CLAUDIA BIANCHI

'NOBODY LOVES ME': QUANTIFICATION AND CONTEXT

ABSTRACT. In my paper, I present two competing perspectives on the foundational problem (as opposed to the descriptive problem) of quantifier domain restriction: the objective perspective on context (OPC) and the intentional perspective on context (IPC). According to OPC, the relevant domain for a quantified sentence is determined by objective facts of the context of utterance. In contrast, according to IPC, we must consider certain features of the speaker's intention in order to determine the proposition expressed. My goal is to offer a plausible and fair reconstruction of IPC. Drawing a parallel between quantifier domain restriction and standard cases of context dependence as indexicality, I argue that the speaker's intentions can play a semantic role only if they satisfy an Availability Constraint: an intention must be made available or communicated to the addressee, and for that purpose the speaker can exploit any feature of the objective context (words, gestures, relevance or uniqueness of either the quantificational domain or of the referent in the context of utterance). An intention satisfying the Availability Constraint must be something that a hearer in normal circumstances is able to work out by relying on the physical surroundings of the utterance situation, on utterances exchanged during the previous conversation, and on background knowledge shared by speaker and addressee.

1. INTRODUCTION

Suppose I utter

- (1) Nobody loves me.
- Is (1) true or false? Of course, someone *in the world* loves me (Mum and Dad, for instance, or the Pope), but suppose that my partner and all my friends, fed up with my bad temper, have actually abandoned me. Or what about
 - (1*) Everybody was at my birthday party.

Again, not everyone in the world was at the party, but suppose that all the people I love came to the party. The answer

concerning the truth-value of (1) or (1*) depends on our answer to the problem of quantifier domain restriction: the truth or falsity of (1) or (1*) depends on the quantificational domain of "nobody" or "everybody". There are several possible theories that address this problem, which is a special case of the problem of context dependence: in the end the answer depends on the role we assign to context.

For the purpose of this paper, I will assume that it is the proposition *expressed* by (1) or (1*) (and not the one merely *conveyed* by (1) or (1*), for example) that depends on a quantificational domain somehow determined in context. In other words, I will assume that the quantifier domain restriction takes place at the semantic level (the level of "what is said"): (1) expresses the proposition that nobody in the contextually restricted domain of quantification loves me. Here I will focus instead on the question of the nature of this restriction (driven by objective or intentional factors): I will try to provide a theory concerning the various mechanisms that come into play in determining which domain is contextually relevant.²

This paper is structured as follows.

In section 2, I present an example of quantifier domain restriction taken from Christopher Gauker.

In section 3, I analyse Kaplan's two theories of demonstratives: confronting the two theories allows us to reliably test our intuitions about communicative mechanisms and, more specifically, about the relation between objective context and intentional context.

In section 4, I present the objective perspective on context (OPC), according to which the relevant domain of quantification is determined by objective facts of the utterance context.

In section 5, I present the intentional perspective on context (IPC), according to which the relevant domain of quantification is determined by adding in certain features of the speaker's intention. In this section, I develop a sophisticated version of IPC, drawing on an account of demonstrative reference given by Kent Bach.

In section 6, I argue that the speaker's intentions can play a role in semantics only if they satisfy an *Availability Constraint*,

that is to say, if they can be recognised by the addressee; in other words only if the speaker enables the addressee to recognise his intentions, putting her in a position to work them out based on information from external factors, linguistic co-text, and background knowledge.

2. TOMMY AND SUZY

How do we determine or restrict, in context, the appropriate domain of quantification in the case of an utterance like (1)? To answer this question, I will focus on an example taken from Christopher Gauker in *Mind* 1997. In Gauker's words:

Suzy is sitting on the floor in her bedroom playing with glass marbles. All of the marbles in Suzy's room belong to Suzy, and some of them are red. Suddenly Tommy comes into Suzy's room and declares in a loud voice "All of the red ones are mine!". As a matter of fact, when Tommy says "All of the red ones are mine!" he is thinking of the marbles in his own room, and it is the thought that all of the red marbles in his room are his that leads him to speak as he does. Tommy is very proud of his possessions and on this occasion is exulting in his possession of red marbles. But there is no way Suzy could know that. She would naturally expect that he was talking about the marbles there on the floor in plain view of both of them. So of course she retorts "No, they're not".³

What is the quantificational domain governing Tommy's utterance – and in relation to which his claim that

- (2) All of the red ones are mine!

 nust be evaluated? According to Gauker, there a
- must be evaluated? According to Gauker, there are four possibilities:
- A. the quantificational domain is constituted by the class of marbles Tommy "has in mind", the ones in Tommy's room: (2), then, expresses a true proposition;
- B. the quantificational domain is constituted by the class of marbles in plain sight on the floor in front of Tommy and Suzy, the ones in Suzy's room: in this case (2) expresses a false proposition;
- C. there are two quantificational domains A. and B.: here (2) expresses two propositions, one true and the other false;

D. there is no quantificational domain: no proposition has been expressed, therefore (2) is neither true nor false.

In what follows, I will focus mainly on the discussion of A. and B.⁴

Following Gauker, I will distinguish between:

- the context defined in terms of intentional states of the participants, or shared assumptions⁵ what we can call the subjective context, or the cognitive context, or the *intentional* context; and
- the context defined in terms of relevant states of affairs occurring in the world the *objective*, mind-transcendent context: "facts that are particularly relevant to the conversational aims of the interlocutors, whether they are aware of these facts or not".

Let's go back to Tommy and Suzy. From an objective perspective on context (OPC), the relevant domain of quantification is determined by the objective facts of the context of utterance; therefore the relevant domain is B. (the class of marbles in plain sight on the floor in front of Tommy and Suzy). and (2) is false. In contrast, from an intentional perspective on context (IPC), the semantic rules of English, by themselves, do not determine a definite proposition for (2), even if all the publicly available aspects of the utterance situation are taken into account. Since both semantics and the objective features of the context do not identify a proposition, we must add in information about the speaker's intention in order to determine the proposition expressed by (2): the relevant quantificational domain is now A. (the domain Tommy "has in mind"). If we fill in the gaps by appealing to Tommy's intentions in uttering (2), (2) will be evaluated as expressing a true proposition.

IPC is the perspective favoured by what Gauker calls the *expressivist's theory of communication*, the theory according to which "the primary function of language is to enable speakers to convey propositions to hearers" and "speakers choose their words with the intention of enabling hearers to recognise the

content of an underlying thought". The expressivist's theory of communication – hence IPC – is Gauker's main target. He himself assumes the interpretation of the evaluation context of an utterance in objective terms (OPC):

[C]onversations are in a sense governed by objective, or mind-transcendent propositional contexts. Conversations are governed by propositional contexts in the sense that certain norms of discourse that interlocutors ought to adhere to may be formulated in terms of them. Propositional contexts are objective in the sense that they may pertain to a conversation in these ways although none of the participants in the conversation may succeed in grasping their contents.⁹

I claim that Gauker doesn't offer a fair reconstruction of IPC, but reduces the intentional perspective to a sort of Humpty Dumpty theory of language: the speaker has a proposition in mind and hopes that the addressee will read his mind. I will try to offer a better reconstruction of IPC: my paper can thus be seen as a defence of the expressivist's point of view.

3. DIGRESSION: DEMONSTRATIVES

As I said, the problem of quantifier domain restriction is a special case of the problem of context dependence. The classical case of context dependence is, of course, indexicality: indexicals and demonstratives are referential expressions depending, for their semantic value, on the context of utterance.

In "Demonstratives", Kaplan introduces the distinction between pure indexicals (expressions like "I", "here", "now") and demonstratives (expressions like "this", "that", "she", "he"). Language conventions associate a rule fixing the reference of the occurrences of the expression in context with a pure indexical as a type. The semantic value of an indexical (its content, its truth conditional import) is thus determined by a conventional rule and by a contextual parameter, which is a publicly available aspect of the utterance situation. The character of an indexical encodes the specific contextual co-ordinate that is relevant for the determination of its semantic value: for "I" the relevant parameter will be the speaker of the utterance,

for "here" the place of the utterance, for "now" the time of the utterance, and so on: the designation is then automatic, "given meaning and public contextual facts". 10

In the case of the demonstratives, the situation is quite different. The meaning of a demonstrative, like "she" in the sentence

(3) She is drunk,

by itself doesn't constitute an automatic rule for identifying the referent of the expression in a given context. The semantics of "she" cannot unambiguously determine its reference: if, for instance, in the context of utterance of (3) there is more than one woman, the expression "she" can equally identify any woman. According to Kaplan, the occurrence of a demonstrative must be supplemented by a *demonstration*, an act of demonstration like pointing. The relevant semantic unit is then the demonstrative associated with the demonstration. For Kaplan in "Demonstratives", the act of demonstration is *semantically relevant* in order to complete the character of the demonstrative.

In "Afterthoughts", Kaplan modifies his own theory and acknowledges that even a gesture associated with the occurrence of a demonstrative and constituting the act of demonstration, may be insufficient to disambiguate the expression. Just imagine the sentence

(4) I like that

uttered by someone pointing clearly and unambiguously to a child: the expression "that" could designate the child, or his coat, or a button of the coat, or the colour of the coat or, for that matter, any spatial region or molecule between the speaker's finger and the child. The gesture then no longer has a semantic role; for Kaplan the relevant factor is now "the speaker's directing intention". The demonstration only has the role of manifesting the intention, externalising it – a role of pragmatic aid to communication: "I am now inclined ... to regard the demonstration as a mere externalisation of this inner intention. The externalisation is an aid to communication, like

speaking more slowly and loudly, but is of no semantic significance". ¹³ Every occurrence of the same demonstrative as a type has to be associated not with an act of demonstration but with an intention. ¹⁴ In this sense, a demonstrative is different from an indexical: once the context of utterance is fixed, the linguistic rules governing the use of the indexicals determine completely, automatically and unambiguously their reference, no matter what the speaker's intentions are. ¹⁵

The quantifier domain restriction, like the determination of the reference of a demonstrative, doesn't appear to be bound by semantic rules in the way that the determination of the reference of an indexical seems to be. We could easily reformulate Gauker's example in terms of demonstratives as "that", or "those", or "those marbles", rather than in terms of domains of quantification¹⁶: in both cases the semantic rule alone doesn't determine the reference of either the demonstrative expression or the quantified expression in the light of the context of utterance. The question to be answered is: what do we have to add to the semantic rules and context of utterance in order to have a complete proposition:

- something like a demonstration that is, a feature of the *objective* context (OPC), or rather
- something like an intention that is, a feature of the *intentional* context (IPC)?

My claim is that the analysis of demonstrative reference allows us to test in a reliable way our intuitions on communicative mechanisms, and more specifically on the relation between objective context and intentional context.

4. THE OBJECTIVE PERSPECTIVE ON CONTEXT (OPC)

Actually, Tommy and Suzy's example is a case of miscommunication. What, according to OPC, happens in cases of successful communication? For a start, let's look at two non-problematic examples.

Case I. Suzy is sitting on the floor in her bedroom playing with glass marbles. All of the marbles in Suzy's room belong to Suzy, and some of them are red. Suddenly Tommy comes into Suzy's room and, *pointing to the marbles on the floor*, utters:

(2) All of the red ones are mine!

Intuitively, in this case, the domain of quantification is individuated by an objective aspect of the utterance situation, that is, Tommy's ostensive gesture. The marbles on the floor belong to Suzy, hence (2) is false.

Case II. Like Case I., but now Tommy *points back to his room*, and utters (2). Again, the domain of quantification seems to be individuated by Tommy's gesture. The marbles in Tommy's room belong to Tommy, hence (2) is true.

In both cases, the domain of quantification for "all of the red ones" seems to be individuated by the speaker's gesture, by an element of the context in the objective sense, by public contextual facts. 17

Now, what happens in the case described by Gauker (hereafter, Case III)? The utterance situation, as Gauker describes it, is as follows:

Case III. As far as we know, Tommy and Suzy have been playing all the afternoon with their marbles, Tommy in his room and Suzy in her room. Suddenly Tommy comes into Suzy's room and utters (2) without pointing to anything. According to Gauker, a supporter of IPC is committed to saying that if it is the speaker's intention that rules, then the relevant domain is the class of marbles that Tommy has in mind, i.e. the marbles in his room. Our intuition, however, is different: once more the domain of quantification for (2) seems to be individuated by objective factors, namely what marbles are in plain view of both children, i.e. the class of marbles on the floor in Suzy's room – no matter what Tommy's actual intention is. Since the marbles on the floor belong to Suzy, (2) is false. Another example should clarify the objective perspective.

Case IV. Suzy is sitting on the floor in her bedroom reading a book. No glass marbles are around, let alone red glass marbles. As in Case III, suddenly Tommy comes into Suzy's room and

utters (2), intending to point and refer to the marbles in his own room. But suppose that sudden paralysis prevents him from pointing or making any other ostensive gesture, like nodding or glancing. From Gauker's point of view, a supporter of IPC is committed to saying that, if it is the speaker's intention that rules, then the relevant domain is the class of marbles that Tommy has in mind, i.e. the marbles in his room. Again, our intuition is different: since no domain is demonstrated, or otherwise made salient, no domain is determined, and (2) doesn't express any proposition.¹⁸

It seems, then, that in all the cases under examination, the speaker's intention doesn't play any essential role, that is, any *semantic* role in determining the domain for the quantified expression – a domain which is fixed by the objective context.

5. THE INTENTIONAL PERSPECTIVE ON CONTEXT (IPC)

The main point of my defence of IPC is to show that communicative intention requires more than just "having something in mind". I will deny Gauker's claim that IPC is bound to choose A. (the domain Tommy "has in mind") as the relevant quantificational domain in Case III.

Let us consider three more examples in order to see if the speaker's intentions play any role whatsoever in the determination of the relevant domain of quantification.

Case V. As in Case II. Tommy utters (2) pointing back to his room. But imagine that, during the night, while Suzy was awake and Tommy was asleep, Mom switched Tommy's marbles with Suzy's. Again, the domain of quantification seems individuated by the gesture, no matter what Tommy intends. The marbles in Tommy's room belong to Suzy, hence (2) is false. In Case V, Tommy's intention to refer to the class of his own marbles doesn't succeed in picking up the intended domain.

Case VI. As in Case II. Tommy intends to refer to the marbles in his room, and intends to point in the direction of his

room, but a tic makes his arm move in the direction of the floor, where Suzy's marbles are. Following the intentional perspective (as Gauker interprets it), one should say that if it is the speaker's intention that rules, then the relevant domain is the class of marbles in Tommy's room – the one Tommy has in mind. But, intuitively, the domain of quantification seems individuated by Tommy's gesture – even if unintentional – and his intentions seem irrelevant.

Case VI. Tommy and Suzy have been playing all the afternoon with Suzy's marbles on the floor of her room. Suddenly Tommy comes back into Suzy's room and utters (2) without pointing to anything. In this case the domain of quantification is intuitively individuated by salience. The most salient domain of quantification is the one constituted by the class of marbles the kids have been playing with, namely the marbles on the floor in Suzy's room; since they belong to Suzy, (2) is false.

At first glance, the speaker's intentions may seem irrelevant; but let's deepen our analysis, beginning with this latter case. Gauker explicitly states that the objective features of the utterance situation are the *external* ones. ¹⁹ Salience is not necessarily a case in favour of OPC: in establishing salience, in fact, the external features of the utterance situation (e.g. what marbles are in sight) don't always matter. Just consider Case VIII.

Case VIII. Tommy and Suzy have been playing all the afternoon with Tommy's marbles on the floor of his room. Suddenly Tommy comes back into Suzy's room and utters (2) without pointing to anything. As in Case VII, the domain of quantification is individuated by salience. The most salient domain of quantification is the one constituted by the class of marbles the kids have been playing with, namely the marbles in Tommy's room; since they belong to Tommy, (2) is true.²⁰

For Cases V and VI, I will exploit Kent Bach's theory of referential intentions. According to Bach, "a referential intention is part of a communicative intention, an intention whose distinctive feature is that 'its fulfilment consists in its recognition'... A referential intention ... involves intending one's audience to identify something as the referent by means of thinking of it in a certain identifiable way". ²¹ Following Grice

on this point, Bach thinks that the audience's recognition of the communicative intention occurs in part by supposing that the speaker intends his intention to be recognised. In Kaplan's classic example, David points, without turning and looking, to the place on the wall that was occupied by a picture of Carnap and utters:

(5) That is a picture of one of the greatest philosophers of the twentieth century.

But, unbeknownst to him, the picture has been replaced by Spiro Agnew's portrait.²² Even if David intends to refer to Carnap's picture, he in fact refers to Agnew's picture: (5) cannot be taken as true. In Bach's reconstruction, although David intended to refer to Carnap's portrait, he didn't intend his addressee to recognise *that intention*; he intended the addressee to recognise only the intention of referring to the portrait on the wall behind him. The referential intention is this last one: "the one which you intend and expect your audience to recognise and rely on in order to identify a certain [picture] as the referent".²³

The analysis of Kaplan's example can be easily extended to Case V (the switch). Although Tommy intends to refer to his own marbles, he doesn't intend Suzy to recognise *this* intention; rather, he intends Suzy to recognise his intention of referring to the marbles that he is pointing at. The semantically relevant intention is this latter one. Even if Tommy intends to refer to his own marbles, he actually refers to the marbles in his room – which happen to belong to Suzy. Tommy is saying that the marbles he is pointing at (the ones in his room) are his: since they belong to Suzy, (2) is false.

The same goes for Case VI (Tommy's tic). Although Tommy intends to refer to his own marbles, he doesn't intend Suzy to recognise *this* intention; he intends Suzy to recognise his intention of referring to the marbles he is pointing at. The intention semantically relevant is this latter one, for the act of pointing (even if unintentional) is the only evidence permitting Suzy to identify Tommy's communicative intention. The relevant domain is determined by public behaviour, by intentional *acts* and not by intentions as mental objects. Tommy is saying

that the marbles he is pointing at (the ones on the floor) are his: since they belong to Suzy, (2) is false.

Cases I and II are unproblematic: there is a perfect coincidence between intention and objective context – hence between IPC and OPC.

What, then, of Case III (Gauker's example)? As I said, I deny that IPC – and consequently the expressivist's theory of communication – is committed to picking up A. (the class of marbles Tommy "has in mind", the ones in Tommy's room) as the relevant quantificational domain. Although Tommy intends to refer to his own marbles, he doesn't intend Suzy to recognise this intention: the only reasonable intention we can attribute to him – the one he intends Suzy to recognise – is the intention of referring to the relevant objects in the context of utterance. The semantically relevant intention is this latter one: there is no act of pointing, no explosion or falling star,²⁴ in other words no further evidence – except relevance – that would permit Suzy to identify Tommy's communicative intention. Note that even the fact that by using the words "all of the red ones", Tommy is referring to a class of marbles, and not to a class of blocks (for example) is a matter of relevance. Tommy is saying that all the relevant red objects in the context of utterance are his: since the relevant red objects are the marbles in plain sight on the floor and since they belong to Suzy, (2) is false. By qualifying Tommy's intention as I suggest, IPC would yield the desired result: what Tommy says comes out false.

And, finally, Case IV (paralysis). Although Tommy intends to refer to his own marbles, he doesn't intend Suzy to recognise *this* intention; rather he intends Suzy to recognise his intention of referring to the marbles that he is pointing at. But of course he has not done what is necessary to enable Suzy to recognise this latter intention: in Bach's words, his intention is "empty". As I see it in this context, Tommy's intention of referring to his marbles, without using either a gesture, nod, or glance, or without exploiting any kind of relevance deriving from the external context, or previous conversation, would be utterly arbitrary and bizarre – in a word, unreasonable, and hence with no semantic significance. ²⁶

6. THE AVAILABILITY CONSTRAINT

IPC, in my interpretation, does take acts of demonstration to be a way – perhaps the most common way – to go "public" concerning our referential intentions. Not the only way, however: in Case VIII no pointing is necessary in order to identify the relevant domain of quantification. IPC, then, requires communicative intentions to be non-arbitrary – that is connected with a particular external context, or a suitable behaviour, or else an appropriate co-text, that enable the addressee to determine the referent or the relevant domain of quantification.²⁷ In other words, an intention, to be semantically relevant, must satisfy an Availability Constraint, that is, it must be communicated or made available to the addressee.²⁸ Not just any intention will do: as Kaplan once put it, "there are limits to what can be accomplished by intentions (even the best of them)". ²⁹ Suzy can't recognise every intention that Tommy could have: she can't read Tommy's mind. In Case III, the only manifest basis for Suzy to identify Tommy's communicative intention in the context of utterance is the presence of some marbles in plain sight on the floor in front of them. A communicative intention satisfying the Availability Constraint must be something that a hearer in normal circumstances is able to work out using external facts, linguistic co-text, and background knowledge. In other words, a "good" intention is an intention that the speaker intends to be recognised, relying on the physical surroundings of the utterance situation, on previous utterances exchanged during the conversation, and on the conversational concerns shared by speaker and addressee.

These three kinds of contextual information are, of course, nothing more than a way of spelling out relevance. First, we have the information inferred from the extralinguistic or physical context – available to both speaker and addressee. As I said, the quantified expression "all of the red marbles" doesn't require any particular action on the speaker's part (gesture, nod or glance) if the class of marbles he intends to refer to is the only class of marbles in the context of utterance, or the most salient class (for "external" reasons, as, for example, its

perceptual salience) in the context of utterance. Second, we have the information inferred from the linguistic co-text. Suppose that, during the previous conversation, Tommy and Suzy have mentioned Tommy's marbles; in this case, a successive use of (2) will refer quite naturally to Tommy's marbles.³⁰ Third, we have the information inferred from the knowledge shared by speaker and addressee, because they belong to the same community or sub-community. Just think of the vertiginous amount of information that brother and sister share and which they may take as basis for the recognition of their respective communicative intentions. Suppose that Tommy is obsessed by his marbles, for example, and Suzy knows it. If the two children are in Tommy's room and Tommy utters (2), Suzy will easily determine the quantificational domain of "all of the red ones" even if in his brother's room there are dozens of red blocks, red cars, and red pencils.31

Let me state my point once again in a slightly different way. According to Gauker there are only two plausible accounts of the quantificational domain governing Tommy's utterance in Case III:

- A. the red marbles in Tommy's room;
- B. the red marbles on the floor in front of Tommy and Suzy.

What I suggest is to interpret Case III along the lines of Bach's reconstruction of Kaplan's classic example (5). Following Bach, there are three accounts of the object David intends to refer to:

- (a) the picture of Agnew;
- (b) the picture of Carnap;
- (c) the picture on the wall behind him.

According to Bach, (c) gives the right characterisation of David's *referential* intention in example (5): since the picture on the wall behind David is Agnew's portrait, (5) cannot be taken as true.

Likewise, in Case III, we may characterise the quantificational domain governing Tommy's utterance along the following lines: C. the relevant red marbles,

or

C*. the red marbles that Tommy succeeds in calling Suzy's attention to.

Since the relevant marbles are the marbles in plain sight on the floor, and since they belong to Suzy, (2) is false. A. is the domain that Tommy expects Suzy to infer on the basis of C.: C. satisfies the Availability Constraint, and A. doesn't. Of course in the case of miscommunication something goes wrong: in Case III, Tommy, too proud of his possessions, overestimates the relevance of the marbles in his room.

One last point, in closing, to clarify my overall project. As my paper has shown, supporters of both IPC and OPC agree on the semantic value of the utterance under examination in the different contexts – that is, on its propositional content. In fact, if we accept my characterisation of IPC, we are ready to attribute semantic values (hence truth values) in accordance with OPC to utterances of (2) (or (5)) in all of the cases I presented above - including Case III. The disagreement between IPC and OPC, then, doesn't concern the semantic interpretation of (2), but what features of the context have a bearing on its semantic interpretation – and in particular what it is in virtue of which a particular domain is the relevant one for the interpretation of (2). The distinction between semantic values and what in the context makes it the case that an utterance has the semantic value it has, is an instance of a wellestablished distinction within semantics between descriptive and foundational semantics. In Stalnaker's words:

A descriptive-semantic theory assigns *semantic values* to the expressions of the language, and explains how the semantic values of the complex expressions are a function of the semantic values of their parts... Second, there are questions, which I call questions of 'foundational semantics' about what the facts are that give expressions their semantic values, or more generally, about what makes it the case that the language spoken by a particular individual or community has a particular descriptive semantics.³²

Descriptive and foundational analysis are, of course, very often interrelated, but it is customary to separate the descriptive from the foundational issues in discussing contextual dependence.³³ My own proposal is a contribution to the foundational problem of context dependence – and more specifically to the foundational problems raised by quantifier domain restriction.

7. CONCLUSION

In my paper, I have presented two competing perspectives on the problem of quantifier domain restriction – OPC and IPC – and I have tried to offer a fair reconstruction of IPC and a defence of the expressivist's point of view. In my view, the restriction of the quantificational domain of an utterance is a special case of the problem of context dependence: for this reason, I have found it useful to draw a parallel between quantifier domain restriction and indexicality. I have shown that, according to Kaplan, the addressee must take into account the speaker's intentions in order to identify the reference of some expressions, i.e. the demonstratives: intentions are therefore relevant for determining the semantic core of demonstrative sentences. In my paper, the analysis of demonstrative reference allows us to reliably test our intuitions about communicative mechanisms, and more specifically about the relation between objective context and intentional context.

This analysis has thus been the starting point for more general reflections on the notion of communicative intention. The examples provided argue that the speaker's communicative intentions can play a semantic role only if they satisfy an Availability Constraint, that is to say, if they are reasonable and not arbitrary, and can be recognised by the addressee: reference is determined by public behaviour, by intentional *acts* and not by intentions as mental objects.³⁴ In other words, an intention must be made available or communicated to the addressee to be semantically relevant, and for that purpose the speaker can exploit any feature of the objective context, including words, gestures, or the relevance or uniqueness of

either the quantificational domain or of the referent in the context of utterance: elements of the intentional context can be identified *only through* the identification of elements of the objective context. And identification is certainly not (contrary to Gauker's claim) a mind-transcendent procedure.³⁵

NOTES

- ¹ The domain restriction at the semantic level can be explicit or implicit. For a defence of the explicit approach, see Stanley and Szabò (2000); according to them, in a case like (1) "there are covert semantic values which play their role in determining the proposition expressed. The semantic value of the sentence is a proposition that quantifies over the relevant [people]... the value of a contextual parameter somehow contributes to the semantic value of the whole sentence" (p. 234). For a defence of the implicit approach, see Reimer (1998): actually her theory is a sophisticated version of the implicit approach, contextually restricting not just the *individuals* to be included in the domain of quantification, but the properties of those individuals as well. See *ibidem*, for a critique of the approach in terms of the distinction between "what is said" and "what is meant": "it is at odds with the fact that context-dependence is an ubiquitous feature of the use of natural language... To deny such context-dependence would, in effect, be to claim that the majority of our ostensibly literal utterances involve a divergence between what is said and what is meant" (p. 102).
- ² The quantifier domain restriction case raises more general questions, such as the distinction between objective and cognitive context, between presemantic, semantic and post-semantic context (cf. Perry, 1997), and, in the end, between semantics and pragmatics: on the latter point, see Bianchi (2004).
 - ³ Gauker (1997, pp. 1–2).
- ⁴ For an extensive but not always convincing discussion of C., see van Deemter (1998) and Gauker's reply in Gauker (1998b).
- ⁵ Assumptions *actually* shared, as in Clark (1992), or only *supposedly* shared, as in Stalnaker (1999): on the two options, see Gauker (1998a, p. 154).
- ⁶ Gauker (1998a, p. 150). According to Gauker, the objective context is constituted by situational elements (the external context) and by propositional elements: he calls the totality of such elements the *propositional context*. On the distinction between cognitive and objective context cf. Penco (2004), and Sbisà (2002a) and (2002b).

⁷ Gauker (1997, p. 5).

⁸ Gauker (1998b, p. 447).

- ⁹ Gauker (1998a, p. 166).
- ¹⁰ Perry (1997, p. 595).
- ¹¹ Kaplan (1977, p. 490): "Typically, though not invariably, a (visual) presentation of a local object discriminated by a pointing".
- ¹² Kaplan (1977, p. 492): "The referent of a pure indexical depends on context, and the referent of a demonstrative depends on the associated demonstration".
- ¹³ Kaplan (1989, p. 582).
- ¹⁴ Kaplan (1989, p. 588): "The directing intention is the element that differentiates the 'meaning' of one syntactic occurrence of a demonstrative from another, creating the *potential* for distinct referents, and creating the actuality of equivocation".
- ¹⁵ For a different perspective on the distinction between pure indexicals and demonstratives, see Bianchi (2001b).
- ¹⁶ This is also Gauker's opinion: see Gauker (1997, p. 14).
- ¹⁷ Even cases I and II, of course, could be reconstructed as problematic cases.
- ¹⁸ The same goes for an empty description: the description "the pink marbles" is empty if there are no pink marbles, and the utterance containing it is neither true nor false.
- ¹⁹ Cf. Gauker (2001).
- ²⁰ To avoid relevance-based objections, Gauker sometimes relies on his notion of the *goals* of the conversation. But then it is not clear in which sense we are still talking of objectivity: we are far from Kaplan's notion of objective content and from Gauker's own identification of the objective features of the utterance situation with the external ones. Cf. Sbisà (2002b): "If goals contribute to the delimitation of context, objective context is in fact made to rely on a subjective element". Sbisà's own theory is a different matter where entitlements, obligations and the like are objective features of interactional situations, not merely cognitive states of the participants.
- ²¹ Bach (1992a, p. 296). On referential intentions, see also Bach and Harnish (1979, 1992). As it is well known, Bach's theory is a development of Grice's, and of his intention-based and inferential view of communication.
- ²² Kaplan (1978, p. 396).
- ²³ Bach (1992b, p. 143). For a different analysis of this example, cf. Reimer (1991a, b).
- ²⁴ Cf. Kaplan (1977, p. 525f).
- ²⁵ Cfr. Bach (1992a, p. 298).
- ²⁶ Cfr. Travis (1981, p. 56).
- ²⁷ On this point, see Roberts (1997, p. 198): Roberts speaks of "reasonable referential intentions", basing his argument on Donnellan's treatment of reasonable expectations and intentions: "On Donnellan's view... one's intentions are limited by reasonable expectations, which in turn are limited

by established practices and particular stipulations" (p. 196); cf. Donnellan (1968, pp. 212–214).

- But, in my opinion, not to *any* competent speaker, as Garcia Carpintero proposes; cf. Garcia Carpintero (1998, p. 537): "I will take demonstrations to be sets of *deictical intentions* manifested in features of the context of utterance available as such to any competent user". On this point, see Bianchi (2001a), chapter X. Marina Sbisà suggests extending this availability constraint to all the "relevant participants" (personal communication).
- ²⁹ Kaplan 1978 (cited in Reimer (1991a).
- ³⁰ Note that it is possible to build more sophisticated examples, in which the speaker may refer not only to objects explicitly mentioned in the conversation, but only presupposed.
- ³¹ For a more detailed analysis, see Clark (1992), Roberts (1993), and Bianchi (2003).
- ³² Stalnaker (1997, p. 535).
- ³³ And in particular in discussing demonstratives; cf. Stanley and Szabò (2000), pp. 223–224: "Semanticists often think of the semantic value of a demonstrative as 'given' by the context, and relegate questions of what exactly it is in virtue of which it counts as the semantic value of that demonstrative in that context to a separate field of study... debates about whether demonstrations or speaker intentions fix the reference of demonstrative expressions are instances of the foundational problem of context-dependence".
- ³⁴ Note that this thesis implies the reconciliation between "Demonstratives" in which Kaplan claims that the occurrence of a demonstrative must be supplemented by a *demonstration*, like a pointing (a feature of the objective context) and "Afterthoughts" in which, conversely, Kaplan argues that the occurrence of a demonstrative must be supplemented by a *directing intention*, the referential intention the speaker associate with the expression (a feature of the intentional context): see Bianchi (2003).
- ³⁵ I wish to thank John Biro, Chris Gauker, Diego Marconi, Carlo Penco, Stefano Predelli, Marina Sbisà and Nicla Vassallo for extensive discussions on many points related to the topic of this paper. I would also like to thank an anonymous referee for helpful comments and suggestions.

REFERENCES

Almog, J., Perry, J. and Wettstein, H. (eds.) (1989): *Themes from Kaplan*, Oxford: Oxford University Press.

Bach, K. (1992a): 'Paving the road to reference', *Philosophical Studies* 67, 295–300.

- Bach, K. (1992b): 'Intentions and Demonstrations', *Analysis* 52(3) 140–146.
- Bach, K. and Harnish, R.M. (1979): *Linguistic Communications and Speech Acts*, Cambridge, MA: MIT Press.
- Bach, K. and Harnish, R.M. (1992): 'How Performatives Really Work: A Reply to Searle', *Linguistics and Philosophy* 15, 93–110.
- Bianchi, C. (2001a): *La dipendenza contestuale. Per una teoria pragmatica del significato*, Napoli: Edizioni Scientifiche Italiane.
- Bianchi, C. (2001b): 'Context of Utterance and Intended Context', in V. Akman *et al.* (eds.), *Modeling and Using Context. Third International and Interdisciplinary Conference, CONTEXT '01*, pp. 73–86, Berlin: Springer.
- Bianchi, C. (2003): 'How to Refer: Objective Context vs. Intentional Context', in P. Blackburn et al. (eds.), Modeling and Using Context. Fourth International and Interdisciplinary Conference, CONTEXT '03, Lecture Notes in Artificial Intelligence, Vol. 2680, pp. 54–65, Berlin: Springer.
- Bianchi, C. (ed.) (2004): *The Semantics/Pragmatics Distinction*, Stanford: CSLI.
- Clark, H. (1992): Arenas of Language Use, Stanford: The University of Chicago Press & CSLI.
- Donnellan, K. (1968): 'Putting Humpty Dumpty Together Again', *The Philosophical Review* 77, 203–215.
- Garcia-Carpintero, M. (1998): 'Indexicals as Token-Reflexives', *Mind* 107, 529–563.
- Gauker, C. (1997): 'Domain of Discourse', Mind 106, 1-32.
- Gauker, C. (1998a): 'What is a context of utterance?', *Philosophical Studies* 91, 149–172.
- Gauker, C. (1998b): 'Intelligibility in Semantics: Reply to van Deemter', *Mind* 107, 447–450.
- Gauker, C. (2001): 'Situated Inference versus Conversational Implicature', *Nous* 35: (2), 163–189.
- Hale, B. and Wright, C. (eds.) (1997): A Companion to the Philosophy of Language, Oxford: Blackwell.
- Kaplan, D. (1977): 'Demonstratives. An Essay on the Semantics, Logic, Metaphysics, and Epistemology of Demonstratives and Other Indexicals', in J. Almog *et al.* (1989), pp. 481–563.
- Kaplan, D. (1978): 'Dthat', in P. French, T. Uehling and H. Wettstein (eds.), (1979): *Contemporary Perspectives in the Philosophy of Language*, pp. 383–400.
- Kaplan, D. (1989): 'Afterthoughts', in J. Almog et al. (1989), pp. 565–614.Penco, C. (2004): 'Context and Contract', in P. Bouquet et al. (eds.), Contexts, Stanford: CSLI, forthcoming.
- Perry, J. (1997): 'Indexicals and Demonstratives', in Hale and Wright (1997), pp. 586–612.

- Reimer, M. (1991a): 'Demonstratives, Demonstrations, and Demonstrata', *Philosophical Studies* 67, 187–202.
- Reimer, M. (1991b): 'Do Demonstratives Have Semantic Significance?', *Analysis* 51, (4), 177–183.
- Reimer, M. (1998): 'Quantification and Context', *Linguistics and Philosophy* 21, 95–115.
- Roberts, L. (1993): How Reference Works. Explanatory Models for Indexicals, Descriptions, and Opacity, Albany: State University of New York Press.
- Roberts, L. (1997): 'How Demonstrations Connect with Referential Intentions', *Australasian Journal of Philosophy* 75, 2, 190–200.
- Sbisà, M. (2002a): 'Il contesto fra dimensione cognitiva e oggettività' in P. Parrini (ed.), *Conoscenza e cognizione*. *Tra filosofia e scienza cognitiva*, pp. 243–256, Milano: Guerini.
- Sbisà, M. (2002b): 'Speech acts in context', *Language and Communication* 2, pp. 421–436.
- Stalnaker, R. (1997): 'Reference and Necessity' in Hale and Wright (1997), pp. 534–554.
- Stalnaker, R. (1999): *Context and Content*, Oxford: Oxford University Press. Stanley, J. and Szabò, Z. (2000): 'On Quantifier Domain Restriction', *Mind and Language* 15(2), 219–261.
- Travis, Ch. (1981): The True and the False: the Domain of Pragmatics, Amsterdam: Benjamins.
- van Deemter, K. (1998): 'Domains of Discourse and the Semantics of Ambiguous Utterances: A Reply to Gauker', *Mind* 107, 443–445.

Faculty of Philosophy
S. Raffaele University, Milan
Palazzo Arese Borromeo
20031 Cesano Maderno (MI)
Italy
E-mail: claudia@nous.unige.it