

Descriptive Singular Terms

KATARZYNA KIJANIA-PLACEK¹

ABSTRACT: In “Descriptive indexicals and indexical descriptions” Nunberg claimed that only indexicals among singular terms may have descriptive uses, i.e. have non-singular contributions to the propositions they are used to express. In this respect they differ from proper names or definite descriptions. In “Lessons from Descriptive Indexicals”, Sæbø shows that this conjecture is untenable, providing examples of the descriptive uses of both proper names and definite descriptions. This paper offers an account of the descriptive uses of all of the singular terms and provides an alternative to Sæbø’s account. Sæbø’s analysis rests on the assumption that the propositional contribution of all singular terms used descriptively is a singular concept. I will argue against this assumption and my proposal will offer a uniform analysis of the descriptive uses of singular terms that is not constrained by it.

KEYWORDS: definite descriptions – descriptive anaphora – descriptive uses – demonstratives – indexicals – individual concepts – proper names – singular terms.

In his seminal work “Indexicality and deixis” (1993), Geoffrey Nunberg introduced the idea that indexicals may have descriptive uses, i.e. non-singular contributions to the propositions they are used to express. In (2004a) he claimed that indexicals in this respect are unlike other

¹ Received: 26 January 2018 / Accepted: 20 May 2018

✉ Katarzyna Kijania-Placek

Institute of Philosophy and the Jagiellonian Centre for Law,
Language and Philosophy, Jagiellonian University

52 Grodzka St., 31-049 Krakow, Poland

e-mail: katarzyna.kijania-placek@uj.edu.pl

referential terms, such as names or non-attributive definite descriptions, which do not seem to have such general readings. However, in (2015) Sæbø shows that this conjecture is untenable, providing a plethora of examples of the descriptive uses of both proper names and definite descriptions to bolster his line of argumentation. In this paper I will attempt to support Sæbø's findings and propose a uniform analysis of the descriptive uses of all of the singular terms, providing an alternative to his account. Sæbø's analysis rests on the assumption—shared by many others, such as Elbourne (2005, 2008)—that the propositional contribution of all descriptively used singular terms is an individual concept. In contrast, I will argue against this assumption in section 2.3 and my proposal will offer a uniform analysis of the descriptive uses of singular terms that is not constrained by such an assumption.

The analysis proposed will be based on a generalization of the mechanism of descriptive anaphora which I suggested for the interpretation of the descriptive uses of indexicals in Kijania-Placek (2012, 2015, 2017, 2018). It will not only provide an account of the generation of the propositions expressed in the case of the descriptive uses of singular terms, but will also allow for an explanation of the differing pragmatic availability of such uses between indexicals as well as proper names on one hand and definite descriptions on the other. In the end, I will suggest the consequences of the phenomenon of descriptive uses for the semantics of singular terms.

1. Descriptive uses of indexicals and other singular terms

Indexicals and proper names are usually considered as devices of direct reference (Kaplan 1978, 1989a, 1989b; Perry 1977, 1979, 2012; Recanati 1993; Salmon 1986; Soames 1989; Heim & Kratzer 1998). If definite descriptions are taken to be semantically ambiguous (Wettstein 1981; Devitt 2004), then their referential uses are usually also analyzed as directly referential. This means that such expressions contribute objects to the propositions expressed and, as such, contribute to the expression of singular propositions. However, from Nunberg onwards, the so-called descriptive uses of indexicals have generally been acknowledged whilst indexicals, in their descriptive uses, contribute to the expression

of general propositions (compare Nunberg 1979, 1991, 1992, 1993, 2004a,b; Recanati 1993, 2005; Bezuidenhout 1997; Elbourne 2005, 2008, 2013; Hunter 2010; Stokke 2010; Galery 2008, 2012; Kijania-Placek 2012, 2015, 2017, 2018). A popular example to be found in the literature (Nunberg 1992; Recanati 1993; Jespersen 2012; Kijania-Placek 2011, 2012) is the following:

- (1) He is usually an Italian but this time they thought it wise to elect a Pole.
[uttered by someone pointing at John Paul II as he delivers a speech with a Polish accent shortly after his election]

By the use of 'he' in this utterance the speaker is not expressing a contradictory proposition concerning John Paul II that would ascribe the properties of both being an Italian and being a Pole to him, but a general proposition that most popes are Italian.

In general, a proposition might be singular with respect to the contribution of one singular term, while the contribution of another singular term is general, i.e. a distributive property. Thus, the proper name 'Picasso' does not contribute Pablo Picasso to the proposition expressed by:

- (2) He donated all his Picassos to MOMA,

while 'he' is used here referentially and contributes a person. Since the contribution of the name is a property of being a painting by Pablo Picasso, the resulting proposition is general with respect to this use of the name.² Similar remarks apply to another example of Sæbø's (2015, 1121):

- (3) If Mary had been a boy then yes, I do believe England would have remained a Catholic country.

In (3) 'Mary' contributes the property of being a child of Henry VIII by Catherine of Aragon, while 'I' and 'England' have default singular interpretations. (2) and (3) are examples of descriptive uses of proper

² For the idea that singularity is a relative feature of propositions, see McKay & Nelson (2014).

names. Other examples have been given by Nunberg (1995), Elbourne (2005), Hunter (2010), Sæbø (2015), Jeshion (2015a,b), Fara (2015a,b) and others. An important category of the descriptive uses of names are the so-called Machiavelli uses (compare Fara 2015b), which are different from (2) and (3) in important respects and will be discussed in section 3.2.1. A representative example is the following:

- (4) Dick is a real Einstein,

where ‘Dick’ has its default referential meaning, but ‘Einstein’ contributes the property of being an exceptionally intelligent person.

Attributive uses of definite descriptions are by definition descriptive because their propositional contribution is a property depicted by the descriptor of the term. The important question is, however, if definite descriptions have uses in which the propositional contribution is neither the denotation nor the concept which is the descriptor of the term, but a different property altogether. Hereafter I will use the term “descriptive” in a limited sense, i.e. only for uses of definite descriptions which have a general contribution but are not attributive, i.e. whose propositional contribution is a distributive property other than that formed by the descriptor. To exhibit the descriptive uses of definite descriptions thus understood, I will use another example from Sæbø’s work. The following utterance should be considered in the context of “a discussion of a snowsled accident where a boy, driving in snowdust and straying from the trail, has hit a tree; the debate is about whether or not the tree was to blame and should be cut down, this discussant arguing that no, the driver was responsible” (Sæbø 2015, 1124):

- (5) What if the tree had been a Moose, a deer or another sled, would this still have happened? I believe it would have...

The idea is that since the intended meaning, i.e. ‘the entity obstructing the course of the snowsled driven by your son on Pitre Trail Friday’, is “costly to express and process” (Sæbø 2015, 1145), it is delivered instead by ‘the tree’. In the next section I will briefly discuss the available analysis of the descriptive uses of indexical, proper names and definite descriptions and then propose my own analysis of this phenomenon.

2. Extant analysis of the descriptive uses of singular terms

2.1. *Descriptive uses of indexicals*

The mechanism of deferred reference was proposed by Nunberg (1993) for the analysis of some uses of indexicals, such as the following:

- (6) He is my favorite writer.
[uttered while pointing at a photograph of Nabokov]

The idea stems from Quine's case of deferred ostension where "we point at the gauge, and not the gasoline, to show that there is gasoline" (1968, 195). Its linguistic counterpart is deferred reference, which Nunberg proposed to explain by postulating a distinction between the index and referent of an indexical. According to Nunberg, deferred reference is a two-stage process in which a linguistic expression refers to something in the world by first picking out an element in the expression's context of utterance (an index) and only then referring to (possibly) another element of the context that somehow corresponds to the index. The correspondence is of a pragmatic nature and given by the context. Typically, the referent is an object or property the speaker has in mind, and the index is used to direct the addressee's attention to the referent (Nunberg 1993, 25-26). In the case of (6) the photograph demonstrated is the index, while the person depicted in the photograph—Vladimir Nabokov—is the referent that contributes to the singular proposition expressed. In the same paper, Nunberg claims that the mechanism of deferred reference should be used for the analysis of the descriptive uses of indexicals. We must simply admit that the referent (or, as he sometimes puts it, the interpretation) in deferred reference is either an object or a property (Nunberg 1993, 15, 28-30, 33, 34). The latter case should deliver a general interpretation of the indexical.

The problem with this analysis is that reference to properties does not necessarily result in the generation of general propositions. For example, reference to abstract objects—which is only possible in a deferred way—arguably results in the expression of singular propositions.³ This means

³ Examples of deferred ostension to abstract objects by pointing to their exemplifications were given by Quine in (1968). Compare also Kijania-Placek (2012). For criteria of the singularity of a proposition, see Neale (1990).

that the fact that an indexical refers to a property does not by itself provide an analysis of the descriptive uses of indexicals, i.e. uses whose propositional contribution is general. Furthermore, Nunberg holds that deferred reference is characterized by three meaning components (deictic, classificatory and relational) of which the classificatory component concerns the referent and includes features like number and animacy, grammatical and natural gender (Nunberg 1993, 8, 20, 25-26). Since in the case of ‘he’ the classificatory component includes the requirement that the referent is male, the property of being a pope—not itself being male—is strictly speaking excluded as a potential referent of ‘he’ as used in (1). We should thus distinguish cases of deferred reference to properties considered as abstract objects from the descriptive uses of indexicals, in the case of which the property itself is not really the *referent* of the term but is still its interpretation. In the latter case, the semantic contribution of the indexical to the general proposition expressed consists in restricting the domain of quantification of a quantifier that constrains the structure of the general proposition.⁴ The concept of descriptive anaphora that I propose in section 3 for the analysis of descriptive uses of singular terms may be considered an elaboration of that part of Nunberg’s analysis that concerns cases in which the indexical “contributes a property” (Nunberg 1993, 22) in the intended sense. His deictic, classificatory and relational components of meaning would then be limited to the more classic case of deferred reference, when the referent is an object.

I have given detailed arguments against the analysis of the descriptive uses of indexicals proposed by Recanati (1993), Elbourne (2005, 2008), Stokke (2010) and Galery (2008) in Kijania-Placek (2012). Given the absence of space here for such considerations, I will not repeat these arguments as none of the analyses extends to other kinds of singular terms (but see footnote 9 below). The advantage of my analysis is that it captures all kinds of singular terms. To my knowledge, only Sæbø’s and Hunter’s accounts explicitly concern the whole range of singular terms and I will discuss them in section 2.3 below.

⁴ This statement will be slightly amended in section 3.

2.2. *Descriptive uses of proper names*⁵

Fara (2015a) claims that examples such as (2) and (3) can be analyzed with the help of another of Nunberg's notions: that of meaning transfer.⁶ She offers an analogy with other nouns, such as "witch" or "cat" that can sometimes be used to convey transferred meanings of a "person in witch's/cat's costume". The resultant meaning would be available by meaning transfer from the initial meanings of "witch" or "cat" respectively. As Jeshion (2015b) was quick to point out, however, such an analysis of proper names is not available for Fara under her predicativist assumptions. According to predicativists (Burge 1973; Fara 2015a,b; Matushansky 2008; Elbourne 2005, 2008, 2013) "names are predicates in all of their occurrences" (Fara 2015a, 60) and by that they mean "multiply applicable predicates that are true of just those things that are bearers of the name" (Fara 2015b, 251). But while it is quite natural to assume that the meaning of the predicate "person in cat's costume" is a result of an operation on the meaning of "cat", the meaning required for (3)—a "painting by Pablo Picasso"—cannot be obtained from the meaning of "bearer of Picasso" alone, without reference to the relevant referent of the name. Additionally, the process required is not an operation transferring the meaning of one predicate to another— $\langle e, t \rangle \Rightarrow \langle e, t \rangle$ —but involves a transfer from an object (Pablo Picasso himself) to a predicate (painting by Pablo Picasso)— $e \Rightarrow \langle e, t \rangle$ (Jeshion 2015b). Jeshion uses the term "coercion" to characterize such a process but does not provide any details as to the exact definition of the process. The analysis proposed below in terms of descriptive anaphora can be considered an elaboration

⁵ Although I am usually careful to use the phrase 'descriptive uses of names', the shortened version "descriptive names" is also used in the literature, in analogy to 'descriptive indexicals'. Yet the kinds of readings discussed in this paper should not be confused with 'descriptive names' in the sense of Evans (1982).

⁶ She uses the phrase "descriptive interpretation" but refers the reader to Nunberg (1995) and (2004b), where by descriptive interpretation he means both deferred reference and meaning transfer in the introductions, but devotes both papers exclusively to the analysis of the latter.

of the “coercion” process mentioned by Jeshion.⁷ What we need in this case is a relation between Picasso and the distributive set of his paintings, given for example by the property of being a painting by Pablo Picasso. Such a relation will be provided by the mechanisms of descriptive anaphora proposed below.

2.3. *Sæbø’s and Hunter’s uniform analyses of descriptive uses of singular terms*

Sæbø’s account is based on a postulation of a substitution relation which is to hold between two individual concepts, where “the concept expressed is replaced by another, co-extensional concept (one designating the same individual in the actual world), which is then given a *de dicto* reading” (Sæbø 2015, 1114). Thus, in the case of (5), the concept expressed by the definite description ‘the tree’ is given the interpretation of ‘the entity obstructing the course of the snowsled driven by your son on Pitre Trail Friday’ (Sæbø 2015, 1145). I agree that Sæbø’s analysis provides correct results for (5). However, it is only applicable to such cases where the replacing concept is an individual one and co-extensional with the original. The following examples, typically considered in the literature as cases of the descriptive uses of indexicals, are thus not analyzable by Sæbø’s substitution relation.⁸ Let us first consider an example based on Nunberg’s (1993):

- (7) Today is always the biggest party day of the year.
[uttered on New Year’s Eve]

‘Today’ does not contribute here an individual concept but rather a property of being a day that is a New Year’s Eve; any such day. If the term

⁷ In linguistics, coercion is usually associated with the works of Partee (for example 1985) and this reference can indeed be traced back from Jeshion (2015b) through Nunberg (1995, 2004b), to Pusteyovski (1993), to Partee (1985). But her notion of coercion does not include transfers of the $e \Rightarrow \langle e, t \rangle$ type (other than the property of being identical with a specific object) that are required here.

⁸ It should be noted that in (2015) Sæbø does not analyze quantificational examples, such as (7) below. He does, however, suggest that the account presented there should be considered as a general analysis of descriptive singular terms.

contributed an individual concept, the singularity of the concept would clash with the requirement imposed by the quantifier “always” that requires a range of values to quantify over.⁹ The clash would be the same as the original clash between the referential reading of “today” and the requirements of the quantifier that triggered the reinterpretation in the first place. The aim of the reinterpretation was to resolve the clash by supplying an interpretation that would deliver a non-individual interpretation for “today”—a multiply applicable distributive property and thus not an individual concept. In the case of (7) this property restricts the domain of the quantification of the adverb of quantification ‘always’ (compare Kijania-Placek 2012, 2015, 2017, 2018).^{10,11}

Another of Nunberg’s examples argues against the requirement of co-extensivity (Nunberg 1990). It is drawn from Peter Weir’s movie *The Year of Living Dangerously*. Mel Gibson plays a reporter in Indonesia, Mr. Hamilton, who is looking for arms shipments for local communists and, of course, he would be in trouble if they found out. Hamilton, talking to a warehouse manager and inquiring after the shipments, receives a warning:

- (8) – MR. HAMILTON?
 BE CAREFUL WHO YOU TALK TO ABOUT THIS MATTER.
 I'M NOT P.K.I., BUT I MIGHT HAVE BEEN.¹²

In this example, the replacing concept cannot be co-extensive with the indexical ‘I’ as the speaker is not a communist and does not warn the warehouse manager against himself but rather against others who are relevantly

⁹ See footnote 15 below for a more nuanced characterization of this clash.

¹⁰ The assumption of singularity (in the sense of individuality or definiteness, not that of rigidity) of the resulting concept is shared by Recanati (2005) and Elbourne (2005, 2008, 2013), and, I believe, Jespersen (2012). Thus, my criticism of this assumption applies to those accounts as well.

¹¹ A binary structure is standardly postulated for adverbial quantification, regardless of its explicit structure. Thus ‘He usually goes on holiday to Italy’ would be analyzed as ‘Usually, if he goes on holiday, he goes to Italy’ (see for example Quine 1941; Lewis 1975, 1986; compare also Kijania-Placek 2012, 2017).

¹² ‘P.K.I.’ is an abbreviation for ‘Partai Komunis Indonesia’.

similar to himself. Yet, the nature of this warning, its pragmatic force, is only sustained if the interpretation is not (metaphysically) counterfactual, as it was in the case of ‘the tree’, but concerns the actual situation of the interlocutor, his actual future.¹³ These counterexamples are intended to show that Sæbø’s account, considered as a uniform analysis of the descriptive uses of all singular terms, is inadequate.

Another account that proposes the uniform treatment of the descriptive uses of singular terms is that of Hunter (2010). Since it is developed in the framework of Discourse Reference Theory, I am unable to discuss it here in any detail for spatial constraints. In a nutshell, her analysis assumes that “One must first determine the standard indexical interpretation [...] and then use this interpretation, together with further contextual information, to figure out what is being said” (Hunter 2010, 139). By “standard indexical interpretation” Hunter means a Kaplanian interpretation of an indexical. She thus requires initial saturation of the indexical’s contribution, i.e. finding a referent in the context of utterance. This analysis fails for cases such as Schiffer’s (1981):¹⁴

- (9) He must be a giant,
[said upon seeing a huge footprint in the sand]

where no intended referent of ‘he’ is present in the context, so no standard interpretation is available. In what follows I will propose an account of descriptive singular terms that covers examples such as (7), (8) and (9) as well descriptive uses of proper names and definite descriptions.

¹³ For an extensive analysis of this example and especially for an argument against retaining referential interpretation of the indexical under the epistemic interpretation of the modality, compare Kijania-Placek (2012, 2017).

¹⁴ A similar example was also proposed by Loar (1976). Hunter’s analysis is originally only intended for quantificational and modal examples of descriptive indexicals. The criticism presented here is thus directed not so much against Hunter’s actual analysis but against its generalization to all types of descriptive uses of indexicals.

3. The mechanism of descriptive anaphora

3.1. *Descriptive anaphora defined for indexicals*

In Kijania-Placek (2012, 2015, 2017, 2018) I proposed an interpretive mechanism which I dubbed ‘descriptive anaphora’ for the analysis of the descriptive uses of indexicals. Under the descriptive anaphoric mechanism, an indexical expression inherits its semantic value from its antecedent. However, in contrast to classic anaphora, that antecedent stems from an extra-linguistic context: it is an object identified through the linguistic meaning of the pronoun (in the case of pure indexicals) or by demonstration (for demonstratives). The object is used as a pointer to a property corresponding to it in a contextually salient manner and that property contributes to the general proposition. What is important is that the property is not a referent of the pronoun. The structure of a general proposition is determined by a binary quantifier, usually the very quantifier that triggered the mechanism of descriptive anaphora in the first place (see below); the property retrieved from the context serves as a context set that limits the domain of quantification of the quantifier.¹⁵ I will explain the mechanism of descriptive anaphora with the help of (a version of) example (1):

(1a) He is usually an Italian.

Because ‘usually’ is a quantifier that requires a range of values to quantify over, and because ‘he’ on its standard interpretation provides just one object, there is a tension in this sentence which triggers the search for an alternative interpretation. The tension is not caused by the fact that John Paul II himself is the standard referent, but it is a tension between the generality of the quantifier and the singularity of the indexical in its default interpretation.¹⁶ The tension would be present, regardless of who the referent was.

¹⁵ See Kijania-Placek (2012). There I distinguish other triggers for descriptive anaphora, such as the absence of a potential referent in the context (exemplified here by (9)) or pragmatic irrelevance of the referential interpretation (exemplified here by (8)).

¹⁶ In typical cases, descriptive anaphora is triggered by the use of adverbs of quantification in contexts in which they quantify over the same kind of entities that the inde-

Under the descriptive anaphora interpretation, John Paul II is the demonstrated antecedent and his salient property of ‘being a pope’ is the semantic contribution of this use of the pronoun. ‘Usually’ is a binary quantifier— $\text{USUALLY}_x(\varphi(x), \psi(x))$ —interpreted in accordance with the generalized quantifiers theory (e.g., Barwise & Cooper 1981), which constrains the structure of the general proposition expressed:¹⁷

$\text{USUALLY}_x(\text{POPE}(x), \text{ITALIAN}(x))$,

and USUALLY has the truth conditions of the majority quantifier:¹⁸

$M^{gi} \models \text{USUALLY}_x(\varphi(x), \psi(x))$ iff $|\varphi^{Mgi} \cap \psi^{Mgi}| > |\varphi^{Mgi} \setminus \psi^{Mgi}|$.

This analysis gives the intuitive reading for (1): ‘Most popes are Italian’.

Other examples of descriptive readings of indexicals are analyzed in a similar way.¹⁹ The problems I posited for Sæbø that concern co-extensivity and the singularity of the resulting interpretation do not arise in the present analysis, because the mechanism of descriptive anaphora gives a property which restricts the domain of quantification and not an individual concept as the semantic contribution of the indexical. As such, the semantic value

icals refer to. In such contexts, the generality of the quantifiers clashes with the singularity of the default referential reading of indexicals. Whether there is a clash is, however, a pragmatic matter, as it depends on the domain of quantification of the quantifier, which for most adverbs of quantification is not given as part of the semantics of the word (compare Lewis 1975 and Kijania-Placek 2012, 2015, 2017).

¹⁷ I use the SMALLCAPS font style for formal counterparts of natural language quantifiers and predicates.

¹⁸ In what follows, M is a model, g is an assignment of objects from the domain of the model to individual variables, i is a context, \models is a satisfaction relation obtaining between a sentence (or an open formula) and a model and context, under an assignment; φ and ψ are open formulas, $|A|$ signifies the cardinality of the set A , φ^{Mgi} is the interpretation of formula φ in model M and context i under assignment g , “ \cap ” and “ \setminus ” are the standard set-theoretical operations of intersection and complement (compare Barwise & Cooper 1981 and Peters & Westerståhl 2006).

¹⁹ Some examples require positing covert or implicit quantifiers, see the analysis of (9) and (8).

is not necessarily co-extensional with the referent (i.e. with the individual concept of the referent). The analysis of example (7)

(7) Today is always the biggest party day of the year,

depends on the linguistic meaning of ‘today’, which delivers the day of utterance. This day serves as the extra-linguistic antecedent pointing to its salient property of being New Year’s Eve. This property restricts the domain of quantification for the adverbial quantifier ‘always’. As a result the proposition expressed by (7) is ‘New Year’s Eve (i.e. any New Year’s Eve) is always the biggest party day of the year’ (compare Kijania-Placek 2012, 2015).

For an adequate interpretation of (8), which I will analyze in the following, more discussed version (Nunberg 1991):

(8a) I might have been a communist,

it was important that the warning concerned the actual situation of the speaker. Yet since the speaker was not himself a communist and was not warning the reporter against himself, the resulting concept could not be co-extensional with the indexical. On the descriptive anaphora account, the speaker serves as the extra-linguistic antecedent of the indexical ‘I’, but the semantic contribution of the expression is a salient property of this person: being a warehouse manager or just being an Indonesian who is unknown to the reporter. The warehouse manager falls within the extension of the property but, since the property is not an individual concept, is not the only object that satisfies the property. Thus the speaker is able to warn Hamilton not about himself, but of others like himself (compare Kijania-Placek 2012, 2017).²⁰

If we consider the example that was problematic for Hunter’s account:

²⁰ The relevant property supplied by the extra-linguistic context serves the purpose of the context set for the binary existential quantifier which is implicit in this type of modal construction:

MIGHT-HAVE EXISTS_x(WAREHOUSE-MANAGER(*x*), COMMUNIST(*x*)).

In Kijania-Placek (2012, 2017) I argue for an epistemic interpretation of the modality.

(9) He must be a giant,

it works perfectly well under the descriptive anaphora mechanism, because in the case of demonstratives, the antecedent is not given by the linguistic meaning of those expressions, which is scarce, but by demonstrations. Even though the potential referent is not present in the context, another object—the demonstrated footprint—serves as the extra-linguistic antecedent. This object points to its salient property of being left by somebody. What we get as a semantic value is in fact a property which results from the relation of ‘*x* is left by *y*’ by filling the first argument with the demonstrated footprint. The sentence does not contain an overt quantifier which constrains the structure of the proposition expressed, but in analogy to the use of bare plurals for the expression of a quantified sentences, I postulate a covert binary quantifier for the interpretation of examples like (9).²¹ The choice of quantifier depends on the nature of the relation: it is common knowledge that one footprint is usually left by one entity, so the relevant quantifier in this case is the definite description operator.²² The property generated by the mechanism of descriptive anaphora restricts the domain of the quantifier:

THE_x(MALE-WHO-LEFT-THIS-FOOTPRINT(*x*), GIANT(*x*)),
 – “The man who left this footprint (whoever he is) is a giant.”²³

Thus the mechanism of descriptive anaphora allows for the intuition of the singularity that is present in this case to be accounted for, even though the singularity is not built into the interpretive concept.²⁴ According to this

²¹ For a more extensive discussion of this example and in general of the postulate of covert quantifiers, see Kijania-Placek (2012, 2015). For the postulate of covert quantifiers for the analysis of bare plurals, see Carlson (1977) and Kratzer (1995).

²² Compare Carlson (1977).

²³ The property of being male is contributed by the features of the pronoun. I leave this aspect out of consideration in this paper but it should be included in a full account. I have also ignored ‘must’ in this analysis and assumed that it is an evidential (compare Chafe & Nichols 1986 and especially Chafe 1986; see also Kijania-Placek 2012).

²⁴ “Singularity” in the sense of individuality and not of rigidity.

account, the singularity is a result of combining the concept with a quantifier. In this way the proposed account is flexible and allows for accounting for singularity without making it an intrinsic feature of descriptive uses of singular terms.

3.2. A generalization of the mechanism of descriptive anaphora

The mechanism of descriptive anaphora defined above for indexicals relies on objects present in the context, be they objects delivered by the linguistic meaning of the indexical, or by demonstration. This restriction would not work for proper names as they allow for descriptive uses even if the objects which are their default referents are not present in the context of an utterance. To deploy descriptive anaphora in the analysis of those expressions, we must extend the conception of the mechanism, yet in this respect the required extension is fairly minimal. Already the original description of the mechanism allowed for differences between pure indexical and demonstratives in the way the antecedent was chosen. The differences depend on the nature of the expressions themselves: while pure indexicals—such as ‘I’, ‘here’ and ‘now’—have a rich linguistic meaning that allows for the identification of the relevant object, for demonstratives—such as ‘this’, ‘that’, ‘he’ or ‘she’—the identification is largely dependent on demonstration.²⁵ The required extension of the concept of descriptive anaphora will thus amount to allowing for more than these two ways—pure linguistic meaning and demonstration—of ascertaining the identity of the object which is to serve the role of the extra-linguistic antecedent, while the nature of the identifying relation will—as in the original case of indexicals—depend on the characteristics of the expressions themselves. Thus, for example, the antecedent of a proper name will be given by the social convention related to a particular use of a name at play in the context of an utterance that connects this use of the name with a particular object—the same convention that gives the default referent for the name when it is used referentially.

²⁵ By the claim that pure indexicals have rich linguistic meaning I simply mean that their Kaplanian character is descriptive and in most cases suffices for the identification of the referent in the context of utterance without depending on demonstration.

This extension of the concept of descriptive anaphora permits the analysis of examples such as (2), presented below, but will not suffice to account for all of the descriptive uses of proper names discussed above. This is because (2) is a quantified use of a proper name and in this respect it is analogous to the examples of the descriptive uses of indexicals. However, (4) does not contain a quantifier and no covert quantifier is necessary for the analysis of this use of ‘Einstein’. Yet the propositional contribution of the name is still general, making it a case of a descriptive use of a name. As I have already mentioned, however, the quantificational structure of the resulting proposition is either given by the explicit presence of a quantifier in the sentence, like in the case of (7), or is given by a covert quantifier (9). The postulation of a covert quantifier is required only when the sentence itself does not support an alternative structure for the proposition, i.e. when the replacement of an objectual contribution with a property would—to use Frege’s terminology—result in an unsaturated semantic structure and thus not a proposition. Thus in the case of (9)

(9) He must be a giant,

since the pronoun’s contribution is a property instead of an individual object, the resultant semantic structure would have been a complex property of being somebody who left this footprint and is a giant. This property needs to be inserted in the scope of a quantifier to produce a proposition. Covert quantifiers would thus be postulated when descriptive interpretation is given to a name in an argument position of a sentence. So the quantifier is a product of the structure of the sentence being interpreted and should not be considered an integral part of the mechanism of descriptive anaphora. The generalized definition of descriptive anaphora should thus be the following:

Definition. Descriptive anaphora

- under the descriptive anaphoric mechanism, a singular term inherits its semantic value from its antecedent;
- that antecedent stems from an extra-linguistic context and is an object identified through that aspect of the linguistic meaning of the term, which is crucial for the identification of the term’s referent in its default singular uses, i.e. either:

- by the Kaplanian character of the term (for pure indexicals), or
 - by demonstration (for demonstratives), or
 - by a social convention operative in the context of utterance that links that use of name to its default referent, or
 - by the linguistic meaning of a definite description supplemented by contextual clues (for definite descriptions);²⁶
- the object is used as a pointer to a property corresponding to it in a contextually salient manner;
 - that property contributes to the proposition expressed but is not a referent of the singular term;
 - the property retrieved from the context either serves as a context set that limits the domain of quantification of the quantifier that constrains the structure of the general proposition expressed or constitutes a predicative part of a singular proposition.

Now I will turn to a demonstration of the mechanism of descriptive anaphora as applied to proper names (section 3.2.1) and to definite descriptions (section 3.2.2).

3.2.1 Descriptive anaphora applied to the analysis of proper names

In example (2)

(2) He donated all his Picassos to MOMA,

the name ‘Picasso’, in its plural form, is used descriptively. Via the descriptive anaphora mechanism, the extra-linguistic antecedent of this use of the name is the person Pablo Picasso and the semantic contribution of the name is the property that results from a salient relation of ‘*x* is a painting by *y*’ with the second argument filled by Picasso himself. This property restricts

²⁶ In this paper I ignore referential uses of definite descriptions which are cases of misdescription (compare Donnellan 1966). They would probably be amenable to the treatment analogous to that of demonstratives, but this issue requires further research.

the domain of quantification of the binary universal quantifier ‘all’, resulting in the following proposition (‘he’ and ‘him’ are assumed to be directly referential and ‘A’ stands for the person the pronoun refers to in the context; I disregard the tense in this analysis):

ALL_x(PAINTING-BY-PABLO-PICASSO-OWNED-BY-A(x), DONATED-BY-A-TO-MOMA(x)),
 – ‘He donated all his paintings by Pablo Picasso to MOMA’.

In the analysis of example (3) I will concentrate only on the first embedded sentence. The counterfactual form of the whole utterance requires the consideration of possible worlds in which the following is true:

(3a) Mary is a boy,

while other elements of the context of utterance are fixed, i.e. it is clear from the context who ‘Mary’ refers to on its default referential and undeferred reading. The mechanism of descriptive anaphora applied to (3a) gives Mary I of England as the antecedent; her salient property of being a child of Henry VIII by Catherine of Aragon is the propositional contribution of the name. Since the name is in the subject position of (3a), the structure of the proposition expressed must be given by a covert quantifier—a definite description:

THE_x(CHILD-OF-HENRY-VIII-BY-CATHERINE-OF-ARAGON, BOY(x)),

resulting in the intuitive interpretation of (3): ‘If the child of Henry VIII by Catherine of Aragon had been a boy then yes, I do believe England would have remained a Catholic country’.

The analysis of example (4)

(4) Dick is a real Einstein,

does not result in a general proposition (its structure is not quantificational), but the propositional contribution of ‘Einstein’ is still general (a distributive property). The mechanism of descriptive anaphora gives Albert Einstein as the extra-linguistic antecedent and his salient property of

being an exceptionally intelligent person as a propositional contribution of the name. The structure of (4) does not require a postulation of a covert quantifier and thus the property's contribution remains simply predicative in nature, resulting in the expression of 'Dick is an exceptionally intelligent person'.

3.2.2 *Descriptive anaphora applied to the analysis of definite descriptions*

I will now return to example (5)

- (5) What if the tree had been a Moose, a deer or another sled, would this still have happened? I believe it would have...'

to show how the mechanism of descriptive anaphora works for the descriptive uses of definite descriptions. To repeat, descriptions contribute properties to the propositions expressed in descriptive uses which are distinct from the properties contained in their descriptor parts. Analogously to (3), (5) is a counterfactual claim that invites the hearer to consider a possible world in which (5a) is true:

- (5a) The tree is a Moose, a deer or another sled.

Neither a referential nor attributive reading of 'the tree' in (5a) gives a consistent interpretation of (5), because if something is a tree, it cannot simultaneously be a moose, a deer or a sled in either the actual or in a possible world. The required interpretation, as Sæbø correctly noted, requires replacing the concept of a tree that is given by the original expression with another concept somehow related to it. Such a connection is provided by the mechanism of descriptive anaphora. The incomplete definite description, 'the tree' supplemented by contextual clues, gives its actual referent—the actual tree talked about—as the extra-linguistic antecedent, whose salient property of being an entity obstructing the course of the snowsled driven by B on Pitre Trail on Friday' ('B' stands for the accused) is the propositional contribution of (5) and restricts the domain of quantification of the explicitly given quantifier 'the':

THE_x(ENTITY-OBSTRUCTING-THE-COURSE-OF-THE-SNOWSLED-DRIVEN-BY-B-ON-PITRE-TRAIL-ON-FRIDAY(x), (MOOSE(x) \vee DEER(x) \vee ANOTHER SLED(x))).

As a result, we obtain the following interpretation of the utterance: ‘What if the entity obstructing the course of the snowsled driven by B on Pitre Trail on Friday had been a Moose, a deer or another sled, would this still have happened? I believe it would have...’

I believe that (5) and the other examples of descriptive uses of definite descriptions given by Sæbø (2015) and Hunter (2010) do contradict Nunberg’s statement that definite descriptions do not allow for descriptive interpretations (2004a, 278).²⁷ Yet, I still believe that such uses of definite descriptions are more difficult to come by than descriptive uses of names or indexicals. The mechanism of descriptive anaphora allows the observation to be explained in pragmatic terms. When a sentence containing a definite description is uttered, the sheer fact of its utterance makes the descriptive content of the description salient. Despite the fact that the content does not enter the proposition expressed, it diminishes the salience of other properties and influences pragmatic mechanisms, such as descriptive anaphora, that might generate other general semantic values for the expression. The salience may be contextually overridden, but that requires more contextual setting as example (5) shows.

4. Conclusion: The consequences of the phenomenon of descriptive uses for the semantics of singular terms

In this paper I have proposed a uniform interpretation of the descriptive uses of all singular terms, i.e. indexicals, proper names and definite descriptions. To do so I provided a generalization of the mechanism of descriptive anaphora which I have previously introduced for the analysis of descriptive uses of indexicals in Kijania-Placek (2010, 2012, 2015, 2017, 2018). The generalized mechanism of descriptive anaphora relies on an extra-linguistic antecedent, which is an object given by the default semantic

²⁷ I have previously supported Nunberg’s claim in Kijania-Placek (2010), but now find the arguments presented there unconvincing.

mechanism characteristic of the expression in question. This object points to a salient property and this property forms the propositional contribution of the respective term. Depending on the syntactic position of the analyzed expression in the sentence, the property either restricts the domain of quantification of a quantifier or contributes to the interpretation of the predicative part of the sentence. The resulting concept is not an individual concept, but the definiteness is in some cases contributed by the covert or overt definite description quantifier, whose first argument is given by the property obtained by the mechanism of descriptive anaphora. This allows for a uniform treatment of examples calling for individual concepts and those for which the assumption of individuality built into the interpretive concept itself does not give adequate interpretations.

Descriptive uses of singular terms are not the default ones and the process of a descriptive interpretation is triggered by the failures of other interpretations. What is more, the mechanism of descriptive anaphora is semantically dependent on the presumptive referents. Thus the different uses of singular terms, i.e. their referential and descriptive uses, are interrelated in ways that seem to exclude treating them as homonymous.

The fact that the phenomenon of descriptive interpretation is not limited to indexicals but is available for all singular terms seems to require that these kinds of uses were predicted by the semantics of indexicals, proper names as well as definite descriptions. If we assume, as I think we are supposed to, that “to know the meaning of a term is to know the sorts of semantic contribution that the term can make to a larger context, and to have a general understanding of what sorts of context are those in which it will make this or that sort of contribution” (Dancy 2004, 196), we should aim at a semantic analysis of singular terms that would accommodate descriptive uses. Such an analysis would not, however, necessarily lead to a unified account of all singular terms. The semantic differences between indexicals, proper names and definite descriptions should not be sought in admitting descriptive readings for one kind while denying it for others—a move which seems to have been falsified by linguistic data—but rather in what other readings are available to those expressions. For example, while indexicals have at least deictic, (classically) anaphoric, bound, deferred and descriptive readings, they seem to lack (systematic) predicative readings that are available for names, in which a

proper name *N* contributes the property of being a person called *N* to the proposition expressed.²⁸ Although such uses share important characteristics with descriptive uses of indexicals and the descriptive uses of proper names discussed in this paper, they are different in that the generation of the property is not context dependent in the sense that it does not rely on the properties of the default referent of the name that are salient in the context of the utterance.

The phenomenon of the descriptive uses of singular terms appears to be of a cross-linguistic character and is characterized by intra-linguistic productivity and systematicity. The same is true of other kinds of uses of singular terms like the referential and attributive uses of definite descriptions or the referential, predicative, bound or deferred uses of proper names. It follows that the semantics of singular terms seems to call for a systematically polysemous treatment that would encompass all kinds of uses that are characteristic of a certain class of expressions and would postulate mechanisms that underline those uses.²⁹ Although the details of such treatment lies beyond the scope of this paper and requires further research, the mechanism of descriptive anaphora proposed in this paper may be considered as a contribution to semantic analysis thus understood.

Acknowledgments

This work has been partly supported by the (Polish) National Science Centre 2013/09/B/HS1/02013 grant.

²⁸ Compare Burge (1973), Fara (2015a,b) or Matushansky (2008) for the general idea, although they phrase the relevant property in a slightly different manner. Relevant examples include 'There are three Antonio's in my class'. See also Kijania-Placek (2018).

²⁹ A polysemous treatment of referential and predicative uses of proper names was proposed by Leckie (2013). For an attempt at a polysemous treatment of all uses of proper names, see Kijania-Placek (2018).

References

- ALMOG, J., PERRY, J. & WETTSTEIN, H. (eds.) (1989): *Themes from Kaplan*. Oxford: Oxford University Press.
- BARWISE, J. & COOPER, R. (1981): Generalized Quantifiers and Natural Language. *Linguistics and Philosophy* 4, 159-219.
- BEZUIDENHOUT, A. (1997): Pragmatics, Semantic Underdetermination and the Referential/Attributive Distinction. *Mind* 106, 375-409.
- BURGE, T. (1973): Reference and Proper Names. *Journal of Philosophy* 70, 425-439.
- CARLSON, G.N. (1977): A Unified Analysis of the English Bare Plural. *Linguistics and Philosophy* 1, 413-456.
- CHAFE, W. (1986): Evidentiality in English Conversation and Academic Writing. In: Chafe, W. & Nichols, J. (eds.): *Evidentiality: The Linguistic Coding of Epistemology*. Norwood, NJ: Ablex, 261-272.
- DANCY, J. (2004): *Ethics without Principles*. Oxford: Oxford University Press.
- DEVITT, M. (2004): The Case for Referential Descriptions. In: Reimer, M. & Bezuidenhout A. (eds.): *Descriptions and Beyond*. Oxford: Clarendon Press, 280-305.
- DONNELLAN, K. (1966): Reference and Definite Descriptions. *Philosophical Review* 75, 281-304.
- ELBOURNE, P. (2005): *Situations and Individuals*. Boston: MIT Press.
- ELBOURNE, P. (2008): Demonstratives as Individual Concepts. *Linguistics and Philosophy* 31, 409-466.
- ELBOURNE, P. (2013): *Definite Descriptions*. Oxford: Oxford University Press.
- EVANS, G. (1982): *Varieties of Reference*. Oxford: Oxford University Press.
- FARA, D. (2015a): Names are Predicates. *Philosophical Review* 124, 59-117.
- FARA, D. (2015b): 'Literal' Uses of Proper Names. In: Bianchi, A. (ed.): *On Reference*. Oxford: Oxford University Press, 249-277.
- GALERY, T.N. (2008): Singular Content and Deferred Uses of I. *UCL Working Papers in Linguistics* 20, 157-201.
- GALERY, T.N. (2012): *Descriptive Pronouns Revisited. The Semantics and Pragmatics of Identification Based Descriptive Interpretations*. Ph.D. thesis, University College London.
- HEIM, I. & KRATZER, A. (1998): *Semantics in Generative Grammar*. Oxford: Wiley.
- HUNTER, J. (2010): *Presuppositional Indexicals*. Ph.D. thesis, The University of Texas at Austin.
- JESHION, R. (2015a): A Rejoinder to Fara's "'Literal' Uses of Proper Names". In: Bianchi, A. (ed.): *On Reference*. Oxford: Oxford University Press, 280-294.

- JESHION, R. (2015b): Referentialism and Predicativism about Proper Names. *Erkenntnis* 80, 363-404.
- JESPERSEN, B. (2012): The Non-Italian Pope. *Organon F* 19, 58-64.
- KAPLAN, D. (1978): On the Logic of Demonstratives. *Journal of Philosophical Logic* 8, 81-98.
- KAPLAN, D. (1989a): Demonstratives. In: Almog et al (1989), 481-563.
- KAPLAN, D. (1989b): Afterthoughts. In: Almog et al (1989), 565-614.
- KIJANIA-PLACEK, K. (2010): Descriptive Indexicals and the Referential/Attributive Distinction. In: Peliš, M. (ed.): *Logica Yearbook 2009*. London: College Publications, 121-130.
- KIJANIA-PLACEK, K. (2011): He Is Usually an Italian, but He Isn't. *Organon F* 3, 226-234.
- KIJANIA-PLACEK, K. (2012): *Pochwała okazjonalności. Analiza deskryptywnych użyć wyrażen okazjonalnych (Praise of indexicality. An analysis of descriptive uses of indexicals, in Polish)*. Warsaw: Semper.
- KIJANIA-PLACEK, K. (2015): Descriptive Indexicals, Propositional Attitudes and the Double Role of Context. In: Christiansen, H., Stojanovic, I. & Papadopoulos, G. (eds.): *Modeling and Using Context*. LNAI 9405, Dordrecht: Springer, 287-301.
- KIJANIA-PLACEK, K. (2017): Descriptive Indexicals and Epistemic Modality. *Topoi* 36, 161-170.
- KIJANIA-PLACEK, K. (2018): Can Minimalism about Truth Embrace Polysemy? *Synthese* 195, 955-985.
- KRATZER, A. (1995): Stage-Level and Individual-Level Predicates. In: Carlson, G. & Pelletier, F.J. (eds.): *The Generic Book*. Chicago: Chicago University Press, 125-175.
- LECKIE, G. (2013): The Double Life of Names. *Philosophical Studies* 165, 1139-1160.
- LEWIS, D. (1975): Adverbs of Quantification. In: Keenan, E. (ed.): *Formal Semantics of Natural Language*. Cambridge, MA: Cambridge University Press, 3-15.
- LEWIS, D. (1986): *On the Plurality of Worlds*. Oxford: Blackwell.
- LOAR, B. (1976): The Semantics of Singular Terms. *Philosophical Studies* 30, 353-377.
- MATUSHANSKY, O. (2008): On the Linguistic Complexity of Proper Names. *Linguistics and Philosophy* 21, 573-627.
- MCKAY, T. & NELSON, M. (2014): Propositional Attitude Reports. In: Zalta, E.N. (ed.): *The Stanford Encyclopedia of Philosophy*. Spring 2014 Edition, <http://plato.stanford.edu/archives/spr2014/entries/prop-attitude-reports/>.
- NEALE, S. (1990): *Descriptions*. Cambridge, MA: The MIT Press.

- NUNBERG, G. (1979): The Non-Uniqueness of Semantic Solutions: Polysemy. *Linguistics and Philosophy* 3, 143-184.
- NUNBERG, G. (1990): Indexicality in Context. Presented at the colloquium on „Philosophy, the human sciences, and the study of cognition”, C erisy-la-Salle, France, June 14–20.
- NUNBERG, G. (1991): Indexicals and Descriptions in Interpretation, Ts.
- NUNBERG, G. (1992): Two Kinds of Indexicality. *Ohio State Univ. Working Papers in Linguistics* 40, 283-302.
- NUNBERG, G. (1993): Indexicality and Deixis. *Linguistics and Philosophy* 16, 1-43.
- NUNBERG, G. (1995): Transfers of Meaning. *Journal of Semantics* 12, 109-132.
- NUNBERG, G. (2004a): Descriptive Indexicals and Indexical Descriptions. In: Reimer, M. & Bezuidenhout, A. (eds.): *Descriptions and Beyond*. Oxford: Clarendon Press, 261-279.
- NUNBERG, G. (2004b): The Pragmatics of Deferred Interpretation. In: Horn, L.R. & Ward, G. (eds.): *The Handbook of Pragmatics*. Oxford: Blackwell, 344-364.
- PARTEE, B. (1985): Noun Phrase Interpretation and Type-Shifting Principles. 5th Amsterdam Conference on Formal Semantics.
- PERRY, J. (1977): Frege on Demonstratives. *Philosophical Review* 86, 474-497.
- PERRY, J. (1979): The Problem of the Essential Indexical. *No us* 13, 3-21.
- PERRY, J. (1997): Indexicals and Demonstratives. In: Hale, R. & Wright, C. (eds.): *Companion to the Philosophy of Language*. Oxford: Blackwell, 586-612.
- PERRY, J. (2012): *Reference and Reflexivity*. Stanford: CSLI, 2nd Edition.
- PETERS, S. & WESTERST AHL, D. (2006): *Quantifiers in Language and Logic*. Oxford: Clarendon Press.
- POWELL, G. (1998): The Deferred Interpretation of Indexicals and Proper Names. *UCL Working Papers in Linguistics* 10, 1-32.
- POWELL, G. (2010): *Language, Thought and Reference*. Palgrave Studies in Pragmatics, Language and Cognition. Hampshire: Palgrave Macmillan.
- PUSTEJOVSKY, J. (1993): Type Coercion and Lexical Selection. In: Pustejovsky, J. (ed.): *Semantics and the Lexicon*. Dordrecht: Kluwer.
- QUINE, W.V.O. (1941): *Elementary Logic*. New York: Ginn and Company.
- QUINE, W.V.O. (1968): Ontological Relativity: The Dewey Lectures 1969. *Journal of Philosophy* 65, 185-212.
- RECANATI, F. (1993): *Direct Reference: From Language to Thought*. Oxford: Blackwell.
- RECANATI, F. (2005): Deixis and Anaphora. In: Szab o, Z.G. (ed.): *Semantics versus Pragmatics*. Oxford: Oxford University Press, 286-316.
- SALMON, N. (1986): *Frege’s Puzzle*. Cambridge, MA: Bradford Books, MIT Press.

- SÆBØ, K. (2015): Lessons from Descriptive Indexicals. *Mind* 124, 1111-1161.
- SCHIFFER, S. (1981): Indexicals and the Theory of Reference. *Synthese* 49, 43-100.
- SOAMES, S. (1989): Direct Reference, Propositional Attitudes and Semantic Content. *Philosophical Topics* 15, 44-87.
- STOKKE, A. (2010): Indexicality and Presupposition. Explorations beyond Truth-Conditional Information. Ph.D. thesis, University of St Andrews.
- WETTSTEIN, H.K. (1981): Demonstrative Reference and Definite Descriptions. *Philosophical Studies* 40, 241-257.