OSTENSION AND DEMONSTRATIVE REFERENCE

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Abstract. The strong similarity between the use of ostension and that of a simple demonstrative to predicate something of an object seems to conflict with equally strong intuitions according to which, while "this" does usually refer to an object, the gesture of holding an object in your hand and showing it to an audience does not refer to the demonstrated object. This paper argues that the problem is authentic and provides a solution to it. In doing so, a more general thought is given support by the approach used. Namely, the thought that our abilities to directly refer to things require some basic referential abilities exhibited in ostension and the use of demonstratives which, in their turn, rest upon our abilities to cooperate in performing non-communicative actions on our environment. Several concepts introduced in order to solve the initial problem can be used to articulate this thought in more detail.

Keywords: ostension, demonstratives, direct reference, tagging, this-predication.

I. The Problem

In what follows I will focus on two basic actions which we do in order to talk about things. The first would for instance consist in showing an object (*o*) to another person (A) and saying "food" to A. The other consists in saying "This is food." with respect to the same object (*o*) while addressing A.

The first case includes an ostension of o, while the second involves a demonstrative use of "this" to refer to o.

I feel inclined to accept the following ideas with respect to these cases:

- (1) The two cases are extremely similar. It could be said that in both cases what we do is to communicate that o is food, in roughly the same way.
- (2) In the second case, it seems very plausible to say that "this" refers to *o*.
- (3) In the first case, it seems rather awkward to say that the act of showing *o* to A *refers* to *o*.

There seems to be a tension between (1), (2) and (3), but before spelling that out let me offer you some arguments for each of the three ideas. After I do that, I hope you will see more clearly what my problem is and how my tentative solution to it works.

I will start with (3). Showing o to A and offering o to A appear to be similar actions, having A as addressee, both of which can be regarded as implicitly communicative (by contrast, throwing o at A to cause A to pay attention to it or shoving o in A's pocket (or in a baby's hand) would not usually be regarded as some form of communication)¹. In both cases, one is using o while being involved in some form of communication, but in neither is o used as a sign. We could of course imagine a code according to which the demonstration of o or other similar actions performed on it might mean something to A (in the way in which a sign would), but the usual cases are not like this.

An object could be used as a sign for itself, but such a use seems to require a special setting. Let us consider the following case. Suppose that I have two different looking rings, each being held in a wooden box. Each box has a small transparent window where a tag of the ring inside could be fitted. I chose, however, not to use any tag, but to place the ring inside the box such that it would be visible through the tag window. It could be said now

A simplified Gricean analysis of one of these actions would look like this: X is showing o to A with the intention that A pays attention to o, having also the intention the A notices X's intention that A pays attention to o, and finally, the intention that A pays attention to o based on noticing that this is what X intends A to do. The offering case could be analyzed in a similar way. I call this analysis simplified because it follows (Grice 1957) and not (Grice 1969).

that when any of my rings is placed in its box such that it can be viewed through the tag window, the ring functions as a sign of itself. This could be disputed, of course, but at least it does not seem to be true of o when I am simply offering (or showing) it to A. I am not offering (or showing) A a sign of o, but o itself.

Now, if o does not refer to itself when just shown to A, how could the act of showing o to A somehow refer to it? If this were true, it would follow that any (implicit) communicative action performed while using o would refer to o.

Suppose that after taking her turn in a game of chess A explicitly questions the reason for my previous move. In reply, I ostensibly move one of my pieces and checkmate her king. By this I mean A to understand that the reason for my previous move was that it made my present move possible. I think that my checkmate move can be considered an implicit communicative action in such a context. In performing it I have used one of my pieces, but it would be extremely strange to say that in doing so I was referring to that piece².

One could, perhaps, reply that an ostensive gesture should refer to the demonstrated object, since a pointing gesture can refer to the demonstrated object and proper ostension (holding the object in your hand and showing it to the addressee of your action) cannot be very different. There are many different ways in which one could demonstrate an object to somebody. I could show a friend a new picture hanging on my wall by (gently) grabbing his head and turning it towards the picture. I could show my new dog to someone by calling it. To a blind friend I could present my new piano by playing on it. But even if we ignore the differences between such cases, it is disputable that when somebody demonstrates an object to another person the demonstrative act refers to that object.

Cases of deferred reference – uttering "this is missing" to say that my big red coffee cup is missing, while pointing at the cupboard

Not even the usual description of my move (*e.g.* "Be7#") would include a reference to the *particular* piece of chess I have used, in this case.

where I was famously keeping it – bring this into focus. The more important point here is, however, different. Not only can one point at something while having the intention to refer to something else, but we habitually point at things without having any intention to refer at all. I could point to o because I think, for whatever reason, that A has failed to notice o and it would be beneficial for A to notice o. Or I could point to a piece of bread when asked which one I want to buy in a bakery. Why should I be taken as referring to it when I am, in fact, just choosing it for my purchase?³

So, if demonstrative gestures are performed without referring to the demonstrated object, why not say that their proper function is only to demonstrate something? The demonstrated object could, of course, be referred to by performing an additional act (*i.e.*, a speech act), but the act of demonstrating something does not by itself have a referential function. In the case of what I have called a proper ostension, this seems rather intuitive.

I will now move to (2). There are non-referential uses of "this", but such uses will not concern us here. We take our case ("this is food") as one in which the speaker wants to tell A that o is food and not to use o as a sample, in order to teach A the meaning of the word "food". Apart from using "this" non-referentially, one could use it referentially and fail ("it was not food, but an optical illusion"), or pseudo-referentially ("this is my invisible ball", said while pretending to toss an object in the air and catching it). Such cases would not show that "this" does not usually refer, of course.

We can also acknowledge the vagueness of "this is food". When I tell you that something is food, I do not want to tell you that only "this-right-now" is food. Neither do I want to tell you that "this-always" will be food. I might be said to refer to a vague temporal slice of o, but that in itself would not reject the idea that "this" refers to something.

³ Suppose that the piece of bread was on an accessible shelf. In that case, I would have taken it to the seller and paid for it directly. I take it that my pointing to it in the above example is just an attempt to reproduce that action with the seller's help.

In addition, "this" can be highly ambiguous, even when accompanied by a demonstration. A demonstration in itself can be ambiguous (as noted by Wittgenstein and Quine⁴), but the ambiguity of "this" does not simply come from the ambiguity of the accompanying demonstration. Suppose I am visibly focusing my attention on something and I notice that you have acknowledged what I am doing. Now, if I say "this was quite interesting", there could still be an ambiguity with respect to my reference. Am I referring to an object, one of its properties or an event I was witnessing? Any referential use of "this" could be regarded as ambiguous in a similar fashion, but perhaps we could say that ambiguous reference is still reference, at the end of the day.

Suppose, however, that someone still denied that by saying "this" we can actually refer to something. If demonstrative indexicals like "this" and "that" did not refer to objects (or just salient features from our environment), then how could we directly refer to anything at all? Names can be introduced descriptively (according to Kripke's "Neptune" example⁵), but only if we have names introduced by a demonstrative indexical ("This is Uranus."). General terms like "water" and "tiger" can directly refer to water and tigers only in virtue of being introduced with the help of a demonstrative ("This liquid is water."). I doubt that one could claim that demonstratives do not refer and still hold that any other linguistic expression could refer directly. So if we do not want to give up direct reference altogether, I think we could accept the more mundane thought that at least in some simple situations (like the "this is food" case) one could use "this" to refer to something. After all, there would be no point in debating about how demonstratives get their referents, if we accepted that they do not have a referential function.

Quine went from his idea of the inscrutability of reference to dismissing the notion of reference altogether. However, this seems too revisionary. Depending on the practice one is involved with,

⁴ See (Wittgenstein 1953, §§28-36) and (Quine 1950).

⁵ See (Kripke 1980, 79, footnote).

one would rather engage with objects, some or other of their properties, events, behaviors, actions and so on. We can reasonably hope to overcome most (ontological) ambiguities by more talk, additional involvement in our practices and by further engaging ourselves in our environment.

At this point you might wonder why I also hold that my two initial cases are similar. If the ostension of o does not refer to o in the first case, then the first case cannot be similar to the second, where "this" does indeed refer to o. Still, (1) expresses a strong intuition (shared by Frege and Russell, among others⁶) that in using a demonstrative word or a demonstrative gesture we are doing the same thing. Even if we thought (as Kaplan did initially⁷) that the use of a demonstrative word requires the use of a demonstrative gesture, this by itself would not show that the two are different (think of a light which can be turned on only by pressing a button two times). Moreover, a demonstrative like "this" could be used to demonstrate something without referring to it⁸ and the ostension of o in our first case can be said to be performed to refer to o, in some sense. After all, by showing o to A and uttering "food" we want to say of o that it is food. Before getting to this, however, let me consider other possible objections to (1).

One general line of objecting to (1) might be considered to come from any of the various versions of contextualism and intentionalism according to which a demonstrative gesture is not a necessary condition for fixing the reference of "this" (in the same way in which it does not seem to be a necessary condition for fixing the reference of "here" or of "now")9. But how could this

⁶ Russell's treatment of egocentric particulars in (Russell 1940; Russell 1948) seems to suggest at least that ostension and "this" are used interchangeably to express knowledge by acquaintance. See also (Frege 1956, 296).

⁷ See (Kaplan 1977).

We can think, for instance, of the common internet practice of adding "this" or "also, this" to images or links shared to others. ⁹ I take (McGinn 1981) and (Wettstein 1984) to be representative for the

contextualist view and (Kaplan 1989), (Bach 1992) and (Perry 2009) to be representative for the intentionalist view.

account for a difference between our two initial cases? Suppose that in saying "This is food." I succeed to refer to a particular object without performing a demonstrative gesture. Now suppose that A does not recognize my ostensive gesture and hears me saying "food" while holding o in my hand. A could still understand that I am saying of o that it is food. In fact, A could get it that I am *telling her* that o is food without recognizing that I am showing o to her¹⁰.

I suppose that I would succeed in referring to o by saying "This is food." in any situation in which I would notice that A is engaged mainly with o. Nothing prevents me to say "food" instead, in all these situations. The difference between the two cases, then, would rather be a syntactical one. "This is food" is a complete sentence, used (in our simple case) to predicate of a particular object that it is food. "Food" is not a complete sentence, although we might be tempted to consider it a short form of a complete sentence. I, for one, am inclined to say that by uttering a predicate (or even a proper name) while demonstrating an object one tags the object in case with the uttered word, and thus to distinguish a tagging from a predication, but I am ready to accept that the content of a tagging can be expressed by a predicative sentence.

Another strategy for rejecting (1) could perhaps be to look at the differences between the ways in which one might fail to refer by using "this" and by demonstrating an object. Let us look at the following case¹¹: Having left my lucky red ball on my desk, I enter my room at night, grasp the ball sitting on my desk, the color of which I cannot see, go to the kitchen and tell my parents' guests "this is my ball", only to open my hand and see a green ball belonging to my brother¹², who had previously switched his ball

Recent empirical studies seem to suggest that children can learn new words by "shared attention" only, even in the absence of any "ostensive cues". See, for instance, (Szufnarowska, Rohlfing, Fawcett, & Gredebäck 2014).

This was inspired by (Kaplan 1978) – the "Carnap/Agnew" scenario – and (Reimer 1992) – the "my keys" scenario.

The use of "this" to refer to something which is not accessible at the time of the utterance, but only afterwards, is more familiar in the case of textual

for mine. I am eight years old and have just failed not only in showing the guests my lucky red ball, but also in referring to it by a simple demonstrative. In addition, it could be argued that my ostensive gesture has failed in a different way from my use of "this". As a matter of fact, by saying "this" *I did* refer to the green ball I was holding in my hand. It is only that what I was saying was false. By contrast, I did not succeed to demonstrate my red ball to my parents' guests.

But is this really so? After all, we were not comparing the demonstrative use of an ostension with the referring use of a demonstrative, but the use of an ostension and of a demonstrative to refer to something. In the case discussed above, if I "succeed" in referring to the ball in my hand by saying (falsely) "This is my ball" to the guests, I cannot see why I shouldn't be able to do the same by showing them the ball in my hand and saying "my ball".

Generally speaking, I cannot think of a case in which one would fail (or succeed) in communicating that o is food (or anything else) only by doing one of the two – saying "this is food" with respect to o or demonstrating o and saying "food". In addition, most of the phenomena discussed with respect to "this" (deferred reference, predicative use, and even anaphoric use) could be replicated in the case of an ostension¹³.

One other objection I can think of is based on the fact that one can use a complex demonstrative like "this red ball" but not a "complex ostension". One could, of course, demonstrate a red ball, say "red ball" and then add "mine", but while that would amount to tagging the demonstrated object as red and as a ball, it could be denied that in saying "this red ball is mine" one predicates of "this" that it is a red ball. Nevertheless, I suspect that in order to support

deixis: "Let me tell you this..."(The phrase "textual deixis" is borrowed from (Lyons 1977).

Suppose I repeat some ostensive gesture made by you, without actually showing the object you were initially holding in your hand and showing to me (while saying "food") and I say "bitter". Given the appropriate circumstances, I can be said to have tagged o as bitter. This appears to be quite similar to the anaphoric use of a demonstrative.

that view one would have to say that "this red ball" works more like a definite description and not like a "true demonstrative".

So why did I accept (3), then? Well, because I had the strong intuition that a simple ostension of an object does not refer to the object in case. If we tried to device a function from the ostensive gesture to the object in case, what we will get would not be a referent, but a demonstratum¹⁴.

My problem, then, was that although I had good reasons to accept (1)-(3), I did not see at first how I could do that without running into a contradiction. If demonstrating o and saying "this" of o did play the same semantic function, then a speaker, by doing any of the two, would either refer to o or not. One could not refer to o in one way, but not in the other way. If this was possible, then the two would not have the same semantic function.

II. The Solution

Let us move now to the part where I try to device a solution to this problem. My current suspicion is that the problem appears precisely because we apply a particular concept of reference to the "ostensive tagging" case. Perhaps this concept comes from Kripke's analysis of direct reference for the case of proper names, but its roots can be found in the works of Frege, Russell, and in Wittgenstein's Tractatus. Reference is seen as a function, getting the name (or other referring expression) as its argument and producing the referent as its value. Saying that proper names are rigid designators, for instance, amounts to saying that the referring function produces the same value for a name in every possible world (in which the name bearer exists). Much of the debate on demonstrative reference can be also described in these terms. The problem is to say how the referring function works, what it takes as an argument ("this", a token of "this", an utterance of "this", demonstrative gestures, speaker's intentions, contextual cues,

¹⁴ I think (Nunberg 1993) has some very convincing arguments for this point.

salient features of the environment, various tuples of the previous things etc.) and how it produces a value (a demonstratum, an intended demonstratum, an intended referent, an intended speaker-referent etc.).

Proper ostension, when used to perform a speech act centered on an object, does not work like that. So instead of conceiving the relation between the ostensive act which is part of some tagging and the tagged object as a function from the first to the second, I propose that we do something different.

Let us simply say that in showing o and saying "food" one is using o to tag it as food. More generally, we could say that when an ostension is performed as part of a speech act, the demonstrated object itself is *used* and the speech act is *performed on it*. After all, when we perform other actions we have no difficulty to talk about objects acted upon. Tagging o as food to A is to perform a verbal action on o, the addressee of which is A, the difference between such an action and that of offering o to A being one of a degree only.

Performing an ostension on o is not a necessary condition to tag o as food, of course. If A is already acting on o, there is no need to show o to A. In demonstrating o to A one is trying to make A involve herself in some empirical action¹⁵ performed upon o (looking at o, listening to o, touching o etc.), but if that condition is already satisfied, there is no need to demonstrate o anymore.

The mentioned condition could be satisfied in several ways. I could be involved with o in some way and A could get involved (cooperatively, perhaps) with what I was doing (watching o, digging o out of the ground, talking about o etc.). Other times o could be a salient feature of our environment, such that we both engage into some empirical action having o as object. Now, the transition from doing implicit communicative actions on o (shooting at it, pointing at it, inviting one another to examine it, carrying it together etc.) to the performance of explicit communicative actions on o (tagging it as "food" or "danger" etc.)

 $^{^{\}rm 15}~$ For my use of "empirical action" see (Ştefanov, forthcoming).

is a fine one, but we need not be concerned about that right now. From a certain point on in that transition, at least, we can safely say that we refer to o by the explicit communicative actions we perform on it.

The problem of determining what thing(s) we are acting on is still unsolved, but this is not specific to the use of demonstrative gestures (or demonstratives like "this", for that matter). In this respect, the problem is the same in the case of a non-communicative action. What is acted upon when I am using a water pump to send water into the cistern of a house, thus poisoning the inhabitants? Here, as in the case of determining the reference of "this", the answer can be provided by talking about my intentions, the context of my action, the conceptual content of my action being made explicit in the descriptions (D) under which I am ready to accept that I have done D etc. 17

A different problem is that of determining whose actions should count in determining what object are we talking about. I could ask you "Mine?" or "Is that mine?" with respect to an object *you* are fumbling with and *I* cannot see. Since my question is addressed to you (A), it seems that I can successfully use the object you are acting upon to ask it.

What if both of us were acting on different objects? Suppose you are reading a book and I am trying to boil an egg. If I say "this will be tasty" to you, I seem to be referring to my egg and not to your book. However, if I did nothing to get you involved into what I was doing, it seems that I was, after all, inadvertently saying of your book that it will be tasty. If I still claim that I was referring to my egg, than perhaps that is because an ambiguity not in the reference of "this", but with respect to the addressee of my utterance. Did I say to you that this (i.e. your book) will be tasty or was I just telling myself that this (i.e. my egg) will be tasty?

¹⁶ I am borrowing this example from (Anscombe 1963, 41).

In this respect, I see the more recent debates about how the reference of a demonstrative is fixed as opposing conceptualists to anti-conceptualists.

If we are on a crowded beach and I say "That is a fine looking young man."18, perhaps I am using "that" as a means to say something of the young man I am looking at (or thinking of), but then I must be talking to myself. If I claim that I am talking to you, I am not referring to the man in question, but only denoting him by way of a description like "the man I am talking about" 19. So perhaps the rule should be that I directly refer to the object the addressee of my speech act is acting on, after all.

You might have noticed, by now, that instead of doing things the other way around I want to model the use of "this" to predicate something of an object after the more primitive case of ostensive tagging. In doing so I also hope I am more faithful to our natural history, since it seems reasonable to hypothesize that the demonstrative use of "this" has evolved from that behavior.

We can agree, of course, that an actual demonstration is not necessary either for "ostensive" tagging, or for the "demonstrative" use of "this". Still, an ostension and an utterance of "this" can be used to demonstrate an object without referring to it and both tagging and this-predication are usually accompanied by demonstrations. So, in order to sum up the previous considerations, we can list the following ideas:

- (i) Both in tagging and in this-predication we use an object directly to say something about it. Such explicit communicative actions are usually accompanied by demonstrations, but they need not be.
- (ii) A constitutive condition for performing both explicit communicative actions is that their addressee is performing an empirical action on the object we use for tagging or this-predication.

¹⁸ This case is inspired by (King 2014).

Here perhaps one could be tempted to say that "that" was token-reflexive. In any case, Nunberg's (1993) claim that indexicals have a descriptive use could be extended to some uses of demonstratives too. If I say "I thought this was mine" of the green ball I am holding in my hand I do not want to say that I thought of this ball (the green ball belonging to my brother) that it was mine, but only that I thought that the ball I was holding in my hand was mine.

- (iii) A success condition for performing both explicit communicative actions is that their agent and their addressee get to cooperate in acting on the same object.
- (iv) Demonstrations (either by ostension, or by "this") are implicit communicative actions (the explicit form of which would be "look at this!" or, more generally, "engage yourself perceptually with this!"). As such, one can demonstrate an object without referring to it (that is, without using it to perform a speech act or some explicit communicative action).
- (v) More generally, all speech acts performed directly on an object (acted upon by the addressee and with respect to which both the speaker and the addressee can be said to cooperate), regardless of the fact that their syntactic structure includes an object handle (*i.e.* "this") for the purpose of predication or not, are a basic form of reference.

Based on these ideas, the solution to my problem should be obvious. We agree to (1) since, according to (i)-(iii) and (v), the difference between our two initial cases was only a syntactic one. We agree to (2) since, for the same reasons, by uttering "this is food" we actually use o directly to predicate that it is food. We agree to (3) since, according to (iv), the ostension of o does not refer to o. I did refer to o by using it to tag it as food, given that my addressee was perceptually involved with it and accepted my cooperation with respect to it, but I did not refer to o by just showing it to my addressee.

III. Conclusions

Now, I do not expect you to simply agree to this solution, of course. Both my problem and my solution to it might have just grown out of an acute lack of academic interaction (and since we are on this topic, an extremely limited access to the relevant literature should be mentioned as well). Nevertheless, let me just point, for now, to the general direction my view here is heading to.

First, I might seem to claim that the use of "this" is in fact unimportant for reference, since "this" is just a syntactical feature and has no real semantic import. What I actually want to say, however, is that what we do when we say that "this is food" is to use some object directly to say that it is food (this is not very different from Kaplan's initial idea that the referent of a demonstrative is part of the proposition expressed by the sentence containing it). We could do the same thing without using "this" on pain of losing predication and be left with the more rudimentary tagging. I am reluctant to talk about the relation between "this" and "its referent" because I do not think that basic reference should be conceived as a mathematical function from some linguistic objects to some natural features of our environment. (I am, after all, an anti-representationalist.) But if one wanted to talk like this, one could, perhaps, say that true demonstratives get their reference by functioning as handles to the object empirically acted upon by the addressee. So their character (to use Kaplan's vocabulary) is given by something like: "the x, such that A is empirically acting on x''. One could, of course, be mistaken about what object the addressee of one's utterance is (or will be) looking at, touching etc., but that would not be a failure of reference, in my opinion. I would rather call it a "failure of cooperation."

Finally, I think that the bigger picture suggested here is as follows. Our ability to refer directly to features from our environment and our related cognitive abilities come from the fact that we act in our environment and in doing so we cooperate to each other. Non-communicative and communicative actions are intertwined together in our practices. This guarantees us a strong relation between what we say and what we are talking about. We are part of our environment and we are actively involved with it from within through our actions, of which our speech acts are only a species. Getting from using an object in a non-communicative action to using the same object in an implicit communicative action and then in an explicit one is less mysterious than getting from a mental object (be it an intention to refer, the meaning of a linguistic expression, the character of an indexical or whatever) to

a referent. This does not necessarily mean that we must abandon conceiving reference as a relation from a word to an object, but that concept of reference should perhaps be built out of our basic referential practices or abilities²⁰.

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²⁰ I am aware that my use of the phrase "practices or abilities" here is similar to the way the same phrase is used in (Brandom 2008). This is not the only similarity between my "bigger picture" sketched above and Brandom's analytic pragmatism, but I am still trying to figure out if I am headed in the same direction as him or not.

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