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Indexicals and essential demonstrations

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Abstract: In this paper, I discuss some of Maximilian de Gaynesford’s arguments regarding indexicals. Although I agree with his treatment of the first singular personal pronoun as a prototype of demonstrative expressions, I challenge his refusal to treat indexicals as complex demonstratives. To offer an alternative to this refusal I try to develop a common ground from different theories that consider indexicals as linguistic constructions that embed a nonlinguistic element, following an original idea in Frege’s latest writings. These views form the backdrop on which we can put forward the claim of treating all indexicals as complex demonstratives. In the central part of the paper, I criticize each of de Gaynesford’s arguments against the reduction of indexicals to complex demonstratives. Besides, I propose a new definition of the concept of “demonstration” as a nonlinguistic feature of all indexicals in their referential uses, to contrast de Gaynesford’s rejection of the idea that demonstrations are an essential feature of indexicals. Eventually, I strengthen my claim by distinguishing indexicals from proper names and definite descriptions on the ground that only perceptual indexicals necessarily require an accompanying demonstration. However, the main point of the paper is a negative one, that is the rejection of de Gaynesford’s arguments against the reduction of indexicals to complex demonstratives. More work is needed to reach a positive conclusion on this topic.

Keywords: de Gaynesford; definite descriptions; demonstration; demonstratives; indexicals

1 Indexicals as complex demonstratives?

In a well-known passage of his *Posthumous Writings* Frege discusses the complex demonstrative “this person” and claims:

A concept-word combined with the demonstrative pronoun or definite article often has... the logical status of a proper name in that it serves to designate a single determinate object. But

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then it is not the concept-word alone, but the whole consisting of the concept word together with the demonstrative pronoun *and accompanying circumstances* which has to be understood as a proper name. (Frege 1979: 213, my emphasis)

I consider this statement to be one of the first examples of the claim that nonlinguistic elements may be part of the expression of the thought. In some particular cases, the expression of the thought is a mixture of linguistic and nonlinguistic elements. This claim stimulated many authors, eventually driving some of them towards the idea that all indexicals follow this particular kind of mixture of linguistic and nonlinguistic elements. Besides that, the idea suggests that indexicals might be properly represented with the logical form of a complex demonstrative, where a demonstration (a nonlinguistic element) is an essential part of the expression. In Section 2, I will present a review of some of the attempts following this peculiar Fregean idea. In Section 3, I will then discuss three main arguments de Gaynesford makes against the reduction of indexicals to complex demonstratives. In Section 4, I introduce a definition of “demonstration” as a necessary nonlinguistic ingredient of indexicals. With this definition, I try to respond (in Section 5) to further criticisms presented by de Gaynesford on the concept of demonstration, and in Section 6, I will endorse the asymmetry thesis concerning the difference between indexicals and proper names or definite descriptions grounded on the different requirements on the use of demonstrations. In what follows I will use “indexicals” as a general term covering indexical and demonstrative expressions.

Some authors have suggested treating all demonstratives, or even all indexicals, as complex demonstratives. Tyler Burge (2005 [1979]: 239) suggests that bare demonstratives like “this” and “that” are to be conceived of as complex demonstratives. A sentence like “that is F” is a kind of shorthand for “that G is F,” where – together with the sortal “G” we need something more, a direct acquaintance with the demonstrated object. Eros Corazza (2003, 2006) presents an explicit rendering of pronouns as complex demonstratives: he claims that a sentence like “she is G” can be analyzed as “that, who is F, is G,” following the analogy with subordinate clauses in parentheticals. Simon Prosser (2005, 2019) refers to indexicals such as “here” and “there” as complex demonstratives. His solution provides the possibility of using two different demonstratives to refer to the same place and explains dynamic thoughts: a typical case is to think of a place as “there” after having thought about the same place as “here”; we could ideally express this dynamic thought with an identity statement in the following form: “the place referred to now as ‘there’ = the place referred to earlier as ‘here’” (Prosser 2019:11).

Instead, according to David Kaplan “here” is a typical example of “pure indexical” and yet, from Prosser’s perspective, it becomes a complex demonstrative,

which requires – we may assume – some kind of demonstration of the place, basically given by the physical presence of the speaker when she says: “it is F here.” According to Prosser (2019), this judgment may be expressed as “this H place is F.”

To better understand what is at stake we need to bear in mind two distinct questions:

- A) Do indexicals always contain a nonlinguistic element?
- B) Can indexicals be reduced to complex demonstratives?

Perhaps not all authors that accept (A) are bound to also accept (B) and vice versa. The two questions are deeply connected because a positive answer to (B) drives us towards a positive answer to (A) and a positive answer to (A) can open the way for (B). Therefore, before addressing question (B) we need to answer question (A) and decide – in case of an affirmative answer – what we should consider being the nonlinguistic element in question. In this paper, I present some arguments in favor of a positive answer both to the first and to the second question.

2 Nonlinguistic elements as part of indexical expressions: Frege’s heritage

According to Kaplan (1989a; developed by John Perry 1997) “I,” “here” and “now” are “pure” indexicals because they do not require any supplement, neither physical nor intentional: their referent is fixed in the context by their being uttered, and the utterance itself suffices for them to be understood without equivocation. Other indexicals, mainly demonstratives, require an intention that suffices to fix the referent (and sometimes also be expressed with a demonstration). Many authors have challenged this standard presentation and suggested something grounded on Frege’s remark on the necessary presence of nonlinguistic elements in the expression of the thought. However, their conceptions of the nonlinguistic element differ.

For some authors, like Kripke, the non-linguistic element is the object itself (the speaker with “I” or the time with “now”). An indexical would therefore consist of a pair constituted by a linguistic part and a nonlinguistic part. As Kripke claims:

“Now it is raining in Stockholm,” or more simply, “It is raining in Stockholm,” is not the expression of a complete thought. Also included in the expression of the thought, and hence in the sentence (*Satz*), is not merely the verbiage, but also a time. The real *Satz* or expression of a thought (*Gedankenausdruck*) is therefore an ordered pair:

$\langle L, t \rangle$

Here *t* is the time of utterance, where *L* is the piece of language, such as “It is raining now in Stockholm.” But really, since it is part of the expression of the thought, the time of utterance is, for Frege, an unrecognized piece of language. (Kripke 2008: 201–202)

Künne (2010) criticizes the function theoretic account presented by Kripke, for whom a sentence with an indexical as “it is raining in *F*” is a functional expression in need of a supplement, where the supplement is given by the time of the utterance. But – Künne remarks – the time is not a sign and cannot be treated as such. However, time belongs to the complex sign, or a *mixtum compositum* constituted by the hybrid proper name. Therefore, Künne claims, sentences like “It is raining today ...” should be treated as follows:

The thought contains a mode of presentation of the time of the utterance that is expressible and graspable only at that very time, and this sub-propositional sense is expressed by a *mixtum compositum* that consists of the present-tense inflection of the verb and the time of utterance ... Neither the verbal part of a hybrid singular term nor, of course, its non-verbal part is a function-sign. Neither the non-verbal part of a hybrid singular term nor, of course, its verbal part is a singular term. But the result of combining a word or phrase with a time, a place, a speaker or an act of demonstration is a singular term that by itself designates something. (Künne 2010: 544–545)

Mark Textor develops Künne’s idea of hybrid proper names (Künne 1992), insisting that a demonstration is often a necessary non-linguistic part of a thought: “If we complete ‘that’ with a demonstration (and, if necessary, a further concept-word), we get a hybrid proper name that has sense and reference. Without the demonstration, we do not have a singular term that purports to have a semantic referent” (Textor 2007: 958).

If demonstrations are signs, they have both sense and reference, and, when faced with missing demonstrations, the uttering itself takes the role of a demonstration (Textor 2007: 957). In a later paper, Textor (2015) presents a criticism of both Kripke and Künne claiming that their views are not dissimilar to the standard view with objects put in the parameters of the index. He chooses a more radical claim that the nonlinguistic part of a hybrid proper name is the use of circumstances in which a speaker utters a sentence with an indexical:

Knowledge of linguistic meaning and understanding the speaker’s use of the circumstances of utterance both contribute to grasping the thought expressed by an utterance of an indexical sentence. One needs to know the context-independent meaning of the indexical and understand the speaker’s use of circumstances accompanying the utterance in order to arrive at the right way of thinking of the referent of the indexical. (Textor 2015: 842)

Here, by “context-independent meaning” of an indexical expression we may understand something like Kaplan’s character, while the context-independent

meaning of a sentence with an indexical can be conceived of as the reflexive truth conditions as discussed in Perry (2019; for another rendering see Heck 2002).

Carlo Penco elaborates on what is common between Kripke and Kühne, that is the analysis of demonstratives, where the supplement needed to express a complete thought is given by a demonstration. Although following much of what is proposed by Textor (2015), he explicitly hints at the possibility of treating all indexicals as complex demonstratives, and claims that, after the debate on Frege's theory of indexicals, "We have now a better awareness of what is needed to 'supplement' words in indexical thoughts: deeds, actions, those kinds of institutional or social actions that are gestures of different kinds, especially demonstrations that point to objective features of the context of utterance" (Penco 2015: 209).

From this perspective, Borghi and Penco (2018) provide some remarks on the etymology of indexicals (including pure indexicals) as connected to demonstrative roots in ancient Indo-European. They take this as an indication compatible with the understanding of indexicals as complex demonstratives.

In elaborating on the shortcomings of Kühne, Kripke, and Textor, Tadeusz Ciecierski proposes a more metaphysical view where "utterances are aggregates of contextual parts across actual distributions of contextual parameters or, as one might put it, contextually perduring objects" (2019: 58). Circumstances are part of the expression of a thought as aspects of a contextually perduring utterance. We will not enter into the metaphysical problem of hybrid proper names here, but I want to highlight two noteworthy aspects of this analysis: first, the values of the parameters of a context are not objects as normally conceived, but *qua*-objects, or objects under a description (Kit Fine) or under a perspective. This suggestion is coherent with the actual trend in contextualism as it appears in the 2010 anthology by Recanati and others entitled *Context-Dependence, Perspective, and Relativity* (Recanati et al. 2010). The second aspect, which is even more relevant to our discussion, is the idea that demonstrations being actions, may be presented also as "omissions." Ciecierski's suggestion is as follows: "The absence of other possible actions of demonstration invites the addressee to formulate a hypothesis pertaining to the referential intentions of the speaker and the reasons she has to avoid making other demonstrating actions" (Ciecierski 2019: 60).

Each author has a different proposal on what is to be taken as the nonlinguistic supplement that is needed to complete the linguistic expression of a complete (Fregean) thought. Notwithstanding these differences within a variety of perspectives, all authors quoted above share the claim that we need to find a nonlinguistic feature for all indexicals. This claim runs counter to Kaplan's idea of "pure indexicals" ("I," "here," "now") and his view of demonstratives as just grounded on referential intentions (not requiring demonstrations). The alternative to Kaplan's view is the treatment of indexicals as complex demonstratives, where "this place,"

“this male person,” “this time” represent the logical form of “here,” “she,” “now,” and analogously for other indexicals.¹ Yet there are formidable criticisms of this reduction and, among the strongest, we find some of Maximilian de Gaynesford’s arguments.

3 Three main arguments against indexicals as complex demonstratives

De Gaynesford (2006) presents strong criticism of the idea of “pure indexicals” working mainly on the indexical “I.” He refers to John Perry’s doubts (1977: 596) on pure indexicals when Perry says that “here” is not a completely “pure” indexical, because it has uses that require gestures to fix the reference. De Gaynesford wants to go further and claims, with a set of well-organized arguments, that also “I” is not a pure indexical, but it is a demonstrative expression. He also hints at the idea that the utterance itself of the first personal pronoun is a demonstration of the speaking subject:

It is plausible to suppose that simply doing what is necessary to utter the term is sufficient demonstration to determine one as that individual. Thus, just doing what is necessary to count as using the term ensures its success. Uttering “I” determines reference to something, and the right something. So, one’s uses will never fail. (De Gaynesford 2006: 81)

According to de Gaynesford, the security of reference granted by the mere uttering of a deictic term is also shared by demonstratives like “this” and “that” or by expressions like “this very speaker.” Therefore, it is not a sign of “essential indexical,” but at most it helps to classify the first personal pronoun as a typical example of a demonstrative term. One might expect that, from these premises, de Gaynesford would happily join others in claiming that indexicals may be treated as complex demonstratives. Yet, de Gaynesford explicitly rejects this claim, with a stark criticism of the above-mentioned paper by Corazza, who instead supports the idea of *reductio* of indexicals to complex demonstratives:

1 As is well known, Kaplan explicitly challenged this idea tagged as the point of view of a “sloppy thinker,” on the grounds that it clashes with our intuitions on possible worlds. I will not discuss this problem here, but at least give a hint of an answer: We may treat expressions like “this person” as fixing the referent in the actual world, like a “dthat” operator. Apparently, the same expression “this person” in different possible worlds may refer to different individuals, but this is what differentiates a proper name from an indexical. For more remarks on this topic see Borghi and Penco (2015).

Some claim that *She/He* are disguised complex demonstratives of the form *That Female/Male*. If this were true, it would greatly complicate the application to them of the anaphoric-deictic distinction. The idea that *She/He* are to be understood in this fashion, and that sentences like ‘*That woman is studious*’ are consequently to be treated as synonymous with ‘*She is studious*,’ is said to follow from the claim that *She/He* have a hidden indexical component. But the arguments are quite unconvincing. (de Gaynesford 2006: 92)

Contra Corazza de Gaynesford claims that the thesis that pronouns are complex demonstratives in disguise would complicate the application to indexicals of the anaphoric-deictic distinction. It is not completely clear to me why. Robert Brandom tried to reduce deixis to anaphora and explain deixis through anaphora; de Gaynesford (2006: 105) suggests reversing the explanatory order and hints at the possibility of considering anaphoric reference as a particular form of deictic reference. But, even in this last case, nothing would forbid studying the relationship between anaphora and deixis from the point of view of the reduction of indexicals to complex demonstratives. After all, complex demonstratives may have both a referential and an anaphoric use as is the case with pronouns. De Gaynesford’s discussion is short: the main point on the difference between anaphoric and deictic uses is devoted solely to concluding that the first personal pronoun has no anaphoric uses, and it is a kind of “super-deictic term.” This central point of his book is an interesting and welcome result, which appears, however, to be compatible with a possible reduction of indexicals to complex demonstratives. But this is not so according to de Gaynesford, who launches three main arguments to support his claim against the reduction: a question of primacy, a question of meaning, and a question of information. I will shortly present these arguments and try to point out some shortcomings that show they are not as conclusive as they appear at first sight.

3.1 Argument by primacy

De Gaynesford summarizes his point as follows, assuming – for argument’s sake – that there is hidden indexicality:

Suppose we acknowledge hidden indexicality. First, this evidence does not settle the question of primacy. It gives us no more reason to regard *She/He* as a proxy for *That Female/Male* than vice versa. Hence, we have as much reason to regard *That Female/Male* as disguised simple demonstratives of the form *She/He* as the converse. (De Gaynesford 2006: 91)

Speaking of primacy is ambiguous, at least, between genetic, chronological, and explanatory primacy. From the genetic point of view, there is etymological evidence of the origin or derivation of personal pronouns from demonstratives. This is a consolidated view in language studies since Brugmann and Bühler and recently

discussed by Ballester (2006) and Diessel (1999, 2006, 2012; with solid arguments against alternative theories). See also Borghi and Penco (2015) for an updating of those arguments.

With regards to chronological primacy, we may refer to studies in language acquisition: it appears that demonstratives are among the first words learned in the early stages of children's development, coming before personal pronouns. Although there may be a progression and stages in learning deictic contrasts of "this" vs. "that," demonstratives are always among the first words to appear: one-year-old children already use demonstratives for perceptually available objects in the immediate nonlinguistic context. Uses of pronouns appear later (2½– 3½-year-old children) and in particular, the third-person pronoun appears after the first-person pronoun and after or together with the second person pronoun; referential cohesion with pronouns arrives at age five (Brener 1983; Clark 2009: 334–335; Clark and Sengul 1978; Ricard et al. 1999; Tomasello 2006: 200–207).

Regarding explanatory primacy, explaining the meaning of "she" once acquired the mastery of "that" seems easier than explaining the meaning of "that woman" with the mastery of "she." Think of the following situation: I am walking along a street and I see a lady with a hat and comment "she is beautiful." My niece does not know the term "she" and asks: "what does 'she' mean?" or "who is she?" mistaking "she" for a proper name. I may answer: "do you see that woman with the hat? Saying 'she,' I mean that woman." I cannot imagine a contrary explanation in which I explain the term "that woman" with the term "she."

3.2 Argument about meaning

According to de Gaynesford, assuming hidden indexicality

gives us no reason to regard the meaning of the terms in question (their logical character, inferential role, referring function, expressive use, and communicative role) as given by the meaning of That Female/Male or That Woman/Man. Doubtless the sortal question (which gender?) is answered by She/He; but that is a different matter. (De Gaynesford 2006: 91)

The sortal question is explicitly answered with the nominal in the complex demonstrative. But as far as the linguistic meaning of "she" in its referring function, why can't we define it as the female individuated by a demonstrative and a demonstration? The logical character depends on the formalism you choose, and if you choose to treat pronouns in referential uses as complex demonstratives you will choose a formalism adequate with this choice. The expressive and communicative role is even clearer if we take indexicals as complex demonstratives because they are connected with a nonlinguistic element, that is a demonstration, which has an

apparent strong communicative role. But, on this aspect, de Gaynesford has further worries, connected to his criticism of Kaplan's view of demonstrations, and I leave the discussion of this point for later. About the inferential role, we may rely on the arguments given by Textor 2007 on the relevance of the inferential role of different occurrences of the same type of a complex demonstrative, elaborating on an example by John Perry, which we are going to present in what follows, given that also impinges on the difference in informative value.

3.3 Argument about the difference in informative value

The last criticism discusses the difference in informative value between a pronoun and a complex demonstrative. According to de Gaynesford, one motivation for claiming that synonymy between pronouns and complex demonstratives is incorrect is linked to informative value: sentences of the form 'She is that woman' have fully informative uses that 'She is she' does not.

However, this point is not elaborated but taken for granted. My question is banal: is it true that there are no fully informative uses of identity statements like "She is she"? If we are speaking of utterances, "she" occurs in two different *stages* of an utterance (using Ciecierski's metaphysical viewpoint, an utterance as a perduring kind of object). I, therefore, do not see a significant problem in proposing examples similar to the one given by Kaplan (1989a) on "that ... is identical to ... that." Kaplan's example was as follows: one may point very slowly at Venus in the morning and the evening, so that the two occurrences of "that," together with a pointing gesture, express two different modes of presentation of the same object. Perry (1977: 12) proposed an analogous and much-discussed example of a ship seen from two different perspectives where "that (ship) is ... that (ship)" is an informative assertion. Textor (2007) analyzes this example, showing that, in this case, the different occurrences of the same kind of demonstrative may have different inferential roles, given that from the second occurrence we may derive what follows from the identity statement and further consequences depending on the context of discourse. Our problem is to extend this kind of analysis to pronouns. If we can show that we may have identity statements formed with pronouns ("she is she") that perform the same informative role of statements with complex indexicals ("she is that woman") we may offer de Gaynesford an answer. At the same time, we may take Textor's point on inferential value against the question posed by de Gaynesford about differences in inferential roles between complex demonstratives and pronouns.

We can make examples of statements with indexical distributed utterances (McCullagh 2020) where two occurrences of "she" may have relevant informative

value. Textor 2015 proposed a case of informative identity statement with two occurrences of the pronoun “I”: a host waiting for an unknown guest at the airport answers a call from the guest and hears “I ...,” when, suddenly, the guest realizes who her host is and continues with “... am I” showing herself in front of the waiting host. Following this example, let us use another of the same kind: observing a quick-change artist that rapidly changes her dress while passing behind a screen I may point to her before and after, and say: “she ... is ... she!” (or “that woman is ... that woman”) and I make an informative statement. It seems therefore that the argument for the difference in the informative value of identity statements of “She is that woman” and “She is she” loses its force in front of examples of different occurrences of the same kinds of indexicals in an utterance.

In the views discussed above, concerning the reduction of indexicals to complex demonstratives, we considered the possibility of giving demonstrations an essential role in defining the referential uses of indexicals. De Gaynesford analyses many aspects that suggest that demonstrations determine the reference of deictic terms: demonstrations obey a system of constraints and are conventionalized (although only in part). Besides, not all ostensive gestures are demonstrations and demonstrations have a determining role in reference fixing. However, according to de Gaynesford, they are not essential in the use of deictic terms:

To say that demonstrations have the role of determining the reference of Deictic Terms is to make a claim about all demonstrations, not about all Deictic Terms. It tells us that if some gesture does not have such a role, it is not a demonstration. It does not tell us that if some use of a Deictic Term is not accompanied by a demonstration, its reference is not determined. (de Gaynesford 2006: 116–117)

Disentangling proper demonstrations from other ostensive gestures is a good point: de Gaynesford refers to an updated version of Kendon’s continuum where he shows that demonstrations need to be set apart from other kinds of ostensive gestures. However, as it is explicitly stated at the end of the previous quotation, he strongly objects to the idea that demonstrations are essential to the referential uses of deictic terms. His point is that – he claims – there is nothing in common about the referential function of Deictic Terms. We have three different ways to provide a positive answer to a ‘which?’ question: (a) Demonstration; (b) Utterance-relative uniqueness; (c) Leading candidacy. In the cases of (b) and (c), he claims that these criteria may be applied both to actual referential uses in extralinguistic situations and to anaphoric uses in the context of discourse. The main core of our discussion, however, is around the referential use of indexicals and we will therefore only discuss this aspect (the question of anaphoric uses would require more extensive arguments, as previously suggested, and, besides that, the indexical “I” – as pointed out by de Gaynesford – has no proper anaphoric uses).

We are left with two questions:

- (1) Can we define the concept of demonstration so that it cannot be rendered empty through excessive vagueness?
- (2) Can utterance relative uniqueness and leading candidacy be reduced to uses of demonstrations?

4 Towards a new definition of demonstration

De Gaynesford has a negative answer to the first question, with a very simple argument: there is no proper concept of demonstration covering all uses of a deictic term: “If we stretched Demonstration so that something counting as such could be associated with every spoken, communicative, soliloquizing, written use of a Deictic Term, we would merely have a contradictory concept with inconsistent application and a grotesque distortion of what is ordinarily meant: ostensive gesture” (De Gaynesford 2006: 119).

Here it seems that we have a straw-man argument: no one suggested stretching the notion of demonstration to cover all cases of all uses of indexicals. Let us, therefore, leave aside soliloquizing, anaphoric, phantasmatic, and written uses of deictic terms and limit our analysis to the referential uses of indexicals in the perceptual context. De Gaynesford’s criticism is a challenge also in this specific setting and requires an answer. According to de Gaynesford, the three major points of distortion and contradiction that happen when we try to make the demonstration a criterion of deixis are as follows: that sometimes demonstration is considered a gesture; sometimes a contextual feature indicated by a gesture (“this is Rome” with somebody pointing to a spot on the map); and often the demonstration is no gesture at all.

This criticism refers to Kaplan’s use of the term “demonstration” which is very broad and goes from actual pointing (as in the example of the Fregean theory of demonstrations) to a general appraisal of a salient object in a context. Kaplan (1989a: 490) defined “demonstration” as typically, though not invariably, “a (visual) presentation of a local object discriminated by a pointing.” This definition, according to de Gaynesford, raises more problems than it solves, also given that, according to Kaplan, demonstrations may also require no special action on the speaker’s part. Here Kaplan refers to cases where somebody shouts: “Stop that man.” Kaplan (1989b) notoriously abandoned the centrality of demonstration relegating it to a secondary and unnecessary role of making a referential intention explicit. However, the point is worth of a better definition: de Gaynesford (2006: 39) reminds us that it is not clear whether for Kaplan a demonstration is a pointing gesture, or a presentation made salient by the pointing. It seems that Kaplan uses the term both for an action (e.g., a pointing gesture), or a mere visual presentation

(relying on the salience of an object in context). However, notwithstanding a series of questions posed at Kaplan's notion of demonstration², de Gaynesford does not seem to answer the same questions he asks, and does not provide a more precise definition, nor gives a proper alternative to Kaplan's definition. He only remarks that not all ostensive gestures are demonstrations and discusses the classical Kendon's classification of gestures based on three questions: must speech be present? Are the properties of the gesture linguistic? Is the gesture conventionalized? Different answers to these questions provide a classification for gesticulations, dumb shows, iconic forms, autonomous gestures, and, besides these, we have demonstrations, characterized by being partly conventionalized *co-speech* gestures. Aside from this hint toward a definition, de Gaynesford suggests that demonstrations should be studied by linguists as a separate kind of gesture, remarking that they are not normally treated among gestures by linguists and psychologists. However, there is a broad psycholinguistic tradition in the analysis of demonstrations within the problem of demonstrative reference, at least since the works of Herbert Clark. In the chapter "demonstrative reference" of his *Arenas of Language Use*, Clark claims that, to understand what one refers to with a complex demonstrative, a hearer not only has to grasp the words, but also register what the speaker is indicating by a gesture or "demonstration, which could have been a nod, a gaze, a presentation, or some other gesture" (Clark 1992: 789).

Although de Gaynesford accepts the idea that demonstrations have their home in language, he insists that there are uses of deictic terms that do not require demonstrations (2006: 117). The analysis is short, and maybe the old work by Clark may pose some doubts on this last assumption. Let us see how: Clark (1992: 81–82) reminds us that sometimes we pick the relevant individual without an explicit demonstration because that individual is salient, but salience is never enough because each individual is salient for certain characteristics. To understand the process of using an indexical without a demonstration we must rely on the specific common ground of hearers and speakers (Clark et al. 1983). We will therefore have three constant sources of information of demonstrative reference: perceptual evidence, linguistic features, community membership (or information shared in the specific common ground). Community membership explains most uses of

2 Here are some examples of de Gaynesford's questions: if the demonstration is the pointing, must it be an ostensive bodily gesture, or can it include non-bodily signs? Must it be the speaker's action, or an action under the control of the speaker – could it be the action of another agent? If the demonstration is the (visual) presentation, to whom must it be presented – would it be sufficient if the speaker alone saw it, or must the immediate audience see? If speakers refer to something that is (or could be) visually present to others, but not to the immediate audience, does that count as demonstration? Is demonstration to be thought of as a gesture or the situation in which a term is used, a whole within which gestures merely form a part?

anaphoric and phantasmatic uses of indexicals³. Perceptual evidence, on the other hand, needs the joint attention of speakers and hearers. How is this construed? An answer may come from a more specific definition of the concept of demonstration as a co-speech gesture, following studies on *kinds* of demonstrations inside a theory of action. This perspective may help to better clarify the concept of demonstration as a gesture that goes beyond its standard characterization and suggests treating it as a kind of action of which pointing gestures are only one of the many exemplifications.

Without entering too much into the actual debate on the theory of action, we may rely on a traditional trend, according to which, an action is not necessarily a physical movement, but something that answers a “why” question (Anscombe 1957) or a “what” question as “what are they doing?.” Actions need not be “so circumscribed that it is required that an agent move her body for there to be an event which is an action” (Hornsby 2004). How can we define demonstrations then, if they are not necessarily physical movements? How can we define some genus of which the class of pointing gestures is only a species?

I think the best suggestion comes from the discussion of linguists on demonstratives, where they say that demonstratives have the role of actions guiding joint attention (Diessel 2012). Bare demonstratives and complex demonstratives alike are accompanied by different kinds of joint attention guiding actions or – generally speaking – co-speech gestures. It is a very old tenet of traditional linguistics since Brugmann (1904) who speaks of the “indispensability of deictic clues.” Bühler (1984 [1934]) proposes a two-field theory, where a demonstration-perceptual field needs to join a conceptual field: different modes of perceptual pointing are an integral part of the conceptual grasp of the world. This traditional view is partly rehearsed (without reference to Bühler) by Nunberg (1993), who speaks of deictic and classificatory components of demonstratives. Which kinds of specific actions belong to demonstrations intended as joint attention guiding actions? Here, a frequently quoted suggestion by Frege may pave the way. In a passage that precedes the quotation we put at the beginning of this paper Frege says:

³ I rely here on the distinction made by Bühler and discussed by Dolcini (2016) among three modes of deixis: perceptual, anaphoric, and phantasmatic. My argument concerns only the first basic use of indexicals in their perceptual uses in context. Phantasmatic modes of deixis take place in the realm of imagination and they refer to what Dolcini calls “phantasmatic context”. They are common in everyday speech, when somebody rehearses in her mind a context and refers to objects in imagination as “that *x*” or “this *x*” (to be often requested of an explanation if the hearer do not share the same phantasmatic context). Here there is no question of demonstrations, unless we may think of imagined demonstrations in the common phantasmatic context. Most uses of indexical that apparently do not require a demonstration are anaphoric and phantasmatic uses of indexicals.

I can use the words ‘this man’ to designate, now this man, now that man. But still, on each single occasion, I want to designate just one man ... The sentence that I utter does not always contain everything that is required; something has to be supplied by the context, by the gestures I make and the direction of my eyes ... (Frege 1979: 213)

Bühler (1984 [1934]: 112) followed similar ideas when he wrote, about pointing gestures for deictic features connected with demonstratives, that “other optical or acoustic cues can be used instead of the finger gesture, and all of them can be replaced by indirect situational evidence or conventional interpretational clues.”

We may therefore attempt a more specific definition of demonstrations:

DEF. Demonstrations are joint-attention-guiding physical actions including including gaze and postures in a physical surrounding that are a necessary completion of a demonstrative expression to make the speaker’s and hearer’s attention converge towards a particular object.

Although the prototypical case is a pointing gesture, most explicit pointing gestures may be progressively abandoned or made less explicit, also due to rules of politeness, and often substituted instead by glances, postures, and torso orientation (see Kita 2003). Being spontaneous accompaniments of words, they belong to the expression of referential intentions. Pointing gestures, nods, gaze direction, torso orientation are the best completions for correctly using a complex demonstrative. Textor (2015: 831n), referring to de Gaynesford’s text, claims that “pointings are just one instrument for raising an object to the status of a leading candidate; every action, and indeed in a limiting case the act of uttering the demonstrative pronoun, can be a demonstration.” Is “demonstration,” so broadly intended, a too vague notion? Can we put together these different kinds – pointing gestures, glances, postures – in a unifying category of attention guiding co-speech actions? There’s nothing wrong with classifying and better specifying different kinds of demonstrations that are an integral part of the expression used, following works like Lascarides and Stone (2009), who elaborate a distinction between identifying and visualizing gestures. We may try to verify the viability of the definition above concerning further criticism advanced by de Gaynesford.

5 Relative uniqueness, leading candidacy, and demonstrations

This new definition of “demonstrations,” although wide-ranging, is more restrictive than Kaplan’s definition, and helps to find an answer to question (2) at the end of § 3: can utterance relative uniqueness and leading candidacy be reduced to demonstrations? According to de Gaynesford, a generalization of the notion of

demonstration would create “a grotesque distortion of what is ordinarily meant: ostensive gesture.” This remark is strange because de Gaynesford himself criticized the assimilation of demonstrations to ostensions. We may think of demonstrations as different kinds of tools: as we have different kinds of words we use on different occasions, we likewise have a set of several kinds of conventional actions used in different situations, depending on what is the best and least effortful way of making an object salient (here some psychology taken from relevance theory might help: maximum information with minimum effort; but also we should take into account the problem of cognitive load of speakers and hearers for a good matching between their different viewpoints).

5.1 Relative-uniqueness

Presenting the idea of relative uniqueness de Gaynesford proposes a mental experiment about a one-tree world:

Suppose we lived in a one-tree world. Then no demonstration would be necessary when saying, ‘That tree is dying, but those branches look healthy enough.’ Yet ‘That Tree’ is a Deictic Term. The question ‘which?’ has a positive answer given only by the uniqueness of the individual referred to. This uniqueness is relative to the utterance: it is some particular tree being spoken of and there is but one tree in existence. (De Gaynesford 2006: 117)

This example does not take into account at least two problems: first of all, in one-tree world people would normally use a definite article and not a demonstrative. In fact, in many one-thing actual and possible worlds, people don’t use a demonstrative unless in special conditions. British speak of “the Queen,” referring to the only present queen of England, and an analogous habit is common in all monarchies. One may refer to the Queen saying: “this Queen” only if there is a comparison, such as “this Queen – the present one – has a better life than that Queen,” for instance in front of a portrait of Queen Victoria at the National Portrait Gallery in London. In a one-tree world, the only tree is like the only Queen, and – unless there had been previous existing trees in the past, one did not need to make a comparison using a demonstrative.

However, let us admit – for the sake of the argument – that there is a one-tree world in which people use demonstratives to refer to the only tree in that world. Apparently, if the tree were out of sight, people would use the definite description “the tree.” Let us assume then that they use demonstratives when the tree is in their visual field. In this case, they would use different demonstratives depending on the relative physical position of the speaker: if near they will say “this tree,” if far away they would say “that tree.” The difference is given by their physical posture in front

of the tree. We don't need explicit pointing gestures, but we still need some position of the body relative to the object. Putting myself in a certain position relative to the object will determine which demonstrative I should use to refer to the object (and vice versa). Even with a unique object, a demonstration intended as the relative position with respect to an object is an essential part of the referential uses of demonstratives. Given that other more standard claims of "relative" uniqueness are just weaker examples of the one defined in the mental experiment, then they lose their strength if even the main case has its unavoidable shortcomings.

5.2 Leading candidacy

With regards to leading candidacy, the problem depends on many different features and of what is relevant for whom. This problem is recognized by de Gaynesford, but he claims that the context of discourse is enough to individuate the most reasonable candidate as being the referent of the demonstrative. But here again, as in the case of relative uniqueness, knowing the subject matter being discussed is not sufficient, and one needs to look at the object or needs to be positioned in the direction of the object to reasonably say "that F is G" (unless in anaphoric uses).

Clark (1992: 81) made an example of Julia nodding towards a group of joggers saying, "that is my neighbor." Which kind of action is Julia performing? Certainly, nodding to the group of joggers she intends "that jogger"; but how to indicate the particular jogger Julia has in mind? A gesture is not enough to exactly point to the person in the crowd and there are many possible clues for salience: "each jogger is the most salient by some criterion." The only solution to successfully understand the dialogue is that, *besides the gesture* and the implicit sortal (jogger), Julia relies on previous information on her neighbor, for instance, that her neighbor is bald. Then the hearer may pick the right individual in case all other joggers are *not* bald. Having previous common ground implies a complex arrangement and mixture of anaphoric links (my neighbor having been introduced before) and referential links ("that" plus the gesture). A demonstration is essential, although – following de Gaynesford's terminology – it does not "sufficiently determine" the referent, but only "determines" the referent, that is, "it plays a part in doing so" (de Gaynesford 2006: 32). Demonstrations alone rarely are sufficient to determine an object; the point is whether they are a necessary completion of the linguistic expression.

A problem may arise when it *appears* that no demonstration at all is accompanying a referential use of a demonstrative, and this typically happens when there are strongly conventionalized aspects of referential uses of indexicals. It may be the case that a speaker doesn't necessarily look at the object or his torso orientation is not directed at the object. What can we say? I think we may still say

that the person, using “this” or “that,” is making a demonstration, defined as a joint attention gesture. Think of an auction where the auctioneer says: “the starting price of *this painting* is such and such.” Typically, the auctioneer does not point to the object, but there is a solid convention that his being in proximity of the object is a demonstration of it. My idea is that the kind of posture of a speaker in the surrounding physical context takes the role of a demonstration not only in normal situations but also in highly conventionalized situations. This example is another blow to the leading candidacy, because, in the case of an auction, there are so many objects in the room and, to understand which is the relevant one, we need to know the conventions guiding the auction and then verify the relative position of the auctioneer to the object in question. There is no leading candidacy without a demonstration by the speaker: there will probably be so many salient objects in the room, maybe a very rare painting of very high value that everybody is looking at. But when the auctioneer says: “the starting price of *this ...*,” you do not look at the more salient object in the room, but at the object conventionally demonstrated by the relative position of the auctioneer. We might also say, in agreement with Ciercieski (2019), that an overt demonstration is omitted because the complex action of the auctioneer requires perfect mastery of the situation, and we would be in a context where the action of demonstrating is produced by an omission. However, with the definition of demonstration as joint attention guiding action, the act of demonstrating is fully and conventionally characterized as such.

This proposal has very old roots: we have quoted Bühler’s idea of the “indispensability of deictic clues.” In a striking analogy with Frege’s remark on complex demonstratives, Bühler claims:

If ... something more than only the finger gesture is understood by gesture, then from a psychological perspective much more can be decided than only the controversy on how it might have been in the beginning. It can be shown how it still is today and that it could never have been different. Other optical or acoustic cues can be used instead of the finger gesture, and all of them can be replaced by indirect situational evidence or conventional interpretational clues. (Bühler 1984 [1934]: 112)

A last point is worth making: we cannot confuse an essential demonstration with the emphasis that sometimes accompanies our referential expressions with broad gestures (think of Italians, if you like). Essential demonstrations (essential deictic clues) are only those whose role is coordinating the speaker with the audience and the referent, to reach joint attention. Emphasis is something that goes over the essential demonstration and works as a kind of coloring – Frege would speak of “tone” – that brings about implicatures. This is a relevant part of the communicative aspect of gestures but should not enter the definition of the referential use of demonstratives, whose category needs to be redefined, as Diessel (2006) already suggested, as a

specific kind of linguistic element linked to actions for joint attention. Diessel (2014) insists on the relevance of demonstratives as linked to a ‘cross-modal coordinated system’, which needs us to rely on nonverbal clues, and without which we could not interpret any demonstrative (or, for the same reason, any indexical).

Although the claim that a demonstration is an “essential” or necessary part of indexicals requires more argumentation, I think that we may be satisfied with having shown that the claim is not so easily dismantled. However, we need to provide some clarification on an apparent problem concerning our definition: aren’t demonstrations as joint attention guiding actions also essential to proper names and definite descriptions? If so, this would deprive indexicals of this particular specificity. To defend our claim of the unique relationship between demonstrations and indexicals, we need to offer some clues about the relationship between demonstrations and other kinds of referential expressions.

6 Some concerns about demonstrations and referential expressions

It appears that demonstrations, as defined above, are also working in the referential use of proper names and definite descriptions. Producing an utterance containing a proper name, or a definite description seems to foster joint attention, where the position of the speaker seems to be normally connected with the position and orientation in space, which has been presented as characterizing the uses of indexicals. But if demonstrations, intended as joint attention guiding actions, also accompany proper names or definite descriptions, we have an alternative: either we consider proper names and definite descriptions as having some kind of hidden indexicality or we abandon the idea that demonstration is what characterizes indexicals and the entire argument for finding a special connection of indexicals with demonstrations collapses.

There have been attempts at the former strategy, starting from discussions on the hidden indexical theory of proper names (Geurts 1997; Schiffer 1977) or of definite descriptions (Bowker 2019; Schiffer 1995), and we could follow this thread, perhaps relying on the similarity between definite descriptions and complex demonstratives. Yet, I think that the alternative is a false dilemma, and, as I will try to argue here, we can keep the asymmetry thesis about definite descriptions and indexicals, following Carpintero (2005) on this point. My short discussion will not address the general problem, and I will only point to the specific aspect of the asymmetry of indexicals on the one hand and proper names or definite descriptions on the other, with regards to their connection with demonstrations.

Utterances with proper names can indeed be treated as an action for joint attention toward an individual, especially in calling (calling is a property of proper names not shared with other linguistic expressions). However, proper names are often used to refer to individuals external to the scene; in this sense, they are not directly connected with the spatial or temporal location, and in this way, they are more detachable from the physical collocation of the speaker in space and time. The special status of proper names permits their use for directly referring to people in a location different from the context of utterance and therefore detaches them from the *necessity* to use a demonstration, even in the same surrounding situation, without problems of ambiguity.⁴

A bigger problem pertains to definite descriptions in their referential uses. There is abundant literature on the birth of the definite article from demonstratives (see for instance Herzenberg 2015: Introduction). On the one hand, this derivation might suggest trying a similar treatment of demonstratives and definite descriptions. On the other hand, however, the definite article may also suggest the first detachment from a necessary connection with demonstrations. From the first viewpoint, as hinted above, there have been different proposals of inserting hidden indexicality or a demonstrative element in the format of a referential description. Although considering referential descriptions as quantified expressions, Neale (2004), who gives a Russellian logical form for referential descriptions, treats them with a Gödelian completion as follows: “the F” in its referential use would be treated as “the $x Fx$ & ($x = \text{that}$).” This is a tempting solution, which could also be translated as “That $x Fx$,” treating referential descriptions like complex demonstratives.

I think that following this strategy comes at the cost of missing an important difference between indexicals and definite descriptions. For this reason, I think we should follow another strategy, reminiscent of the weakened inertness thesis about complex demonstratives but applied to referential descriptions. Glanzberg and Siegel (2006) criticized the much-diffused “strong inertness thesis” that deprives complex demonstratives of the role of the nominal part and gives them the role of being directly connected with the referent through the bare demonstratives. They propose a weakened inertness thesis where there is space for a default role of the nominal part. But this solution is even more suitable for referential definite descriptions, where the nominal part may have a fundamental role in individuating

⁴ There could be special cases, like the presence of two individuals with the same name in the same common space. In this case to refer to one of the two the position in space might be relevant to disambiguate. But these kinds of situations are very peculiar, and do not impinge on the problem. These cases are rare and do not imply that gaze direction or position in space is a necessary component of the use of proper names (thanks to an anonymous referee for the example and for making me aware of the problem as discussed in this section).

the referent, given some contextual restrictions and default assumptions: we may pick the person referred to as “the man drinking a Martini” even if this is a misdescription but it may reasonably help the hearer to pick the intended referent. I, therefore, think that referential descriptions do not contain a hidden indexical, but may be represented as default application of the nominal part of the definite description (the x) (Fx) in the following form:

“the x for which there is a provisional default justification that it might be F .”

In this setting, incomplete descriptions and misdescriptions also do not reveal hidden indexicality but have their specific default structure linked to the selection of the individual who may be reasonably understood to have the propriety in the context (see also Penco 2017). Therefore, definite descriptions can be detached from the demonstration, conceived as a particular position of the speaker in the common space: the conceptual content expressed with the nominal should suffice to pick the individual intended, without being compelled to link the individual with the spatial orientation of the speaker. If the conceptual part suffices, by default, to select the individual in the context, the link with the particular position of the speaker in the common space is not necessary. The introduction of a definite article instead of a demonstrative can be considered the first step out of the link between the object referred to and the physical position of the speaker in the context of utterances. With definite descriptions, the lexicon supplies what once was needed through a demonstration.

Our concern about the difference between indexicals and other referential expressions amounts to the following: is a particular posture or orientation in space a *necessary* ingredient for the use and understanding of a referential expression? It seems that proper names and definite descriptions do not require this feature as a necessary property of their use: I may use proper names and definite descriptions and be understood also where there is no direct connection between my position-orientation in space with the individual referred to by a proper name or a definite description. This connection, on the other hand, seems a necessary condition of referential uses of indexicals.

In discussing de Gaynesford’s arguments we followed his examples, mainly with demonstratives; more should be said of pure indexicals like “I,” “here,” and “now.” To defend the extension of my claim to spatial and temporal indexicals would go beyond the scope of our paper, which is solely trying to answer some arguments against the reductio of indexicals to complex demonstratives. Therefore, I will only hint at a direction of research, relying on some recent literature. Following on from Künne, Textor (2015) develops a particular and original stance on the relevance of the utterance of “I” intended as a demonstration. The uttering itself in

this case is a kind of demonstration, a demonstration of the speaker, while the uttering of “here” is a demonstration of the place of the utterance, and the uttering of “now” is the demonstration of the time of the utterance. The uttering itself of a certain sound may be considered “a feature of the token independently of the exercise of any intention or the application of any convention.”⁵ We find an analogous attitude in Prosser (2019). He widely discusses how “here” can be analyzed as a complex demonstrative “in this place.” We may wonder how this kind of analysis could be extended to “now.” It is not improper to use a demonstrative when speaking about pieces of time, such as when we speak of “this week” or “this month.” The expression “now,” is linked to the Latin “*nunc*,” which has origin in a Proto-Indo-European “*this new time*.” Expressions like “today” have in some classical languages a clear demonstrative origin (*hodie* in Latin meaning literally ‘this day’; see Borghi and Penco 2015). It is as if our presence at a specific time makes us able to make a “demonstration” towards the piece of time we are in, so that we may extend it with further specifications. Some authors consider temporal and spatial indexicals a case of phantasmatic deixis (Dolcini 2010), but I suggest that the analysis put forward by Künne, Textor and Prosser may be developed to cover the idea that the utterance itself of “here” and “now” may be considered a kind of demonstration, and that also temporal and spatial indexicals can be reduced to complex demonstratives.

7 Conclusion

In this paper, I began with a certain amount of evidence in contemporary literature that included a nonlinguistic element to the expression of a thought, and I suggested that the nonlinguistic element is a demonstration. However, “demonstration” is a term that awaits a more precise definition, and I made some steps toward this by defining it as joint attention guiding action, which may comprise different kinds of actions, from pointing gestures to gaze direction or intentional keeping a certain position or posture in a surrounding situation. Given this definition, which seems coherent with some contemporary theories of action and linguistic theories of demonstratives, I answered some of de Gaynesford’s concerns in his excellent discussion on deictic terms. I first claimed that his arguments against the reductio of

5 See Perrin (2020: 3). However, it seems to me that Perrin goes too far when he claims that a sound “designates the location at which it is produced” (2020: 2, 10). I would still distinguish between designation and demonstration. A specific utterance of a specific word, together with its meaning, calls the attention of the hearers to the speaker, time and location of the sound: the sound is like a gesture towards the relevant object, but it does not “designate” it, unless together with the linguistic meaning of the expression and its referential use in context.

indexicals to complex demonstratives are not sufficient to warrant his worry. The question of *primacy* does not work, because complex demonstratives are normally considered prior from a genetic and chronological point of view and in the order of explanation; the question of *difference in meaning* is not sufficiently defined and the example given for deciding the *difference in informative value* has also been shown to be insufficient. I then challenged his proposal that rejects the idea of *demonstrations* as an essential part of the referential uses of indexicals. Leading candidacy and relative uniqueness considered as alternative ways of reference fixing are shown to be still necessarily linked to demonstrations. One might claim that it is just a question of different terminology. However, I intended to present a notion of demonstration that was not a contradictory set of properties, and I trust that I have presented a coherent view on this. Some plausibility is gained in testing the different kinds of connections with demonstrations held by indexicals on one hand, and by proper names or definite descriptions on the other. While being connected to a demonstration seems to be necessary for the proper referential uses of indexicals, this property does not necessarily hold for the other two kinds of referential expressions.

However, the result of this paper is mostly a negative one. Therefore, I cannot claim to have concluded that indexicals can be reduced to complex demonstratives, but only that the criticisms put forward in de Gaynesford's book are insufficient to dismiss this hypothesis.

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