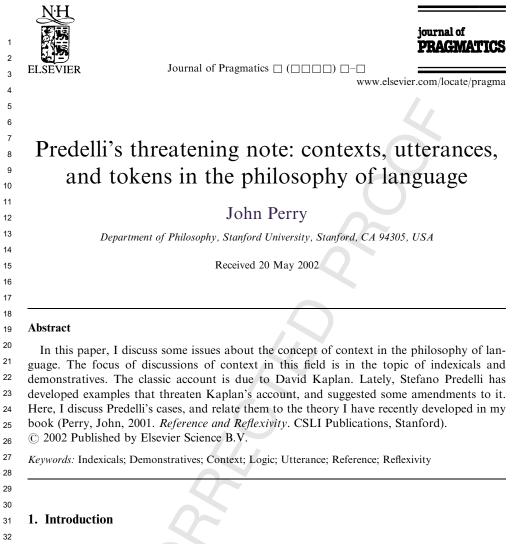
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In this paper, I discuss some issues related to the concept of context in the philosophy of language. The focus of discussions of context in this field is on the topic of indexicals (such as 'I', 'here', 'today') and demonstratives (such as 'this' and 'that'). The classic account is due to Kaplan (1977). Stefano Predelli (1998a,b) has developed some examples that threaten Kaplan's account, and suggested some amendments to it. I discuss Predelli's cases, and relate them to the theory I developed in my recent book, *Reference and Reflexivity* (Perry, 2001).

Kaplan and Predelli are mainly interested in the *logic* of demonstratives, and to that end provide theories of the content of sentences in contexts. On Kaplan's account, a truth in the logic of demonstratives is a sentence true in every context in

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every world. Utterances, concrete events of language use, do not appear within the
theory; they are modeled, with respect to their logically relevant properties, by the
pair of sentence and context. Predelli adopts Kaplan's basic framework, but criticizes certain aspects of his account. In *Reference and Reflexivity* I offer a theory of
utterances, and do not say much about logic. I think Predelli's work helps us to
better understand the interface between these two approaches, and to show the
importance of theories of utterances for pragmatics.

10 **2. Kaplan**

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Here is David Kaplan's semantic rule for 'I' in "Demonstratives" (1977):

¹³ $[I]_{cftw} = c_A$

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This rule gives us the semantic value for a use of the word 'I' at a context c under 16 the variable assignment f with respect to the circumstances in the world w at the time 17 t. The semantic value is an individual, whom we get to in what one can think of as a 18 process involving two functions and two inputs, in addition to the assignments to 19 variables. We start with the use of an indexical 'I'. 'I' has a character. The character 20 models the meaning that the English language assigns to 'I'; thus it remains the same 21 for every use of 'I'. The character is our first function; it takes a context as input and 22 yields a *content*. In Kaplan's system, a context c is simply a quadruple of c_A (agent), 23 $c_{\rm T}$ (time), $c_{\rm P}$ (location or position), and $c_{\rm W}$ (world).¹ 24

The content is our second function: a function from *circumstances of evaluation* to semantic values. Kaplan's contents are a version of the intensions of possible worlds semantics: functions from worlds and times to appropriate extensions: individuals for singular terms, sets of *n*-tuples for *n*-place predicates, and truth-values for sentences. So the second function gives the semantic value of 'I' at a context c, relative to circumstances of evaluation, the circumstances of world w at time t.

If it weren't for the indexicals in Kaplan's language, the semantic value of an expression could be given relative to variable assignments, times, and worlds: for example: [x's youngest sister]_{ftw} = the youngest sister of f(x) at t in w.

The variable assignment f assigns objects to variables x, y, and z and so forth, the 34 same for all circumstances of evaluation. That is, in Kaplan's terminology, the 35 assignment is *direct*. Formally, contexts are similar in some ways to variable 36 assignments: they assign objects directly to 'I', 'now', 'here', and 'actual'. Instead of 37 c_A for example, Kaplan could have written something like $c(\mathbf{i})$. The effect is that 38 the indexicals receive their semantical values directly, the same for all times and 39 worlds, just as the variables do. Leaving out the variable assignment and including 40 the context, we have, [my youngest sister]_{ctw} = the youngest sister of c_A at t in w; [my 41 youngest sister now]_{ctw} = the youngest sister of c_A at c_T in w; [my actual youngest 42 sister now]_{ctw} = the youngest sister of c_A in c_W at c_T . 43

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¹ The world in the context is used to treat 'actually' as an indexical.

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Within the formal language, the difference between indexicals and variables is that 1 there are only four primitive indexicals, while there are an infinite number of vari-2 ables. But semantically and conceptually, there is another important difference. The 3 machinery of indexicals and contexts is intended to model logically relevant aspects 4 of meaningful words in English and their cousins in other natural languages. The 5 variables 'x' and 'y' have no meaning other than belonging to the category of vari-6 ables; they differ from one another only in shape, not in any constraints they put on 7 the things assigned to them. But, conceptually, a context is supposed to reflect the 8 nexus of an utterance, which occurs at a location, in a world, at a time, with a 9 speaker or at least a potential speaker, and the indexical constrains the semantic 10 value to be the occupant of the appropriate contextual role: the location for 'here', 11 the time for 'now', the agent for 'I', and the world for 'actual'. 12

Within the formal theory, an important part of this conceptual connection is made in rule 10 in the definition of a structure:

If $c \in \mathbf{C}$ then $\langle c_A, c_P \rangle \in \mathbf{I}(c_T, c_W)$.

17

In a 'proper' context, c_A must be in c_P at c_T in c_W . This reflects the apparently reasonable requirement that the speaker of an utterance be at the place of the utterance at the time s/he makes the utterance.

This definition and the way truth is defined, allow Kaplan's famous theorem in the logic of demonstratives:

²³ ₂₄ (1) I am here now.

25

This sentence is true in any proper context in any world. However, the content of the sentence as made in any context will not be a necessary truth. If I say, 'I am here now' it must be true, but what it says is not true in every world; for example, not in the worlds in which I am in San Francisco today instead of Palo Alto. 'I am here

now' does not express a necessary truth, but it is necessary, in the sense that it is guaranteed by the semantics that it express a truth in every context.

³³ Other theorems in the logic include:

35	(2)	φ→Actuallyφ
36	(3)	$\phi \rightarrow Now\phi$
37	(4)	Now $\phi \rightarrow \phi$
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Note that for a sentence to be true at a context in a world it is not required that the agent of the context be speaking the sentence, or speaking at all. It does not require that there be an utterance occurring at the time at the location in the world. That is a motivation for having the role connected with 'I' being the *agent* rather than being the *speaker*, and for not having utterances in the theory. The formal theory requires the agent to be at the location at the time in the world for the context to be proper, but

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the agent me silent. The context may be proper even if the agent does not speak at the location at the in the world. This seems right. We want, say, 'It is raining if it is actually raining now' to be a logical truth, because, as we might put it, an utterance of it would be true in every context. It has a more secure status than, say, 'I am speaking' which is not a theorem in the logic of demonstratives.

8 **3. Predelli**

Kaplan's essay "Demonstratives" was written and circulated in 1977, and formed the basis of his Locke Lectures at Oxford shortly thereafter. There was a long gap before it was published in Almog et al. (1989). During this time, technology seemed to deal Kaplan's theory a low blow. As answering machines became ubiquitous, one heard over and over, "I am not here now". Had technology made people logically inept? Or was Kaplan wrong in thinking that "I am here now" must be true, and so, "I am not here now", untrue?

In "Utterance, Interpretation and the Logic of Indexicals," Stefano Predelli argues that Kaplan was wrong. He gives a number of other examples that suggest that something had gone wrong, even before the development of answering machines. Here is one of his examples:

21

Jones...suddenly decides to flee the country. Before leaving home at 8 in the morning he writes a note to his wife, who will be back from work at 5 in the evening:

[P]. As you can see I am not at home now. If you hurry, you'll catch the evening
 flight to Los Cabos. Meet me in six hours at the Hotel Cabo Real (Predelli,
 1998a: 402)

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Predelli points out plausibly that Jones was asking his wife to meet him at the hotel at 11 pm, 6 h after the time he expected her to read the note, not at 2 in the afternoon, 6 h after he wrote it, and 3 h before he expected her to read it. So the time relevant to evaluating the 'now' seems to be 5 pm. But by 5 pm, Jones was neither in the place where he wrote the note, nor in the place where he expected it to be read, but he is clearly the agent, the referent of 'I'.

Predelli argues, based on this example and others, for a distinction between the 35 context of utterance and the intended context of interpretation. In this case, the 36 intended context of interpretation has Jones as agent, 5 pm as time, and his house as 37 place. The context of his utterance—his act of writing the note—had Jones as agent, 8 38 am as time, the place in which he wrote as location. It is the context of interpretation, 39 not the context of utterance, that provides the parameters for application of Kaplan's 40 characters. In Jones' case, the propositions expressed by his note are that Jones is not 41 at home at 5 pm and that his wife can meet him at 11 pm in the hotel. 42

Predelli also thinks that Kaplan's criterion for logical truth was slightly off base.
Logical truth should mean truth solely in virtue of the meanings of the logical terms,
which in Kaplan's system includes the indexicals and demonstratives of his system.

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1 On this criterion 2–4 are logical truths, but 1 is not. The truth of 1 is guaranteed not 2 only by the semantical rules assigned to 'I', 'here', and 'now', but also by rule 10, 3 which limits contexts to proper contexts, in which the speaker is in the position at 4 the time in the world. Thus, even if Kaplan had been right about the structure of 5 utterances and how they determine the parameters of context, so that Predelli's dis-6 tinction between context of utterance and intended context of interpretation weren't 7 needed, it still would be wrong to see (1) as a logical truth.

Rule 10 actually says a bit more and a bit less than it seems to. Within Kaplan's 8 system, saying that a certain time t is $c_{\rm T}$ for a certain context c implies two things. 9 First, it says that the time t will be used for the semantic value of 'now' when sen-10 tences are interpreted at context c. This is quite independent of rule 10. Secondly, it 11 implies that c is a context used to model facts about utterances that occur at t, and 12 similarly with c_A , c_P and c_W . It is natural to think of rule 10 as expressing no more 13 than a truism about people, times, places, and utterances: the people that make 14 utterances are at the places at which the utterances are made at the time they are 15 made in the world in which they are made. But it implies more than that, given the 16 role of the agent, time, place, and world in the semantics. 17

Predelli is not denying that people who make utterances are at the locations they occupy when they make them. He is rather denying that those locations and times should always be taken to be the values of $c_{\rm P}$ and $c_{\rm T}$ for the contexts that model the utterances. Instead of being the place, time, and agent of the utterance, $c_{\rm P}$, $c_{\rm T}$ and $c_{\rm A}$ should be the location, time, and agent intended by the speaker of the utterance. This often will have the same result, but not always.

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4. The reflexive-referential theory

Before considering the reflexive-referential theory proper, I want to make a dis-28 tinction between tokens and utterances. By 'utterance' I mean an intentional act of 29 speaking, signing, typing, writing, etc. By 'token' I mean the effect of such acts, 30 something that is intended to be recognized and interpreted by a hearer or reader. 31 Hans Reichenbach, in his 'token-reflexive' account of indexicals in *Elements of* 32 Symbolic Logic (Reichenbach, 1947), announces that he means an act by 'token', but 33 soon is talking about the ink marks on a page as tokens. He confuses or conflates 34 utterances and tokens. I take utterances to be semantically basic. The intentionality 35 of linguistic acts is a special case of the intentionality of purposeful action generally. 36 The language to which a token belongs, the identity of the words and their mean-37 ings, the syntax, the reference of terms, all derive from the minds of the speakers, 38 and connections between those minds, other minds, things, and properties. In many 39 cases—when you read this essay, for example—tokens are epistemically basic. They 40 are what the reader or listener has as evidence, when the utterance itself cannot be 41 observed. The conditions of the reception of the token is something skilled speakers 42 take into account. One speaks louder when the audience is distant, and less loud 43 when they are close. When speaking on the telephone, or writing a note, you 44 shouldn't rely on contextual clues that the hearer or reader can not perceive. When 45

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sitting in the back seat of a car, you should not say things that require the driver to
 turn to properly interpret. The last is a maxim children are prone to ignore.

Utterances do not always involve the *production* of *new* tokens; tokens can often З be re-used, and when they are, the utterances in which they are used may have dif-4 ferent semantic and syntactic properties. An expensive nametag that said 'George 5 Bush' may have been put in the White House Museum when George I left office; it 6 may now be recycled for George II. A sign that says 'Flying planes can be danger-7 ous' might first have been used at a pilots' school, to warn would-be pilots, and then 8 recycled on a high hill near an airport, to warn would-be kite-flyers. A veteran pro-9 testor might use a sign, 'You are a scumbag' time after time, referring to different 10 politicians. Wilfred Sellars and others have called utterances 'tokenings'. I prefer 11 'utterance', perhaps because 'tokenings' suggests that tokens are basic. 12

The importance of the utterance/token distinction reflects changes in the technol-13 ogy of language. In face-to-face communication, the token is the burst of sound that 14 travels to one's ears; there is typically not much difference between perceiving the 15 utterance and perceiving the token. (There is even less in face to face signing, as with 16 American Sign Language.) Writing makes a dramatic difference; tokens remain long 17 after the utterance. Publishing permits the reproduction of tokens; telephony the 18 distant perception of tokens at the time the utterance occurs. Each change in tech-19 nology makes new patterns of production and perception of tokens possible, and so 20 new expectations and intentions based on these possibilities. 21

This picture of language use suggests the importance of theories of utterances and 22 tokens. Communication is at bottom a matter of events occurring in the physical 23 world that have predictable effects that we can exploit. As noted above, we plan our 24 utterances paying attention to the circumstances under which the tokens we produce 25 will be perceived. An adequate theory of these intentions and plans and the process 26 of understanding utterances, requires representation of the myriad of relations into 27 which utterances can stand to other concrete objects, people, purposes, projects, and 28 other factors. These factors will figure in the process of reaching a reasonable inter-29 pretation of what the speaker is trying to communicate. The most natural way to 30 approach meaning would seem to be, then, as a property of utterances. Logic-31 inspired semantical systems tend to leave out the utterance, providing instead a 32 theory of relations among abstract objects. In Kaplan's system, pairs of sentence 33 types and contexts model utterances. While this has provided considerable insight 34 about the workings of indexicals and demonstratives, especially in contrast to con-35 text insensitive expressions, it provides only a very thin and limited way of thinking 36 about utterances and tokens. 37

The reflexive-referential theory concerns meaning and content as properties of utterances. I use 'meaning' for *types*, 'content' for specific utterances. The English sentence "I am sorry" has the same meaning each time it is used (setting ambiguities, subtleties, and odd uses aside), but different utterances of it have different contents, since the truth of those utterances will depend different people being sorry at different times.

Our ordinary philosophical concept of content is closely tied to a number of otherconcepts:

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1 2	What someone said, or what was said by a certain utterance;What someone believed;
3	 The proposition expressed by an utterance;
4	• The truth-conditions of an assertive utterance, or of a belief.
5	
6	The usual assumption is that an utterance has one content; if is an assertive
7 8	utterance this content will be the proposition expressed, which will capture the truth- conditions; it will be what the speaker said; should the utterance be sincere, it will be
9	the content of the belief that motivates it.
10	On the reflexive-referential theory, utterances have a variety of contents, the most
11	important of which are reflexive contents and referential contents. The referential
12	contents of utterances of sentences containing names, indexicals, and demonstratives
13	will be just those assigned by standard referential theories. The referential content of
14	(5) Lam corru
15 16	(5) I am sorry,
17	
18	uttered by me, is the proposition
19	
20	(6) that John Perry is sorry.
21	
22	
23	When I use bold face in identifying propositions, it identifies a constituent of the
24	proposition. 6, is a singular proposition with me as a constituent, true in worlds in
25	which I am sorry. I use italics to indicate that an identifying complex, rather than the object that fits
26 27	it, is being mentioned. So the proposition
27	it, is being mentioned. So the proposition
29	(7) that <i>the speaker of (5)</i> is sorry
30	
31	
32	has an identifying condition as constituent; it is what Kaplan calls a "general
33	proposition" and is true in worlds in which whoever uttered (5) in the world is sorry
34	there.
35	Kaplan and others use various arguments to show that (6) and not (7) is the pro-
36	position expressed by my utterance of (5); (6) is what I said. I agree with this. I call (6) the referential content or subject matter content of (5). But I believe that it is
37	(6) the <i>referential content</i> or <i>subject matter content</i> of (5). But I believe that it is useful also to recognize (7) as the <i>reflexive</i> content of (5). I call it "reflexive" simply
38 39	because it is a condition on (5) <i>itself</i> . (5) is not what (5) is <i>about</i> ; it is not part of the
39 40	subject matter of (5). Still, (5) will be true if (7) is true, and vice versa. I claim that
41	the referential content helps us understand the reasoning that motivates the pro-
42	duction of utterances, and the reasoning that is involved in their interpretation.
43	The systematic connection among the contents is <i>loading</i> . This is a function from
44	an identifying condition and a state of affairs to an object. Thus (6) is the result of
45	loading the identifying condition in (7) with the fact that I uttered (5).

8 J. Perry | Journal of Pragmatics \Box ($\Box\Box\Box$) \Box - \Box Here are some other examples: 1 2 Loading being the present monarch of England with the state of affairs that Queen 3 Elizabeth I is the one and only present monarch of England yields Queen Eliza-4 beth I. 5 Loading the same condition with the (false or non-actual) state of affairs of 6 Charles being the present monarch yields Charles. 7 Loading being the speaker of u with the state of affairs of u's being spoken by Bill 8 Clinton yields Bill Clinton. 9 10 The different contents of utterances correspond to their truth-conditions, if we 11 adopt a relative concept of truth-conditions: 12 Given F_1, \dots, F_n , an utterance u of ϕ is true *iff* γ 13 Here γ gets at what *else* has to be true, in addition to F_1, \dots, F_n for the utterance u 14 to be true. Some examples: 15 16 Given just the facts of English and the meanings of its words and such things, an 17 utterance u of (5) is true iff the speaker of u is sorry at the time of u. 18 Given all of that plus the fact that John Perry is the speaker of u, u is true iff John 19 Perry is sorry at the time of *u*. 20 Given just the facts about English etc., plus the fact that u is uttered in 2001, an 21 utterance u of 'The present monarch of England was not heir to the throne when 22 born' is true iff the person who is monarch of England in 2001 was not heir to the 23 throne when born. 24 Given all of that, plus the fact that Queen Elizabeth II is monarch of England in 25 2001, u is true iff Queen Elizabeth II was not heir to the throne when she was 26 born. 27 Given all of that, and supposing Charles is monarch of England in 2001, u would 28 be true iff Charles was not heir to the throne when he was born. 29 30 Thus, the referential level of content captures the truth-conditions of utterance 31 given the facts about meaning, and about the reference of names, and the contextual 32 facts about the utterance that fix the reference of indexicals and demonstratives. The 33 reflexive level, on the other hand, does not fix facts about context, but allows them 34 to vary. Relationships that are not fixed by what is given remain part of what the 35 truth-conditions put conditions on. If we do not fix the facts about who is the 36 speaker of u, when the word 'I' occurs in the sentence in question, the issue of who 37 the speaker of u is will be a constituent of the truth-conditions. Once we are given 38 who the speaker is, that speaker himself or herself becomes a constituent of the 39 truth-conditions. 40 In *Reference and Reflexivity*, I distinguish among the following levels of content: 41 42 • Content_{M-N}: content with the meanings of the words fixed, but with name-43 ambiguities (or *nambiguities*) not resolved, and with the relevant facts about 44

45 context not given. I sometimes call this "nominal content".

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Content_M: Content_{M-N} with nambiguities resolved, but the facts about context not given. This is also called "indexical content".

• Content_C: Content_M with the relevant facts about context given in addition. This is also called "referential content" and "official content".

- Content_D: Content_C with the facts that determine the designation of definite descriptions given in addition. I call this "designational content". (This is what Donnellan calls "referential" in the context of his attributive/referential distinction for definite descriptions (Donnellan, 1966).)
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Suppose I say, "David Kaplan loves his garden," You don't know whether I 11 am talking about David Kaplan the logician or David Kaplan the Stanford 12 physician or some other David Kaplan. The proposition you grasp is basically 13 the content_{M-N}. If you overhear someone say, "You should give George Bush a 14 chance," and you realize the speaker is talking about George II instead of 15 George I, but you don't know whom they are addressing, the proposition you 16 grasp is the content_M. If you then see that they are addressing Barbara, you 17 grasp the content_C, and you grasp what they said: that **Barbara** should give 18 George II a chance. 19

Traditionally, logical truth is modeled by varying the meaning of all the expres-20 sions in sentences except the logical constants. The sentences that are true no matter 21 how the other expressions are interpreted are the logical truths. From the point of 22 view of the reflexive-referential theory, it is natural to see this as a level of content in 23 which only the meanings of the logical constants are fixed. Call this Content₁. If in 24 addition we fix the meanings of indexicals and demonstratives, we get Content_{LD}. 25 Suppose we adopt the following rules for 'I', 'here', and 'now', in the spirit of 26 Kaplan's rules: 27

- 29 (7) An utterance u of 'I' refers to the speaker of u
- 30 (8) An utterance u of 'here' refers to the position of u
- 31 (9) An utterance u of 'now' refers to the time at which u occurs.

Then we can say,

- ³⁵ ³⁶ (10) Given (7), (8), and (9), an utterance u of 'I am here now' is true iff there is a ³⁷ relation R between individuals, positions and times such that (i) 'am' stands ³⁸ for R, and (ii) R(x,p,t) where x is the speaker of u, p is the position of u, and ³⁹ t is the time of u.
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The sentence 'I am here now' is not a truth of the logic of demonstratives on this conception, for if 'am' meant 'am hungry' there would be many contexts at which the sentence was not true. So, adopting Predelli's conservative doctrine of logical truth, 'I am here now' does not count as a logical truth.

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5. Answering machines

When we come to the issue of answering machines, the distinction between utterances and tokens seems crucial. The examples that Predelli provides show that we plan our indexical utterances taking into account when and in what circumstances the token produced by the utterance will be perceived.

- 7 Recall this example. Jones writes:
 - [P] As you can see I am not at home now. If you hurry, you'll catch the evening flight to Los Cabos. Meet me in six hours at the Hotel Cabo Real.
- The token produced in this case is a note. It is left in Jones's house for his wife to see. He knows when she will be returning, and so approximately when she is likely to see the note. So he has a plan, that his wife see the note at 5 pm. He uses 'now' to refer to that time.
- It seems that Jones's intention has to derive from some reasonable expectations about what will happen to the token, and how his wife will reason when she perceives it. He could have written instead:
- [P'] I'm leaving now for Los Cabos. I'll have been gone for a long time by the
 time you read this when you get home. If you hurry, you'll catch the evening
 flight to Los Cabos, and can meet me by 11.
- 24 25

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If Jones had written P', the use of 'now' would have referred to the time he left the 26 note. It would be his intention to have his wife understand it as so referring that 27 would be crucial. There is nothing automatic about the context of a note, or even a 28 note that is read many hours after it is produced, that makes the 'now' refer to the 29 time of perception by the recipient rather than the time of production by the writer. 30 As Predelli notes with respect to the original note P, if the wife arrived home early 31 or late, that wouldn't make the 'now' refer to her time of arrival; it would still refer 32 to 5 pm, when the writer expected her to read it. It would be rather odd, however, 33 for the writer to intend for the 'now' to refer to, say, 3:30, if he expects her to see it 34 at 5 pm. A principle in the philosophy of action holds that one can only intend to do 35 what one sees as having some chance of success, and there seems to be no chance of 36 success for the writer to refer to a time unless it is somehow salient from the situa-37 tion, as the time of leaving the note and the expected time of the wife reading the 38 note are. 39 In Reference and Reflexivity, I classified indexicals with a two-fold distinction (see 40

41 Table 1):

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Does designation depend on narrow or wide context? Narrow indexicals
 depend only on the constitutive facts of an utterance: speaker, time, place.
 Wide indexicals depend on other facts.

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4 5	Automatic	I, now*, here*	yea, $dthat(\alpha)$	
3		Narrow	Wide	
2	Types of indexicals			
1	Table 1			

Discretionary	Now, here	That, this man, there, he, she, it
 Is designation 	on 'automatic' given meaning	and public contextual facts, or does

it depend in part on the intentions of the speaker?

'Yea' is wide, because it depends on how far apart one holds one's hands as one 11 says it; it is automatic, because the distance between one's outstretched hands is the 12 distance to which one refers, whether one managed to match the distance one had in 13 mind or not. Kaplan's demonstrative 'dthat(α)' automatically refers to the object 14 which *in fact* fits the description α . The asterisks on the first cell indicates that 'now' 15 and 'here' are not really as automatic as they at first seem to be, since the interval of 16 time or region of space that one considers here or now depends on the intentions of 17 the speaker. These words without the asterisks appear in the automatic/discre-18 tionary cell. I assumed that the time referred to by 'now' and the position referred to 19 by 'here' would automatically contain respectively the time and place of the utter-20 ance, while the size of the containing interval or region was a matter of the speaker's 21 intention. The demonstratives in the final cell depend on both the intentions of the 22 speaker, and on further wide facts about what is salient to the speaker and hearer. 23

Accepting Predelli's analysis, we need to move 'now' and 'here' one cell to the 24 right. The facts relevant to their semantics are not only the narrow, constitutive facts 25 about the utterance: the speaker, and time and place at which it takes place. (Predelli 26 also has important things to say about 'I', but I will leave first-person issues aside in 27 this essay.) In principle, then, there is not a problem incorporating Predelli's point of 28 view into the reflexive-referential theory, aside from having to admit error, and some 29 sadness about the drift of words once regarded as solid indexicals towards the lower 30 right corner, the camp of demonstratives. 31

We can block this drift a bit if we incorporate the distinction between utterances and 32 tokens more directly into the typology of indexicals (see Table 2). We distinguish 33 34

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Table 2 36 Types of indexicals

38Narrow-U (limited to intervals of space/time around place and time of utterance)Narrow-T (limited to narrow-U or to intervals of space/time around some place and time of apprehension of the token)Wide4041	37				
40 of utterance) around some place and time of apprehension of the token) 41 42 Automatic I, now*, here* 43 Discretionary Now**, here** Now, here 44 44 5 That, this man, there, then, he, she, it	38				Wide
40 of apprehension of the token) 41 42 42 Automatic 43 Discretionary 44 Now, here That, this man, there, then, he, she, it	39			x ,	
41 42 Automatic I, now*, here* yea, dthat(α) 43 Discretionary Now**, here** Now, here That, this man, there, then, he, she, it	40		of utterance)	1	
43DiscretionaryNow**, here**Now, hereThat, this man, there, then, he, she, it	41			of apprenension of the token)	
there, then, he, she, it	42	Automatic	I, now*, here*		yea, dthat(α)
44 she, it	43	Discretionary	Now**, here**	Now, here	That, this man,
she, it	44				
45					she, it
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between indexicals that are discretionary only with respect to the interval of space or
time involved, and those that allow also a further choice about which expected
interaction with the token will determine as the reference of 'now'/'here'.

If we remove the indexicals in the first column that we have marked with asterisks, we are left with only 'I' as a narrow-u indexical, and with none that are narrow-u and discretionary.

6. A complication

Our picture of 'now' goes something like the following. When a speaker utters 11 something, the time of utterance is salient, and can serve as the intended semantic 12 value of 'now'. In any but face-to-face conversation, a meaningful distinction can be 13 drawn between perceiving the utterance and perceiving the token produced by, or 14 used in, the utterance. The speaker's plan may involve delayed apprehension of the 15 token. In that case, the speaker can intend to refer with 'now' to the time the token 16 is uttered or the time the interpreter will take him to have expected it to be appre-17 hended. In the answering machine locution 'I am not here now' the 'now' is natu-18 rally taken to stand for the time at which the recipient of the message hears it. This is 19 not automatic, but involves charitable interpretation. A doctrinaire Kaplanian's 20 answering machine may say, "I am here now, but not at the time you hear this 21 message." In that case, we'd take the 'now' to refer to the time the recording was 22 made. 23

If we make the same distinction with respect to 'here', however, things get a bit 24 more complicated, for one can distinguish between the place where the token is at 25 the time of apprehension, and the place where the apprehending occurs. Return to 26 the Jones case, and the alternative messages P and P'. With both messages, the 'here' 27 refers to the place the caller was expecting, or hoping, the person called to be; the 28 place where the telephone which has the number that was dialed is located. It does 29 not seem possible to make the 'here' refer to wherever the speaker is when the mes-30 sage is accessed, or to the place where the caller is when he hears the message. In 31 Predelli's case, the husband could have written "I am not here now," with the 'here' 32 referring to the house, the place where the wife is expected to read the note, and the 33 'now' to 5 pm, the time his wife is expected to read the note. But it seems that the 34 'here' refers to the house because that's where the note is at the time she apprehends 35 it, not because that's where his wife is at the time she apprehends it.² 36

³⁸ 2 Note also that in the case of the answering machine's message "I am not here now," it is the place 39 where the phone is or is expected to be, not the place where the answering machine is. Some answering machines are provided by telephone service providers, and are located miles from the phones they answer. 40 I may use such an answering machine, and in addition, for some reason or other, disconnect my phone 41 and bring it with me when I take a short trip. So there is no phone at my home, and the answering 42 machine you hear is not there either. Still, it seems that "here" refers to my home, the location where the 43 phone you were trying to call was expected to be. If you called my office, where I had also removed the 44 phone, and received a message from the same central location for answering machines, the 'here' would 45 refer to my office. The application of all of this to cell phones is left to the reader.

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Suppose Jones's situation was more dangerous than Predelli suggests. He called his wife and told her not to go home at all but to look through a telescope from a neighbor's house at a note he would leave on the refrigerator with instructions about what she should do. The note begins,

I am not here now,

In the situation, the 'here' seems to refer to the house where the note is, the 'now' to the expected time of perception of it. It does not seem possible to read 'here' as referring to the neighbor's house, the place of perception. If the note continued:

I am hiding there, in the front-hall closet...

the wife would look for her husband in the neighbor's front-hall closet. She would take 'here' to refer to the place where the note was, 'there' to the place where she was.

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19 **7. Conclusion**

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Let us return for a moment to the primordial utterance situation, where there is 21 face-to-face communication. A number of roles that later technology requires us to 22 separate are almost indistinguishable in this primordial situation. The roles of pro-23 ducer of the token, user of the token, and person taken to be the utterer by the 24 interpreter will all be occupied by the speaker. The time of the utterance, the time of 25 expected interpretation, the time of interpretation, and the time taken to be the time 26 of utterance or use will all be the same. The place of the utterance will be at least 27 close to the place of interpretation. In the primordial case, there is not much subtle 28 thinking to do about what counts as the time, agent, and location of the utterance, 29 and the semantic values for 'now', 'I', and 'here'. 30

Technology lets these roles come apart. Really good shouting is enough to change 31 things. The actual speaker may not be the person the speaker wants to be perceived 32 as the speaker. Wilma Flintstone may imitate Fred's voice and shout "I need you 33 over here!" as the surest way to get Barney to come quickly. Writing is of course the 34 big technical step. With writing the token takes on a life of its own; it stays around 35 after the utterance is gone, and even the speaker; it can travel long distances. The 36 producer of the token can plan on its being perceived in various places and various 37 times. The reader has to do a considerable amount of reasoning from token to 38 utterance. 39

Notes can be pinned on doors, left on tables, sent in letters, and so forth. A philosophy department, faced with a steadily diminishing budget, may use a Post-it note, 'I'll miss my office hours today," for years and years, after the actual producer of which is only dimly remembered. It can be regularly re-used for different faculty members on different days. This example is Eros Corazza's, who speaks of the contextual parameters as being "displaced" (Corazza, 2001). We can think of them as

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being displaced from the location and time of the utterance to occupants of various
of the other roles, sure to be the same in the primordial situation, but not in our
situation, with phones, email, recordings, post-it notes, and the rest.

The utterer can plan the context of interpretation of a token, with the contextual parameters being displaced to the occupants of any of the communicatively salient primordial roles, such as the expected time of interpretation. The intentions that comprise the plan are limited by the requirement that the speaker be able to expect uptake on the part of the interpreter.

9 Consider the answering machine message:

'I am not here now'

The 'here' refers to the place the hearer expected the phone to be answered. The 'now' refers to the time the hearer expected the phone to be answered.

In this case the caller's plan and the interpreter's reasoning use reflexive contents.
The caller's plan is for the interpreter to reason as follows:

An utterance u of 'I am not here now' is true iff the agent of u is not in the location of u at the time of u. So the (intended) time of u cannot be the time of recording; it is displaced. The relevant time is doubtless the time of interpretation, when his absence would explain his failure to answer the phone. The time of interpretation is now, so he isn't there now.

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It seems possible, then, to incorporate Predelli's insights into the referentialreflexive theory. Perhaps in the austere domain of logic worries about answering machines and Post-it notes may not be welcome. Perhaps, like the camel's nose under the tent, such concerns are best shoved back outside. The reflexive-referential theory of utterances seems a natural welcoming home for such worries, however.

One can be sure that neither Predelli remarks nor the tables two sections back are 29 not the last thing to be said about the little words 'here' and 'now' however. One 30 issue that seems particularly interesting is the use of 'there' and 'then' as what Hec-31 tor-Neri Castañeda (1967) calls 'quasi-indicators'. If I say, reporting a phone call to 32 Predelli in Oslo last week, "Predelli said that it was cold there then," I clearly imply 33 that Predelli said words to the effect of, "It is cold here, now". Castañeda saw this as 34 a special use of the words 'then' and 'there' to indicate in indirect discourse that the 35 statements reported used 'now' and 'here' or their equivalents. Suppose, however, 36 that Predelli had been in London when I called, but that I had been asking him how 37 it was the day before in Oslo, when he left for London. All of this is clear to you, 38 and I say "Predelli said it was cold there then". It seems that the 'there' and the 39 'then' refer to Oslo and the day before the call, and so clearly do not imply the use of 40 'here' and 'now'. Are these different uses for 'then' and 'there' within direct dis-41 course reporting? This is what Castañeda's theory implies, but I find it somewhat 42 unsatisfying.³ When we truly understand the little words 'now' and 'here' and their 43

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³ The most persuasive defense of Castañeda's view that I know of is in Corazza (in press).

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- companions 'there' and 'then', perhaps all this will be clear, with minimal appeal to
 ambiguity, or to different words with the same pronunciation and spelling.
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