘that’. In order to refer, a
demonstrative also requires some means of picking out the referent from other items in the context. Typically, demonstrative utterances are accompanied by a means of discrimination that indicates the intended referent to A. Wettstein holds that the reference of a demonstrative utterance is what Ac would determine as the referent using the means of discrimination she would reasonably take U to be exploiting. If one accepts Wettstein’s account of demonstrative reference, my proposal has an additional advantage over other analyses of indexical reference in that it provides us with a unified account of the reference of indexicals and demonstratives.

13 I would like to thank an anonymous referee at Philosophical Studies for this objection and rather nice example.

14 See, e.g., Evans (1982, 206) and Bermúdez (1998, 3).

15 In which case the claim is not just odd, but patently false.

16 For a fuller discussion of these issues, see my forthcoming, ‘First-Person Thought and the First-Person Pronoun.

17 Again, I would like to thank an anonymous referee at Philosophical Studies for this point.

REFERENCES


