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IN DEFENSE OF THE DEMONSTRATIVE/INDEXICAL DISTINCTION

Paul R. BERCKMANS

Many philosophers have expressed the belief that the sentence 'I am here now' is true each time it is asserted. In a recent paper, G. Vision has given examples of utterances of 'I am here now' which are false.([1]) Here are his examples:

> [S]uppose that I am lost in an unfamiliar part of Chicago. I take out my map, put my finger on a certain location and begin saying to myself (or to my companion) '*Let's see, I am here now...* .' In fact, I have pointed to a part of the map corresponding to a mile north of my present location. (What my finger points to is not the same as what my term refers to. My finger points to a green quadrate on a piece of paper. My term refers, say, to a public park.)([2])

> I come home unexpectedly at midday and go upstairs to rest. My wife is out, but when she comes home at the usual time (say, two hours hence) I suspect that she will sit downstairs waiting for my arrival. To prevent her wasting this time I seek to inform her of my presence by writing a note that begins 'I am here now... .' Of course, I intend it to be read two hours after it is written. But I am awoken after fifteen minutes by a sonic boom, and distractedly leave the premises without picking up my note, which my wife then reads after I have left. If 'now' refers to the time she reads it, consistently with my expectations, what I wrote is false.([3])

In response to criticism by Julia Colterjohn and Duncan MacIntosh charging that his claim holds only if 'here' is used demonstratively (rather than

([1]) Gerald Vision, "I am Here Now," *Analysis*, 45.4, 1985, pp. 198-199.

([2]) Op. Cit., p. 198.

([3]) Op. Cit., p. 199.

indexically), Vision argues that the distinction between 'indexical' and 'demonstrative' is based on confusion.([4]) Although I agree with Vision's original claim, I believe that too many of the arguments advanced in this debate are based on *ad hoc* conjectures. My aim is to present a general framework for the analysis of indexicals and demonstratives. This analysis will provide a ground for the claims (1) that there is a justified distinction between the demonstrative use of a term and the indexical use of a term, (2) that we shouldn't attempt to reduce indexical uses to demonstrative uses, and, (3) that in false occurrences of 'I am here now' the terms may be used demonstratively or indexically.

The distinction between indexicals and demonstratives has been made by such philosophers as Frege, Peirce, Reichenbach and Russell, and a contemporary discussion can be found in Kaplan's widely circulated manuscript *Demonstratives*([5]) and in "Dthat"([6]). Although there is much disagreement about *how* indexicals and demonstratives refer, we do find the common view that a term is used indexically when the referent of the term is dependent on and determined by the context of use. A term is said to be used demonstratively only if the utterance is accompanied by a demonstration which points to the object for which the term stands. Such referring expressions accompanied by a demonstration are called demonstratives. Here are two illustrations:

(1) Oh, I see you bought Tiffany's new record! That's a nice album.

(2) I'll have that piece of cake [speaker points to piece of cake].

We say that in (1) 'that' is used indexically: the linguistic context establishes the referent of 'that.' We say that in (2) 'that' is used demonstratively if we assume that the speaker, when uttering (2), points to the intended piece of cake, and if we assume that without the accompanying demonstration one could not identify the referent. To say that 'here' or 'now' is used indexically in Vision's examples would amount to showing that in both examples

([4]) Julia Colterjohn and Duncan MacIntosh, "Gerald Vision on Indexicals," *Analysis*, 47.1, 1987, pp. 58-60; Gerald Vision, "Antiphon," *Analysis* 47.2 1987, pp. 124-128.

([5]) *Demonstratives* has now appeared in print in *Themes From Kaplan*, Joseph Almog, *et al.* eds., New York: Oxford University Press, 1989.

([6]) *Contemporary Perspectives in the Philosophy of Language*, P. French, T. Uehling Jr., H. Wettstein, eds., Morris: Minnesota University Press, 1978, pp. 383-400.

the linguistic context determines the referents. But the absence of a relevant linguistic context together with the presence of a relevant demonstration in the first example suggests a demonstrative use of the terms. I regard the first example as quite uncontroversial, but the addition of Vision's second example will require a general account which will also work for the first.

I believe (for reasons on which I cannot elaborate) that Vision is right if he denies any relevant distinction between indexical uses and demonstrative uses at the sentence level. Linguistically or logically (in so far as we are concerned with sentences or propositions) there is little justification for a distinction between an indexical occurrence of a term and a demonstrative occurrence of a term.(7) However, when we talk of *uses* of terms (as Vision's critics do), we talk about terms as parts of utterances. This suggests that, if we want to maintain a demonstrative/indexical distinction, we should argue for a distinction between what I will call demonstrative utterances and indexical utterances. A demonstrative utterance is simply an utterance containing a referring term accompanied by a relevant demonstration. An indexical utterance is simply an utterance containing an indexical. Superficially we might say that a demonstrative utterance is an indexical utterance together with a relevant demonstration (thus mirroring the relation between indexicals and demonstratives), but I want to suggest that we can find a more profound dissimilarity that has to do with a differing degree of intentional complexity.

I have presented elsewhere an elaborate account of demonstrative utterances which may shed some light on the present discussion.(8) Consider the following explication (D):

(D) By uttering U(d), S d−utters U(d) iff S utters U(d)

(1) making a gesture g

(2) intending that H recognize that g is in some way c correlated to d

(3) intending that H fix his attention to O(d) on the basis of H's recognition of (2)

(7) Kaplan, for example, holds that both indexicals and demonstratives refer directly without the mediation of any Fregean *Sinn* whatsoever.

(8) Paul R. Berckmans, "Demonstrative Utterances," *Philosophical Studies*, 60, 1990, pp. 281-295.

(4) intending that H, on the basis of his recognition of (3), form some appropriate belief *p*,

where 'U(*d*)' stands for any utterance U containing a singular denoting term, '*d*' represents the denoting phrase, and the referent of '*d*' is designated as 'O(*d*);' the more neutral term 'gesture' is abbreviated as '*g*.'

The analysis stipulates, in condition (1), that the gesture should be intentional, and, in condition (2), that the gesture should be intended to relate to the denoting part in the sentence. The intended recognition of the correlation between the gesture and the denoting phrase, expressed in condition (2), is very important insofar as it will help the hearer pick out the referent. Ultimately, however, the speaker wants to bring about that the hearer attend to the referent, rather than merely have the hearer recognize the relation between the gesture and the referring term. Since the whole point of a demonstrative utterance is to enable a hearer to pick out some unique individual, the explication must make clear that the hearer should recognize, or understand, that he is intended to attend to the referent, on the basis of his recognition of the correlation between the gesture and the referring expression. This is expressed in (3). Finally, if we demand that the analysis of demonstrative utterances express the point or the purpose of the utterance, a last stipulation must be added. Speakers want to achieve more than just having the hearer attend to the referent. We must keep in mind what a demonstration does for an utterance: it helps out the referring term when its referent cannot be determined by the context. But had the context been different, the speaker would not have needed a demonstration, and his utterance, without the accompanying gesture, would have been quite sufficient. It seems obvious and quite uncontroversial that a speaker, by uttering a demonstrative utterance, desires to express what he would have expressed in a nondemonstrative context. So, for example, by uttering (2) the speaker expresses roughly what he would have expressed by uttering (3):

(2) I'll have that [points to piece of cake] piece of cake,

(3) I'll have the cheese cake.

I shall call (3) the equivalent nondemonstrative form of (2). It seems then that the analysis should stipulate that the speaker intends that the hearer form some belief about the equivalent nondemonstrative form. Condition (4) describes the speaker as intending the hearer to form some belief *p* about

the nondemonstrative form of the demonstrative utterance, on the basis of his (the hearer's) recognition that he should attend to the referent.

The preceding discussion should make obvious some essential differences. First of all, it seems that hearers understand demonstrative utterances in different ways than they understand indexical utterances. In order to grasp the meaning and force of a demonstrative utterance, hearers need the assistance of a speaker's gesture. Conventions of language, in contrast, seem sufficient to determine the meaning and force of indexical utterances and also to determine referents of the denoting terms they contain. General accounts of indexical utterances can thus best be dealt with by our familiar speech act theory and our customary theories of reference: speaker's intentions associated with indexical utterances are no different from the intentions we usually think present when a speaker utters an utterance. Those intentions, we may suppose, are the sorts of intentions about which Grice and Austin have written. The demonstrative cases, however, do require a more complex intentional account not captured by a traditional intentionalist analysis.

If we want to maintain the proposed distinction successfully, we should now have to demonstrate (1) that the conditions associated with demonstrative utterances cannot be reduced to the conditions associated with indexical utterances, and (2) that the distinction does not entail any other distinctions which I would not want to maintain.

(1) I can think of at least one reductive account of demonstrative utterances which, at first glance, seems quite compelling. Proponents of that account will tell us that demonstrative gestures should be treated, quite literally, as contextual features of the utterance. Among contextual features, taken in a broad sense, we count linguistic contexts (including syntactic, semantic and pragmatic contexts), and also those conditions which enter into the determination of the extension (and thus the truth value) of an expression. Let us call the items in the second group, with David Lewis, *coordinates*.(9) Examples are time coordinates ('Today is Tuesday'), place coordinates ('There are no snakes here'), et cetera. Why, then, not say that the accompanying gesture is precisely a contextual feature of that sort, and why not call it 'the gestural coordinate?' If we accept such a proposal (which of course requires much more work), my distinction collapses. However, important differences between gestural coordinates and the other coordinates

(9) David Lewis, "General Semantics," *Semantics of Natural Language*, Donald Davidson and Gilbert Harman, eds., Dordrecht: D. Reidel Publishing Co., 1972.

weigh heavily against that strategy.

A first important difference between a gestural coordinate and other coordinates, say, a place coordinate, is this. Coordinates are coordinates for an index (an expression, a function). The coordinates themselves are facts or states of affairs which require no semantic interpretation; they themselves are not indices, and their existence solely codetermines the extension of the index. However, unlike coordinates, gestures themselves are indices. Gestures are bodily movements which are interpreted presumably in function of some other set of coordinates. There seems something wrong about using an index (the gesture) to codetermine the extension of another index (the utterance). The function of gestures can perhaps best be described as that of a mediator, a facilitator, between coordinates and their expression. The gesture relates, as it were, an expression to various coordinates which then determine the extension of the term. In 'There is a cat [points to cat]', for example, the gesture links 'there' to the relevant place coordinate, and in 'He [points to person] is the one who took my wallet', the gesture links the referring term to what Lewis calls the *indicated–objects coordinate*. But gestures do not behave like coordinates, nor do coordinates behave like gestures.

(2) We can formulate a second challenge to my account. It could be argued that any demonstrative/indexical distinction should be made in such a way that it can also cope with an analogous distinction between demonstrative thought and indexical thought. My analysis doesn't seem to do that very well. I believe we should be able to make that distinction had we argued that the demonstrative/indexical distinction is based on differences in semantic content of the propositions expressed. But one could argue that the thought expressed in a demonstrative utterance can best be described as the thought expressed by the nondemonstrative form. We can add that the thought expressed by the indexical counterpart of the demonstrative utterance is equivalent with the thought of the nondemonstrative form.
Take this example:

(2) I'll have that piece [speaker points to piece of cake].

(2') What's that there next to the Key lime pie? Cheese cake, you say? Good! I'll have that piece.

(3) I'll have the cheese cake.

It appears that (2), (2') and (3) express — roughly — the same thought, and also, that (2) and (2') differ only insofar as they are different kinds of linguistic acts, but as far as content is concerned we need not worry about making a distinction.

Let me return to Vision's examples. The first one is complicated by the fact that we deal with a case of deferred ostensive reference. In cases of deferred ostension some object *a* is pointed to, but some other object *b* is actually referred to. Since my analysis of demonstrative utterances is quite literal we need to modify it even further to eliminate the erroneous interpretation that the speaker is referring to the spot on the map. I will address this difficulty by introducing Geoffrey D. Nunberg's theory of deferred ostension.([10]) He argues that successful accounts of demonstrative reference must include a theory of how the hearer's knowledge of the *demonstratum* (the object pointed to) will enable him to pick out the referent of the denoting phrase. The theory will provide a function which contains the *demonstratum* as its argument and which returns the referent as a value. This function is called the 'referring function' of the use of a term. An act of ostensive reference will be said to be successful just in case the hearer can identify the referring function. So if *a* is a *demonstratum, b* the actual referent, the function 'f(*a*)' is the referring function. Let us reconsider an intended example of a demonstrative utterance:

(4) Oh, I hate those flowers [S points to gardenias]!

In (4), the speaker intends to refer to the gardenias as a variety of flower rather than the actual arrangement of gardenias to which she points. What is the referring function? Since a token (the arrangement of flowers) is pointed to, and the type (the variety *Gardenia*) is referred to, the referring function could be formulated as '*a* is a token of type *b*,' or '*a* is a specimen of variety *b*.' The hearer will, by hypothesis, evaluate any applicable functions (including the identity function) which describe any possible relations between the *demonstratum* and possible referents which are not identical with the *demonstratum*. The hearer will then choose that function which selects the most plausible referent. Other examples of functions which are used as referring functions include '*x* is a picture of *y*,' '*x* is the color of *y*,' '*x* represents *y*,' '*x* is identical with *y*.' Determining how exactly the

([10]) Geoffrey Nunberg, *The Pragmatics of Reference*, Indiana University Linguistics Club, 1978.

process of choosing the appropriate function works is a matter of concern for psychologists. While many points of the application of Nunberg's theory deserve a more thorough explication, I propose to accept the view that referring functions explain, at least in principle, how deferred ostension works in the context of my analysis of demonstrative utterances. We must be careful that adding that stipulation will not make the analysis too strong for cases of ordinary reference. But on the view which I have presented, ordinary reference can be construed as a very special case of ostensive reference in which the intended chosen referring function is the identity function. The only difference, then, between ordinary demonstrative reference and deferred ostensive reference is a difference in the chosen referring function, and consequently no special accommodations for ordinary reference need to be made. I propose (D') as the correct account of demonstrative utterances (where RF is a dummy for 'Referring Function'):

(D') 'By uttering U(*d*) S d−utters U(*d*)' iff S utters U(*d*)

fulfilling conditions (1), (2), and (3) of definition (D), and

(4) intending that H, on the basis of his recognition of (3), and on the basis of H's application of RF, form some relevant or appropriate belief *p*.

Condition (4) in its modified form is intended to capture cases of deferred ostensive reference as well as ordinary reference.

Let us now pick up Vision's examples again. The first example must be broken down into two distinct cases. The first one, which involves a speaker telling his companion 'I am here now' is a paradigmatic case of a demonstrative utterance involving deferred ostensive reference. The speaker demonstrates a spot on the map while referring to a location in Chicago; here, the referring function may be '*x* represents *y*.' But the demonstrated spot on the map doesn't represent his true location, the referential function is incorrectly assigned and yields a false occurrence of 'I am here now'.

The second case involves a speaker (pointing to a map) saying to himself: 'I am here now.' Given the absence of an audience and the knowledge that it is already clear to the speaker what the referent is, we can hardly attribute the sorts of intentions associated with a demonstrative utterance and we should then have to conclude that the speaker has uttered 'I am here now' indexically. The pointing in the example can be thought of as similar to the

sort of superfluous pointing to oneself when asking 'Who, me?' But to accept the example as an indexical utterance is problematic too. If we let the context of use determine the referent here (without taking into account the demonstration) we end up assigning to 'here' the place of utterance. But that is not what the speaker has in mind. If we do consider the demonstration as relevant, we cannot regard it as a merely superfluous gesture. One obvious way out (the standard Gricean answer) is to point out that had an audience been present, the speaker would have had those intentions. We can only make sense of the idea of *talking to oneself* after we have made sense of talking (communicating) in a communication situation. One might, alternatively, disqualify the example as an act of saying anything at all if one thinks of talking to oneself as thinking out loud. The question then is not if statements of 'I am here now' can be false but whether one can *falsely* think 'I am here now.' Acts of talking to oneself are hard to deal with for any theory of linguistic communication. The question whether the utterance in Vision's example is indexical or demonstrative cannot be settled without first determining the status of talking to oneself. That, of course, I cannot do here. But I do want to show that there exist false utterances of 'I am here now' that are clearly indexical. Suppose that while traveling in Italy I board a train thinking that it will take me to Bari. In reality, however, the train will be heading towards Brindisi. Immediately after arriving in Brindisi (the train ride was very unpleasant) I call my friend in Rome to tell him: 'I never thought going to Bari would be such an undertaking. What a hassle! But, oh well. I am here now.' I have just said something false. I also *falsely* think 'I am here now' I have just used 'here' to intimate that 'here' means 'Bari,' although (unbeknownst to me) I am in Brindisi. Presumably, my friend in Rome will be able to determine the referent of 'here' solely on the basis on the linguistic context.

Vision's second example is more complex, but in principle no different than the first. The example can best be understood against the background of a similar example. Imagine an eccentric business executive's office whose walls are covered with poster boards. Newspaper letters glued on the boards form such sentences as 'I am out to lunch,' 'I am in a meeting right now,' 'sell,' 'I am here now.' He has his secretary announce his appointments in his office, and when he doesn't feel like talking, he simply points to the board with the inscription 'I am out to lunch,' saying 'Tell him this,' intending that the secretary will tell the caller that he is out to lunch, and thus sending away his appointment. When willing to meet with visitors he points to the board with the inscription 'I am here now,' saying 'tell him this.'

Sometimes however, when he fears that he might be overheard, or when he just does not want to talk at all, he simply points to the relevant board, and, when he gives a standing order for the entire afternoon, he simply takes the appropriate board off the wall to place it on the door of his office. The three scenarios are:

(5) Tell him this [S points at board with inscription 'I am here now'],

(6) [S points at board with inscription 'I am here now'],

(7) There is a board on the door with inscription 'I am here now.'

In these examples, (6) and (7) can be seen as elliptic forms of (5) where a large part of the demonstrative utterance is suppressed. This sort of ellipsis is not uncommon, as a few additional examples will illustrate. Suppose that, when I am asked where I went for spring break, I reply by unfolding a poster of the Eiffel Tower. Here, my unfolding the poster is an elliptic form of the demonstrative utterance 'I went there [I point at the poster].' Or suppose that in replying to the question 'What will we cover next week,' I produce a copy of Aristotle's *Nicomachean Ethics*. Here, and also in the Eiffel Tower example, we have an elliptic form of a demonstrative utterance involving deferred ostension. The complete form is something like 'We will cover this [I point to Nichomachean Ethics].' What I demonstrate is a book, what I refer to is the theory contained in it, where the applicable referring function may be formulated as 'x contains theory y.'

Another ground for the distinction emerges. Suppose that, rather than unfolding a poster of the Eiffel Tower, I unfold a poster which, against my own expectations, turns out to be a picture of San Quentin. Naturally, I didn't intend to communicate that I spent my vacation in prison. Demonstrative utterances resemble in an important way performative utterances in the sense in which J. L. Austin used the term to describe such utterances as 'I double' or 'I hereby pronounce you man and wife.' Unlike Austin's constative utterances (which have truth conditions) performative utterances cannot be said to be true or false; rather, they are bound to be 'happy' or 'unhappy,' and the conditions associated with them are what Austin called 'felicity conditions.' Demonstrative utterances have both kinds of conditions. Before evaluating the semantic content of the demonstrative utterance, and thus its truth conditions, one needs to determine what the felicity conditions of the demonstrative utterance are. When those conditions aren't fulfilled

questions of meaning and reference should never get off the ground.

Vision's original example, and the example of the eccentric businessman as well, are clear forms of ellipsis. Leaving the note with the inscription 'I am here now' is best regarded as an elliptic form of the demonstrative utterance 'I am telling you this [S places note where the intended reader will find it]', where his placing the note and leaving it is a somewhat unconventional gesture. But notice that leaving the note as a demonstrative gesture fulfills the essential role of structuring the addressee's attention: The note with the inscription is nothing but the *demonstratum* of the demonstrative utterance, on the basis of which the reader is able to reconstruct the entire demonstrative utterance in much the same way that my guests are able to infer the full demonstrative utterance from an unfolding picture of the Eiffel Tower. To explain the situation fully we must, against the background of the suppressed utterance 'I tell you this' describe the speaker as (1) leaving a note ($=g$), (2) intending that his wife will recognize the relation between his leaving the note and an implicit referring term, (3) intending that she will look at the note, having recognized (2), and (4) intending that she will understand that he is home, on the basis of her selecting the correct referring function, relating the note as a *demonstratum* to the contents of the words on the note as the referent of 'this'. It is psychological fact that observers infer and attribute intentions on the basis of observed behavioral effects, and reconstructing elliptic demonstrative utterances is, in part, no more than an instance of such an inference.([11])

University of Florida

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