

# *Interpretation and Indexicality*

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## Prelude: What are Indexicals?

The term indexical is used in many ways in the literature. On its most inclusive use, the term seems to pick out any kind of linguistic expression the content of which depends on the situation, or context, in which it is used. On this broad construal all the following expressions are indexicals:

*I, you, he, we, then, yesterday, now, here, over there, that, this, local*  
(as in *John went to a local bar*), *every bottle, all the students, strong*  
(as in *Steal isn't strong enough*), *the table, and many others.*

This list consists of expressions that are otherwise very different. *I, you, he, we* are pronouns, *here, now, yesterday* adverbs, *every bottle* a quantifier phrase etc. It is therefore highly likely that we will find that these expressions require quite different treatment. Hence, if we want the term *indexical* to have any substantive utility, we will need to constrain it considerably.

The most common way of doing so seems to be to construe indexicals as essentially *rule-governed* in the way they refer on an occasion of use. So, the category of indexicals, on this picture, may cut across different parts of speech such as pronouns, adverbs, quantifier expressions, predicates etc. For instance, one might think that a pronoun like *I* and a predicate like *strong* share the common feature that their content on an occasion of use – a person in the case of the pronoun, and a set in the case of the predicate – is determined by certain rules associated with the expressions. Both would therefore warrant the label *indexical*. Given this, whether or not some kind of expression is indexical or not depends on one's theory of how that kind of expression works in context.

Traditionally, however, theorists usually thought of indexicals as context-sensitive *referential* expressions. This narrows the field in that (at least) predicates like *strong*, adverbs like *local* and quantifier phrases such as *every bottle* (and perhaps incomplete definite descriptions such as *the table*) are ruled out. So on this picture, indexicals are first and foremost pronouns such as *I, you, he, that* and *this*, and adverbs such as *now, here* and *yesterday*.

The reason for this traditional way of carving the space seems precisely to be that most theorists would seem to agree that the way in which these expressions refer on a particular occasion of use is governed by rules, although the precise nature of these rules is highly contested, as is indeed the question of whether they should be regarded as rules of language, whatever that means.

The fundamental puzzle about indexicals, then, is *how* is this context-dependent reference achieved. Are there, for instance, linguistic *rules* which determine what an indexical refers to? Or are their reference perhaps more a matter of some kind of tacit negotiation between speaker and hearer? Or perhaps their reference just depends on what the speaker meant or intended?

All of these questions have deep consequences not only for the philosophy of language, but also for issues in philosophy of mind and epistemology. Indexicality is at the heart of the way we think and talk, and it is a well-documented fact that indexicality seems, moreover, to be *indispensable*. It has long been acknowledged that, given our cognitive limitations, it is impossible

to do away with indexicality. The phenomenon, therefore, cannot be relegated as a mere matter of a convenient way of facilitating communication; and by the same token, it requires more than just linguistic investigation. Philosophical problems arise and require philosophical solutions. This does not mean, however, that we should not recognize that indexicality is first and foremost a linguistic phenomenon, and the starting point of any kind of investigation of it, philosophical or otherwise, must therefore proceed from thorough examination of the role it plays in the way we use language to communicate with each other.

## Abstract

The paper objects to the treatment of descriptive uses of indexicals proposed by Nunberg (1993). It is shown that the arguments Nunberg presents are ineffective against a pragmatic account of these uses such as that put forth by Recanati (1993). The conclusion is that there are good reasons to believe that the deferred interpretation in question are generated by non-semantic processes involving extralinguistic factors such as the speaker's communicative intentions.

## 1 Introduction

This paper is concerned with some problems surrounding the interpretation of utterances containing indexical expressions. (I will often refer to such utterances as 'indexical utterances'.) In particular, the aim of the paper is to object to two arguments put forth by Nunberg (1993) regarding the interpretation of so-called descriptive uses of indexicals.

Nunberg presents a detailed and powerful theory of indexicality which he puts forth as an alternative to what he takes to be the inadequate standard view, namely the direct reference theory of indexicals. A version of the direct reference theory is endorsed by Recanati (1993) who directly engages with Nunberg's objections. In this paper, I will focus on Nunberg's objections, and I will not be concerned with the details of the direct reference theory. My aim is to show that Nunberg's two main arguments against the way the proponent of the direct reference theory handles descriptive uses of indexicals both fail.

Section 2 introduces the problem we are concerned with. Section 3 presents Nunberg's theory of indexicality. Section 4 objects to Nunberg's arguments. Section 5 attempts to draw some conclusions about the nature of utterance interpretation.

## 2 The Problem of Interpretation

One central problem of interpretation and indexicality is this: How do hearers arrive at the contents they do arrive at by interpreting utterances containing indexicals?

Let us take a somewhat naive perspective and think of things according to the following picture. An utterer produces a token of an English sentence containing an indexical expression. A hearer intercepts this token. What we are calling 'interpretation' is the process, whatever it is, by which the hearer is led from this interception to a state in which she entertains a certain content as a result of taking as input to the process the token produced by the utterer.

When the hearer has done this without erring along the way we are inclined to say that she has *understood* the utterance. In our everyday practices, we are often prepared to use locutions involving the verb *say* to describe something like the feature of utterances which is the target of hearers' interpretative processes; for instance, we have a practice of using notions such as *what is said*, *what the speaker says*, *what the speaker means to say* and so on.

As this suggests, we are prepared to distinguish between what is (literally) said by an

utterance and what a speaker means to say or communicate with an utterance. Correspondingly, we have at our disposal two intuitive notions of utterance understanding. That is, we can distinguish between understanding what is literally said and understanding what is meant by an utterance. To see this, we can note that it is possible to misunderstand what is meant while understanding what is said; and conversely it is possible to misunderstand what is said while understanding what is meant.

To illustrate, suppose Prof. X is the reader of the infamous student reference containing (1).

(1) This student is punctual and has excellent handwriting.

Suppose further that Prof. X were to interpret the utterance thereby made in such a way that the output content was simply that the student in question is punctual and has excellent handwriting. In this kind of case, normal practice does not hesitate in passing judgements like, "Sure, that was what the referee literally said in the letter, but Prof. X nevertheless still misunderstood; she didn't understand what the referee meant to say."

The reverse case is perhaps harder to construct. But it is perfectly possible to imagine that there could be a situation in which, for whatever reason, Prof. X interprets the utterance involving (1) such that on the one hand she takes *handwriting* to mean cooking skill; but on the other hand, she still takes the speaker to have intended to communicate the content that the student in question is not a good student. (Indeed, she might think that having excellent cooking skill is irrelevant for being a good student.)

This was Grice's (1989) point. At least at this level of analysis, we need a clear-cut distinction between the two types of content which we normally refer to by 'what is said' and 'what is meant', respectively. There is certainly no doubt that the way we talk about utterances outside our theorising makes such a distinction. It is natural to predict, then, that our theories will likewise need both notions to account for the phenomenon of utterance interpretation.

## 2.1 What kinds of Propositions can be meant by Utterances containing Indexicals?

A related question to the one we identified – how hearers get to understand indexical utterances – is the following: How comprehensive is the range of contents communicated by means of indexical utterances? In particular, availing ourselves of an established terminology of propositions, the question is: Are indexical utterances used to communicate only singular propositions, or are they also used to communicate general propositions? Roughly speaking, a singular proposition is a structured entity which contains an individual in the place corresponding to the subject of the sentence which is said to express it. By contrast, a general proposition is a structured entity which contains a property or a relation in the place corresponding to the subject of the sentence which is said to express it.

The answer to the present question seems at first hand straightforward. It seems to be an empirical datum that utterances containing indexicals are sometimes used to communicate general propositions. That is, there are cases in which, in order to count as understanding an indexical utterance, on one notion of understanding, it is required that the hearer arrive at a content which involves a property rather than an object. An example from Nunberg is (2).

(2) *Uttered by a condemned prisoner*: I am traditionally allowed to order whatever I want for my last meal.

Ordinary judgement does not hesitate in judging that a hearer who interprets the utterance in (2) such that the output of her interpretative process is the singular proposition involving the utterer misunderstands the utterance. Correct understanding, then, seems to require arriving at something

like a general proposition involving the property of being a condemned prisoner. Hence, it seems that an indexical utterance like the one in (2) can be used to communicate general propositions. (We return to the details of this case below.) In such a case, the indexical is said to be used *descriptively*.

The problem is whether this general content is arrived at by a process which, somewhere along the way, involves a literal content – in this case a singular content involving the utterer. Recanati thinks that it does; Nunberg thinks not.

Nunberg's paper presents an abundance of examples like (2) where it seems that an indexical utterance is used to communicate a general rather than a singular proposition. Recanati agrees that this conclusion is correct, but only for some of Nunberg's cases. Regarding these, Recanati holds a view according to which the general proposition is arrived at by a two-step interpretative process with a base level of literal meaning acting as input, the output being a level of non-literal, deferred content. As he says,

It is true that *both indexicals and descriptions can be used either referentially or descriptively*. [...] Yet, at the basic level, indexicals must be given a *de re* interpretation, contrary to definite descriptions. (Recanati (1993, 314))

By contrast, for reasons we shall consider in detail, Nunberg argues that these descriptive uses of indexicals do not render themselves to the two-fold treatment.

We should mention a caveat about Recanati's framework before moving on. Recanati is explicit that he holds a view according to which

the distinction between basic level interpretations and other, non-basic interpretations does not correspond to that between what is literally expressed (what is said) and what is merely 'conveyed'. Non-basic interpretations such as those involved in Nunberg's examples of deferred reference themselves constitute 'what is said' by the utterances which give rise to these interpretations. (Recanati (1993, 316))

So, why are we justified in following Nunberg in taking Recanati's position to be one where the basic level of interpretation – i.e. the level where *I* in (2) makes singular reference – is a level of literal meaning, the descriptive reading arising at the next level by a pragmatic process?

The reason has to do with the way Recanati uses the term 'pragmatic'. The crucial point is that although the basic level is reached via pragmatic processes applied directly to the sentence meaning composed out of the linguistic meaning of the terms, the basic level is defined by Recanati as "the level of interpretation which is reached when no optional p-processes [i.e. pragmatic processes] occurs." (315) In other words, the basic level is reached solely by mandatory processes. By contrast, the next level – i.e. the level to which *I* in (2) contributes a property – is arrived at by optional pragmatic processes.

In other words, the difference between Recanati's view and the view we, along with Nunberg, are attributing to him which takes the general readings of descriptively used indexicals as arrived at by implicature is merely a terminological difference. The important point is that Recanati holds that the pragmatic process by which we arrive at the general content involving the property of being a condemned prisoner by interpreting (2) is optional, whereas the process by which we arrive at the basic level, which is required for the next level, is mandatory.

I therefore take Nunberg to be correct in the relevant respects when he summarises Recanati's view as follows:

On Recanati's view, there is a coherent level at which indexicals like *I* can be given a "literal" interpretation where they refer directly, with their descriptive readings arising as a kind of implicature. (§4)

As we shall see, one of Nunberg's main arguments against this view is exactly that he thinks that such a putative basic level may involve contents which are incoherent.

### 3 Nunberg's Theory of Indexicality

In presenting Nunberg's theory I will focus on two aspects, which I take to be the most central. The first is a distinction Nunberg proposes to account for the meaning of indexicals. The second is his

view of the difference between referential terms such as indexicals and non-referential terms such as descriptions.

### 3.1 The Index-Referent Distinction

A central device of Nunberg's theory is a distinction between what he calls the *index* and the *referent* of an indexical. The former corresponds to what would traditionally be taken to be the contextually identified referent, i.e. roughly the value of the Kaplanian character associated with the term in question (where the context of utterance is the argument of the function). In other words, the index of *I* is the utterer, the index of *you* is the addressee and the the index of *tomorrow* is the day after the utterance. Nunberg reserves the term 'referent' to what is contributed to the output of interpretation.

One central purpose of Nunberg's examples, we can now see, is to show that the thesis that the index and the referent of an indexical are always identical, which Nunberg attributes to the proponent of the direct reference theory, is false. For instance, with respect to the condemned prisoner case, Jesse James serves as the index whereas the property of being a condemned prisoner is the referent.

The immediate question now becomes: What is the relation between index and referent? A perhaps natural view is to hold that the referent is obtained from the index by means of some pragmatic process. Thus, one might hold that the prisoner case should be accounted for by appeal to a distinction of the kind we sketched above, namely between literal meaning, what is said, and a content which is arrived at by pragmatic processes involving, among other things, the speaker's communicative intentions. As we have seen, Recanati opts for a picture essentially like this.

However, Nunberg denies that the cases of descriptive readings of indexicals should be accounted for in terms of pragmatic transfer. For him, it is the lexical meaning of the indexical which takes us all the way to the referent, via the index. Thus, he takes the meanings of indexicals to be

composite functions that take us from an element of the context [the index] to an element [the referent] of a contextually restricted domain, then drop away. (§2.5)

In other words, the meanings of indexicals are functions from indices to referents. This means that the process by which we are lead from Jesse James to the property of being a condemned prisoner is mainly a semantic process on Nunberg's view.

### 3.2 Asymmetry

Nunberg accepts that there is an asymmetry between referential terms such as indexicals and non-referential terms such as descriptions. Since descriptions can be used referentially just like, as Nunberg's examples show, indexicals can be used descriptively, the asymmetry cannot lie at the level of the range of interpretations.<sup>1</sup> Rather, what is at stake is exactly the question we pinpointed regarding how the descriptive interpretation of indexical utterances are generated. On Nunberg's view,

indexicals can have roughly the same range of interpretations that descriptions can: the utterances that contain them can express singular or general propositions, as the case may be. What makes indexicals exceptional is the manner in which their interpretation arises. A description characterizes its interpretations; an indexical provides an object [i.e. the index] that corresponds to it. (§2.5)

For Nunberg, then, the interpretation of the prisoner's utterance, i.e. the general proposition involving the property of being a condemned prisoner, arises out of two factors. One is the meaning of the pronoun, which first gives us the index, i.e. Jesse James. This object is now the object that

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<sup>1</sup> Donnellan (1966) famously showed that definite descriptions have both attributive and referential uses.

“corresponds to” the thing which ultimately goes into the interpreted content. But how exactly does that process work?

As Nunberg notes, a natural response would perhaps be to say that the property contributed by the indexical in the prisoner's utterance comes from the index, i.e. Jesse James. So, we would take one of Jesse James salient properties, i.e. of being a condemned prisoner, and let that go into the interpreted content. However, Nunberg argues that this will not cover the broad range of non-referential uses of indexicals. We do not have to go into the details of this. The important thing is that Nunberg concludes that

most of the work of specifying the interpretation is accomplished in the contextual background, rather than by the utterance, in a process mediated by speaker's intentions, the linguistic context, considerations of relevance and so on. Taken together, these factors define a domain of possible referents, along several dimensions. (§2.3)

With respect to our favourite example, it is easy to see why this appeal to broad contextual factors is needed. Even if we agree that the meaning of *I* can take us all the way to a referent which is distinct from the index, it is implausible that *for any case*, the lexical meaning will pick out the particular referent that an interpreter must hit upon to achieve understanding in that case. It is no part of the meaning of the pronoun which deters us from selecting as referent say the property of being a male individual whose first name starts with a *J*. It is because we share some vital information with the speaker, e.g. that he is a condemned prisoner.

This is the reason that, as we saw, Nunberg holds that the meanings of indexicals are functions from indices to contextually constrained domains. Yet, this also means that the process by which we arrive at the interpretation involving the property is not a *purely* semantic process, on Nunberg's view. This prompts the question of why, in that case, Nunberg still thinks that the Recanati type view is wrong. As indicated above, one reason is that he thinks that in cases like the prisoner case, the putative literal content would be incoherent. The central point of this is that if this is correct, then the process by which we arrive at the general interpretation is, contrary to Recanati's claim, not optional.

I will first examine in detail Nunberg's arguments for taking the process of deferred interpretation to be non-pragmatic. I shall then return, in the conclusion, to the point about optionality.

## 4 Are deferred Readings arrived at by Pragmatic Processes?

Nunberg has two main arguments for denying an account of the index-referent divergence involved in cases like the condemned prisoner's utterance (2) in terms of pragmatic transfer. The first argument attempts to establish that the putative literal level of interpretation might involve incoherent contents. The second argues that there is a significant difference between the processes of deferred interpretation in cases like (2) and ordinary processes of pragmatic transfer.

### 4.1 First Argument: Incoherence of Literal Content?

The first argument is expressed in the following passage:

sentences containing descriptive uses of indexicals may be incoherent if the indexicals are interpreted as making singular reference. [...] In context, the adverbs *usually* and *always* [and *traditionally*] must be understood as involving quantification over instances, but these readings are not possible if the subjects of the sentences are interpreted as referring to individuals or particular times. So it is hard to see what coherent “literal” interpretations we could assign to these utterances. (§4)

We normally have no problem with using referential terms referentially in environments that are controlled by these adverbs. We can say things like “Nunberg usually makes good points” etc. Rather, the thought is that reading *I* in (2) as contributing Jesse James to the interpretation conflicts

with what is contributed by the adverb, which is analysed as a quantifier. On the contrary, I will argue that there is no such conflict.

Suppose we read *I* in the prisoner case as referring to Jesse James. That reading is represented by (3).

(3) Jesse James is traditionally allowed to order whatever he wants for his last meal.

One influential proposal for treating adverbs such as *usually* and *traditionally* as quantifiers is given by Lewis (1975). On the view Lewis opts for, the adverbs in question are regarded as quantifiers over what he calls 'cases', where a case is a tuple of participants which provide values for the free variables in the sentence embedded under the quantifier. Lewis also presents persuasive arguments that the adverbs cannot be taken to be quantifiers over moments of time. So, charity compels us to not read Nunberg's "instances" in this way. Lewis' apparatus of cases therefore seems congenial to Nunberg's thought.

A case is an admissible assignment of values to the free variables that are used to represent the participants in the cases. As a device for restricting which assignments, or cases, are admissible, we can adopt Lewis' idea of using if-constructions. Following Lewis' recipe, then, we analyse (3) roughly as follows:

(4) Traditionally, if *x* is Jesse James and *x* is a condemned prisoner, *x* is allowed to order whatever *x* wants for *x*'s last meal.

We would then regard *traditionally* as an unselective quantifier, the resulting truth conditions requiring the embedded sentence in (4) to be true in most admissible cases/assignments, i.e. those that satisfy the if-clause.

This means that we are analysing *traditionally* like we would *usually*, i.e. as inducing truth conditions in terms of *most* cases. To be sure, it might be argued that *traditionally* has features that *usually* does not, but I ignore these complications, since they arise as artefacts of the case at hand. The example serves the same purpose if formulated with another adverb, as Nunberg's other cases clearly suggest. Similarly, if it is found that *traditionally* should work more like *always*, then the same point applies that this adverb is likewise one used by Nunberg to construct examples about which the claim about the incoherence of the singular reading is put forth.<sup>2</sup>

It might be questioned why we are allowed the specification in the if-clause that *x* be a condemned prisoner. The thought might be that, since this must be drawn from the extralinguistic context, we have abandoned Nunberg's semantic project. However, this problem is also a problem for Nunberg. As we saw above, he allows that the context does a lot of work in preparing the work for the lexical meaning to pick out the referent, via the index. So, we may take it that (4) is a plausible candidate analysis of the singular reading of the original utterance in (2).

In other words, we are now analysing (3) as meaning something like that in most cases where Jesse James is a condemned prisoner he is allowed to order whatever he wants for his last meal. Nunberg's claim about incoherence then seems to be motivated by the thought that one cannot order one's last meal more than once. I now want to make two related points regarding Nunberg's first argument.

1. *The singular reading does not lead to incoherence.* It is clear that if (4) is the right analysis of (3) and its truth conditions are as suggested above, then the reading of the original (2) on which *I* makes singular reference is certainly not incoherent. Indeed, (3) is not even intuitively incoherent. One way of bringing this out is to notice that by adjusting the setting, we can construct a context of utterance such that there is a strong intuition that (3) is true relative to that context.

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2 Cf. for instance Nunberg's example, "Tomorrow is always the biggest party night of the year." (§4)

For instance, imagine a world in which there is no tradition that condemned prisoners have a privileged last meal. In this world Jesse James is a notorious criminal who has been sentenced to death a large number of times. However, each time he has been standing at the gallows with the noose around his neck, he has been pardoned at the last moment. Over the years, a tradition has evolved by which Jesse James is allowed to order whatever he wants for the meal he has on the night before he walks to the gallows. Our intuition is clear that, in such a world, an utterance of (3) is true. Indeed, it seems that, in such a world, the most natural interpretation of the original utterance in (2) is one on which *I* makes singular reference to Jesse James. (We return to this last point below.)

This shows that, whatever we might think of it, the singular reading of (2) is not incoherent, as Nunberg claims.

2. *Truth value intuitions about the singular readings vary depending on the context of utterance.* Parallel to the above, we are likewise able to construct situations relative to which we get the clear intuition that (3) is false. Just take a world where there is no tradition about the last meals of prisoners at all.

In other words, it seems that our intuitions about the truth value of (3) vary depending on which world we are evaluating at. This shows that (3) has intuitively clear truth conditions, and as I have suggested one proposal for analysing them is the one above using Lewis' treatment of adverbs of quantification.

This does not alter the fact, of course, that our intuitions regarding the status of (3) in our own world are clouded by the fact that, barring fantastic escapes etc., one does not get to order one's last meal more than once. Why is this?

I think the reason is very similar to the reason that our intuitions about case like (5) seem unclear.

(5) *Uttered about a room which contains one single book which is black:* Most books in the room are black.

In standard treatments of generalised quantifiers, *most* receives a clause of the following rough approximation (where *F* is the set of *F*s and *G* is the set of *G*s):<sup>3</sup>

(6) 'Most *F*s are *G*s' is true iff  $|F \cap G| > |F - G|$ .

On this analysis, then, (5) is true iff the set of things in the room which are both books and black is larger than the set of things in the room which are books but are not black. Consequently, on this analysis, (5) comes out true. This analysis corresponds to the intuition that 'strictly speaking' *most* means more than half.

Nevertheless, ordinary speakers are likely react to the utterance in (5) with puzzlement. Yet, it is not unlikely that they could relatively quickly be brought to agree that the utterance is in fact true, although inappropriate. One way of seeing this is by comparing the utterance with the corresponding one using *all*, as in (7).

(7) *Uttered about a room which contains one single book which is black:* All books in the room are black.

We have no hesitation in judging the utterance in (7) true. Furthermore, 'All *F*s are *G*s' entails 'Most *F*s are *G*s'.<sup>4</sup> Realising this, along with the recognition of the truth of (7), should lead us to accept the

<sup>3</sup> See for instance Larson & Segal (1995, ch. 8).

<sup>4</sup> It might be observed that if, as is standard, 'All *F*s are *G*s' expresses the subset relation between the *F*s and the *G*s, i.e.  $F \subseteq G$ , then for the



truth of (5).

The sense of infelicity we get from (5) is thus best explained as arising from the fact that it is, as we put it above, true but inappropriate; that is, it is hard to see what anyone could intend to communicate with such an utterance, although literally true.

This suggests that there is a persuasive case to be made that the utterance in (3) shares the same feature of being true but inappropriate, given that *traditionally* is analysed as a quantifier the truth conditions of which parallel those of *most*. In other words, in a world like our own where prisoners do not get to order their last meals more than once, the utterance in (3) is true but inappropriate. It is true because the number of cases in which Jesse James as a condemned prisoner did get to order whatever he wanted for his last meal, namely 1, is larger than the cases in which he did not, namely 0. But it is nevertheless infelicitous, since it is hard to see what anyone could want to communicate by uttering it.

To sum up, Nunberg's first argument against the view that the general reading of *I* in the prisoner's utterance (2) is generated by pragmatic transfer fails. The singular reading is not incoherent. As we saw, it has intuitively clear truth conditions although bringing them out requires some reflection. With respect to our own world, the utterance is true, although conversationally peculiar.

Furthermore, we might ask ourselves why, even if it *were* incoherent, that would show that the general reading cannot arise out of a process of implicature or a similar mechanism of pragmatic transfer. Indeed, it seems most likely that strong reasons could be given that such cases where what is (literally) said is incoherent – as for instance an utterance of 'John is both a lawyer and not a lawyer' – generate implicatures in predictable ways.

## 4.2 Second Argument: Indifference of Expression Choice?

Nunberg's second argument for rejecting that the readings in question are generated from pragmatic transfer is expressed in the following passage:

such a process would be expected to be indifferent as to whether the initial reference to the index was accomplished via indexical reference or the use of a proper name or referentially used description. These disparities could only be accounted for by postulating a semantic apparatus of some sort, which is to say that there must be a semantic provision for deferred interpretation. (§4)

This argument strikes me as stronger than the first one. Still, it will be fruitful to examine it in some detail before concluding anything from it.

Let us compare two scenarios. The first is the original one where Jesse James utters (2) using *I*. In the second scenario, a bystander utters the alternative (3). (Both repeated here.)

- (2) *Uttered by a condemned prisoner*: I am traditionally allowed to order whatever I want for my last meal.
- (3) Jesse James is traditionally allowed to order whatever he wants for his last meal.

Although the passage quoted above is somewhat condensed, I believe it would be most charitable to read it as presenting the following argument about the difference between these two utterances: If the process which takes us from *I* in (2) to the property of being a condemned prisoner is a pragmatic process, then it should be possible to move from *Jesse James* in (3) to the property of being a condemned prisoner *by the same kind of process*. Since this is not possible, the process involved in (2) is not pragmatic but semantic.

I believe that it is possible to use (3) to communicate the general content. As we did earlier,

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entailment to be validated the clause in (6) must be amended so as to allow for the case in which  $F = \emptyset$ . So, the right-hand side of the biconditional in (6) should read ' $|F \cap G| > |F - G|$  or  $F = \emptyset$ '. I ignore this complication on the grounds that the entailment I am appealing to is merely an intuitive one. It is unquestionable that such an entailment holds in all the cases where  $F \neq \emptyset$ .

we can test our intuitions by varying the context of utterance.

Suppose we are in a world where there is only one condemned prisoner, namely Jesse James, and no one else has ever been condemned to death. Further, after James was given his sentence, capital punishment was abolished. So, James is the only prisoner that ever has been, is or will be condemned to death. Finally, James has been scheduled to receive his punishment several times, but each time the carrying out of the sentence has been held up by unexpected mishaps. Now imagine the following dialogue taking place in this world:

A: Is a condemned prisoner allowed to order whatever he wants for his last meal?

B: Jesse James is allowed to order whatever he wants for his last meal.

Given this stage-setting, we get a strong intuition that B's utterance communicates the content that a condemned prisoner is allowed to order whatever he wants for his last meal. What B is trading on is James' property of being a condemned prisoner. And she can do this in answer to A's question because, in this case, James is the only one who has that property.

Now, whether this proves Nunberg's claim about the difference between the two utterances wrong depends on to what extent we can assimilate the process of transfer involved in B's utterance to the one which is involved in the original case, i.e. (2).

Above (4.1) I argued that the singular reading of (2) is coherent and has firm truth conditions. It is attractive to think that the way in which the general content about condemned prisoners is generated is very similar to the way it is generated from B's utterance. What difference is there between the two cases, other than the fact that the *ease* by which we move to the deferred content depends on the contextual backdrop?

In other words, it seems that the process by which we arrive at the deferred content is indifferent to the choice between an indexical or a proper name, contrary to what Nunberg claims.

## 5 Concluding Remarks

The upshot of the above is that Nunberg has failed to establish that the deferred, descriptive interpretations of indexicals are generated by processes which are significantly different from familiar processes of pragmatic transfer, such as the one which takes the interpreter to the general proposition in the case of B's utterance of (3) using the proper name *Jesse James*. Thus, it seems that there is still room for a position like Recanati's.

As described earlier, the central point of Recanati's view is that the deferred interpretations are generated by pragmatic processes which are distinguished by their optionality. Since, as we saw, the singular reading of the indexical utterance in (2) is not incoherent, as Nunberg argued, it seems that the process by which interpreters arrive at the general content involving the property of being a condemned prisoner is indeed optional. That is, whether the process kicks in depends on the contextual background involving, among other things, the speaker's communicative intentions. The same point clearly applies to the general interpretation of (3) containing a proper name.

Recall that we said that intuitively there are two different notions of utterance understanding, i.e. of interpreting utterances successfully. On one of them, a hearer has interpreted the utterance correctly when she arrives at its literal content, what is said. On the other, understanding requires hitting upon the content the speaker intended to communicate with the utterance.

I believe that a lot of the appeal of a view like Nunberg's comes from our sense that a hearer who does not move to the deferred, general interpretation of (2) is intuitively guilty of having misunderstood the utterance in the second sense, whereas she might be said to have understood the utterance in the first sense. This is parallel to the case where Prof. X simply takes the student reference to mean that the student in question is punctual and has excellent handwriting. In these

scenarios, there is a sense in which the further process of deferred interpretation is *not* optional, i.e. it must be undertaken in order to achieve understanding in the sense of interpreting correctly what the speaker intended to communicate.

But it might be questioned why we need the notion of understanding the literal content at all. In cases where the literal content and the intended content diverge, there is a strong intuitive pull towards not attributing understanding unless the intended content is arrived at. In the cases where the literal content and the intended content coincide, understanding could then be explained by the same notion of understanding the speaker's intended content.

However, it seems that there are cases where we particularly need the notion of literal understanding. One way of seeing this is to imagine a scenario in which the hearer has no way of accessing what the speaker might have intended with the utterances. For instance, imagine that the hearer of (2) only possesses the information that the speaker is Jesse James, but knows nothing about James' doings or the traditions pertaining to condemned prisoners. In such a scenario, the singular, non-deferred, interpretation of the utterance is the most reasonable one for the hearer to opt for. And significantly, it would be wrong to say that in such a scenario the hearer has failed to understand the utterance; it is just that she did not have all the information required to realise that the speaker had a different communicative intention.

Consequently, it seems that the Gricean premonition that our theory of utterance interpretation will need both notions of what it is to interpret an utterance correctly is reinforced.

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## *Who Has My Thoughts?*

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The too many minds problem can be adapted to attack nearly every account of personal identity. The problem can be phrased loosely as a question: why do certain things count as people and others not? For example, if this human organism is a person, why isn't this brain also a person? It seems to be thinking; but I (the organism) insist that I am the person, and the brain is just a part of me. The problem also arises as an objection to "perdurantist" theories that maintain that persons persist by