An Analysis of Predicational Sentences with Special Reference to Class and Quality Descriptions *
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1. Introduction

The idea that the descriptive content expressed by the head nominal of an NP is translated into a predicate is by no means novel. Russell (1905), for instance, translates the definite description in subject position "the father of Charles II was executed" into the predicate predicated of some referent identified, as shown in "there was an x who *was the father of Charles II* and was executed." This kind of translation is commonly found in the relevant literature (cf. Hawkins (1978:Ch.3), Campbell (1996)). Nevertheless, there has been little investigation as to what the predicate obtained from such translation is a predicate of.

In this paper, I will analyze predicational copular sentences with special reference to their predicate NPs. I argue that there is a difference in the range of predications between what I here call class predicate NPs and quality predicate NPs, and that the two types of predicate NPs are used in accounting for what the descriptive content of an NP can be a predicate of. It is shown that reference assignment exhibited by a lexical NP involves the propositional content whose predicate is filled by the descriptive content of that NP.

Copular sentences of a predicational type are generally described as being "characterizing" in that complement NPs serve to characterize the referents of subject NPs by denoting the properties of those referents (cf. Higgins (1979:212f.), Declerck (1988:Ch.1.3)). However, little discussion has been made to examine whether or not predicational sentences, or PR sentences for short, constitute a uniform class. I argue that a distinction should be drawn between the sentences in which a person is referred to by the subject NP and a class is predicated of that person, and those in which a person is referred to and a quality is predicated of that person. I call the predicates used in the former type of sentence "class-predicates," and the predicates used in the latter type of sentence "quality-predicates." The class/quality distinction is shown to have a number of ramifications.

I begin by raising a question about the reference assignment exhibited by an NP. In fact, the question is closely related to the issue that I address in this paper, namely, that reference assignment involves an element which is translated into a predicate NP, especially a predicate NP whose head nominal expresses quality.

According to Donnellan (1966), definite NPs in referential use are tools for picking out an intended referent, and it may be successfully used even when the

referent does not fit the descriptive content of an NP. Consider a situation in which Robert and Meryl are attending a party and Robert finds a strange man who has a martini glass in his left hand, then he says the following to Meryl:

(1) Who is the man drinking a martini?

This definite NP can be used in reference to the intended referent even when that referent was in fact drinking a glass of water. So understood, referential NPs are referential because they are primarily concerned with objects referred to and only secondarily concerned with the descriptions expressed by their head nominals. In other words, what matters in definite NPs in referential use is not their descriptive content, but the objects to which they are used to refer.

It is easy to see that referring expressions are not just tools for picking out the objects which are supposed to exist in the context in which these expressions are used. A proper name is a textbook example of referring expression, and a name like *Sophie*, for example, may be used to pick out a particular actress in France. But the name also invites us to imagine why Sophie's parents gave their baby that name: it etymologically means intelligence, and those who bear the name are hopefully intelligent. That is to say, names may have their descriptive meanings, and similar remarks will hold for lexical NPs in referential use.

As a first approximation, we may assume that there is a qualitative difference between the reference by means of *the policeman* and that by means of *the mean old man*, even though the two references are to the same person. It is clear that the head nominal gives rise to the difference between them, but it is not so clear to what domain that difference is attributed. Obviously, the referents of the NPs in question are not the right answer; they are the same thing. I argue that the descriptive content of a definite NP, i.e. the head nominal, may rightly be translated into a predicate, but that predicate cannot simply be taken as denoting a property of the referent of the NP. In this connection, evaluative properties or simply qualities are shown to be involved in wide-ranging predications in the form of NPs.

Although written in a descriptive rather than a theory-oriented style, this paper is intended as a polemic for the position that predication by means of an NP is not limited to the case in which some property denoted by an NP is predicated of such and such a referent, but applied to a wide variety of cases in which such a property is predicated of reference assignment, proposition, comparison, and so on. In short, the designatum of an NP allows a wide range of extensions. I will focus on the case of reference assignment in this paper.

This paper is organized as follows. In Section 2, we review Rouchota (1992, 1994), pointing out that lexical NPs in referential use are not just tools for picking

out intended referents. It is shown how the descriptive content of an NP is related to the reference made by that NP. In Section 3, I will maintain that Rouchota's idea should be built into analysis of PR sentences, which leads to the distinction between class predicate NPs and quality predicate NPs. I will show that quality predicate NPs have a wider range of uses than class predicate NPs, suggesting that the descriptive content of the former is more of a predicate than that of the latter, and that this fact underlies a variety of constructions such as vocatives (e.g. *you idiot*), circumnominal comparatives (e.g. *I'm more of a man than you are, my dear*), the intensification marked by *such*, and a propositional relation established by control between the subject NP and the *to*-infinitive preceded by a predicate NP. The arguments adduced there are instrumental in making explicit the generic sense that is typically accompanied by indefinite singulars in subject position. Section 4 is devoted to analyzing anaphoric epithets with special reference to the relation between the uniqueness of reference signaled by definiteness and the class/quality distinction. I will argue that while the descriptive content of a "quality noun" is compatible with the uniqueness implication, that of a "class noun" is incompatible with it in virtue of the unbalanced relation between uniqueness and the plurality required by a class. Section 5 concludes this paper.

2. Rouchota (1992, 1994)

Within the framework of relevance theory, Rouchota (1992, 1994) presents a set of arguments against the view that referential NPs are just tools for piking out intended referents. Let us suppose that the following sentence is used in the situation in which Jones is flirting with the hearer's sister, and the speaker brings the hearer's attention to Jones.

(2) A convicted embezzler is flirting with your sister.

This is a referential use of the indefinite description, and sentence (2) is equivalent in reference to sentences like the following:

(3) Jones is flirting with your sister.

At this point, it is crucial to see what it is that motivates the speaker to say (2) instead of (3). The answer is obvious; in addition to the proposition expressed that there is an x such that x is a convicted embezzler and x is flirting with your sister, (2) may carry a proposition meant that Jones is a convicted embezzler.

It may be that the predicate *(be) a convicted embezzler* is not predicated of Jones himself, but it is clear that it is predicated of the way the speaker understands Jones, and further of the way he communicates with the hearer and talks about Jones. Put differently, the proposition meant is based on the speaker's impression,

which takes the form of a proposition whose predicate is occupied by the head nominal of the referring expression that he employs.

Rouchota (1994:446) further argues with the following examples that the change in a referring expression gives rise to the change in the way the utterance with that referring expression is interpreted. Suppose a situation in which Robert and Meryl do business regularly with Jones, and in picking out Jones, Meryl says the following to Robert:

(4) a. An embezzler was arrested yesterday.

　　b. Jones was arrested yesterday.

In both versions, the referent picked out is the same, but (4a) can convey something more about Jones than (4b), namely, a proposition meant that Jones is an embezzler. Because the descriptive content helps to set up the proposition meant, the indefinite NP in (4a) is able to offer a hint of why the referent of that NP was arrested.

Similar remarks apply to the reference by means of definite NPs. The examples in (5) come from Rouchota (1992:144ff.). Suppose that (5c), but neither (5a) nor (5b), is uttered by a sports reporter who is commenting on McEnroe's behavior during his last game. What is the effect brought about by this choice?

(5) a. McEnroe gave signs of his bad temper when he threw his racquet at his opponent's head.

　　b. The Wimbledon champion gave signs of his bad temper when he threw his racquet at his opponent's head.

　　c. The notoriously moody tennis player gave signs of his bad temper when he threw his racquet at his opponent's head.

These three versions would have the same value if definite NPs in referential use are just tools for picking out an intended object. However, Rouchota argues that the choice of a head nominal is conditioned by the direction that the speaker wishes the hearer to take with respect to that object. Suppose that the sports reporter has a severe attitude toward McEnroe's tantrums on tennis court, and wishes the hearer to have the impression about him against the background of notoriously moody tennis players. By no other referential NP than the one in (5c) can the speaker's attitude toward him be communicated so effectively to the hearer. To use the theoretical term that Rouchota adopts, it is optimally relevant.

An indefinite NP in referential use plays a part in implicature, and does not have to pick out an intended referent uniquely, but a definite NP in referential use have to do it. So, definite NPs in referential use build their referent in propositions expressed, such as "the notoriously moody tennis player, i.e. McEnroe, gave signs of his bad temper when he threw his racquet at his opponent's head." Aside from this

difference, the two types of NPs have in common the function that the descriptive content of a head nominal serves to set up a proposition in which the speaker communicates to the hearer the way he understands the target referent.

As we will see in Section 4, referential definites of this type are similar to anaphoric epithets. Anaphoric epithets, too, are related to the proposition which is predicated of reference assignment. I will develop Rouchota's ideas in such a way that lexical NPs are not just for the reference whereby an intended object is picked out, but for the predication whereby the descriptive content of an NP used is predicated of the situation occurring with that reference. Now the concept of 'predication' or the term *(be) predicated of* is extended to mean that some property is attributed to the reference whereby the speaker picks out and understands a certain object, as well as that such a property is attributed to the object which possesses that property. These arguments play a key role in our analysis of PR sentences.[1]

3. Two Types of Descriptions

The class/quality distinction that I suggested in Section 1 is the name given to the difference in the way a referent is described. It is crucial to see that there is a difference in how John, the referent of the subject NP, is understood between the statement *John is a teacher* and the statement *John is a fool*. This distinction is based on how a particular referent is understood. We can say of a referent X that he is affiliated with such and such a class. We can also say that he has such and such a quality. In the former, the referent is described in relation to the conditions external to him. In the latter, he is described in relation to his internal conditions. There are a number of facts which converge on the two types of descriptions.

3.1. Vocatives

First, I cite the contrast with respect to the vocatives introduced by *you*. As far as singular NPs are concerned, there is a clear contrast between two classes of nouns denoting people (cf. Zwicky (1974)). Consider the following examples:

    (6) a. You fool!/You silly blockhead!/You angel!

        b.*You student!/*You office worker!/*You cook!

Clearly, nouns like *teacher, doctor, salesman, farmer*, etc. form one class, and nouns like *fool, genius, idiot, angel*, etc. form another. Only the latter class of nouns can be employed in the vocative construction. In what follows, I will refer to the former class of nouns as "class nouns" and the latter class of nouns as "quality nouns." The intention behind these terms will be made clear in the course of discussion. Note that quality nouns are conventionally evaluative in meaning.

I am mainly concerned with sentences which describe human beings, because

nouns which designate human beings are most finely classified. They are suitable devices for illustrating the difference between the two types of descriptions, namely, those that predicate an external class of a referent and those that predicate an internal quality of a referent. Of course, this distinction applies to sentences which describe other things than human beings.

In such utterances as the vocatives, what matters is not so much the referent picked out by *you* as the way reference to *you* is made or the speaker's impression about the quality of that person. This suggests that nouns employed in them serve to describe the quality of a reference, rather than to modify a referent with such and such a property. I make use of this fact to propose that propositional content is encapsulated in the reference made by *you* in (6a), but this is not the case with (6b).

It is by now obvious that the propositional content associated with the vocatives is the proposition meant in Rouchota's sense. The contrast shown in (6) makes sense if we see that quality nouns rank high as predicates compared with class nouns, and therefore the former allow a wider range of predications than the latter. They are readily interpreted as making predicates of some propositions meant even when such propositions are not explicitly expressed.

We will see later that the contrast between class nouns and quality nouns is related to anaphoric epithets, and that it is explained in terms of the contrast between "covert plurality" and "covert proposition."

3.2. Quality Predicate NPs

Predicate NPs are divided into two types in accordance with the two classes of head nouns. One is made from a class noun and the other is from a quality noun. The former class called "class predicate NPs" characterizes people by relating them to their external conditions, and so including them in a larger set. The latter class called "quality predicate NPs," on the other hand, characterizes them by denoting their internal qualities. In this case, the referent itself is not included in a larger class, but rather a particular property is asserted to be included in the referent in question.

A diagnostic environment for quality predicate NPs is given by *to-be*-deletion. Consider the following example:

    (7) John may seem {an idiot/a fool/a coward/*an electrician/*a student/a
        typical student}, but he isn't.

In (7), all the predicate NPs would be acceptable if they were preceded by *to be*, *John may seem to be a student*, for instance. When *to be* is absent, predicate NPs having a quality noun head are acceptable but predicate NPs having a class noun head are not. It is worth emphasizing that a class predicate like *(be) a student* turns into a quality predicate when modified by a degree adjective like *typical*.

The contrast in (7) also shows that quality nouns rank higher than class nouns with respect to the range of predications. Qualities are predicated not only of the referent of a subject NP, but also of the speaker's judgment expressed by *(may) seem.* Classes may take part in the former type of predication, but they do not take part in the latter type of predication.

Quality predicate NPs, but not class predicate NPs, may go with what are called circumnominal comparatives formed by the phrase *(be) more of (a)*:

(8) Bill is more of a {fool/genius/?plumber/*BA} than his father was.

Similarly, the following contrast comes from Bresnan (1973:283):

(9) a. ?John is more of a nextdoor neighbor than Pete.

b. John is more of a nextdoor-neighbor-type than Pete.

As shown in (9), *nextdoor neighbor* is primarily a class noun, but it turns into a quality noun when it is modified with *-type*, a modification which serves to describe what is internal rather than external to the referent of the subject NP.[2]

Whether someone is a nextdoor neighbor or not is a matter of either-or classification. The range of expression made available by this predicate is limited in that it is only contradictory to say that he is a nextdoor neighbor and is not a nextdoor neighbor. However, whether someone is a nextdoor-neighbor-type or not is a matter of degree. Besides being expressed as an either-or property, the predicate denoting this internal property has another choice; it is possible to say that someone is a nextdoor-neighbor-type to a certain degree. With the modification with *-type*, one can put a black-and-white question into a gray area, i.e. the realm of quality. Since it belongs to a gray area, a speaker may subjectively evaluate it highly or low.

3.3. Intensification

The intensification given by *such* lends credence to the bifurcation of predicate NPs introduced above. Whether someone is a fool or not is a matter of degree, and it can be graded along some scale of intelligence. On the other hand, whether someone is a department store manager or not is a matter of the choice of one's career, and it cannot be graded along a scale. As Gary (1979:20) points out, this difference is reflected in the following contrast:

(10) a. He is such a fool.

b. *He is such a department store manager.

In (10a), intensifier *such* modifies the predicate NP *(be) a fool* to emphasize the degree of foolishness. In (10b), however, *such* cannot modify the predicate NP *(be) a department store manager* in this sense. While *(be) a fool* denotes a scalar property, *(be) a department store manager* denotes a discrete property.

The fact that quality predicates go with degree expressions like *more of* and

intensifier *such* means that the property they describe is defined in propositional terms. In (8), the degree modifier *more of* is concerned with a comparison of the two propositions 'Bill is a fool' and 'his father was a fool.' Similarly, in (10), *such* modifies the scalar element of a predicate to intensify the assertive strength of the proposition 'he is a fool to some extent.'

Quality nouns are characterized by the emotional overtones they carry. We use quality nouns when we subjectively evaluate the quality of one's personality on some scale. We may regard Bill as a genius when his conduct merits the description of being a genius on the scale of intelligence. To summarize, when the designatum of an NP enters into the realm of quality, what was originally dealt with in a definite way comes to be subject to the speaker's evaluative judgment. Here is the triangular relationship among quality, scalar sense and evaluative judgment.

At first sight, the class/quality distinction introduced here appears to be based on a classification of nouns into the *Windows-user*-type, on the one hand, and into the *fool*-type, on the other. However, it is important to see that the distinction is reduced to a more general principle in language use. I will propose that the principle at work in the above-mentioned contrasts is defined in the following manner:

    (11) 'Evaluative' properties are predicated of a wider range of designata than 'classificatory' properties. Class predicates denote classificatory properties, and quality predicates evaluative properties.

Behind this principle are two contrastive modes of our mental activity. While class predicates are there for the speaker to attribute his knowledge to a referent, quality predicates are there for him to attribute his impression to it. Knowledge is 'classificatory' and so 'referential' in a way impression is not; it is supported by the relation that the speaker has to the world in which he lives. By contrast, impression is 'evaluative' in a way that knowledge is not; it is supported by the attitude that the speaker takes to the world he lives in. Being free from the social norms, the latter mode of mental activity is given more latitude than the former mode, and therefore it is natural that the predicates based on the latter take part in a wider range of predications than the former.

Unlike the properties defined in terms of one's internal mentality, the properties defined in terms of social classes are discrete in nature. Predicate NPs denoting these properties, i.e. class predicate NPs, are not compatible with such degree modifiers for this reason. We will later discuss the linkage between class predicates and their referent-orientedness (not reference-orientedness) in relation to plurality.

The superiority of quality predicates over class predicates is furnished by the copular sentences followed by a *to*-infinitive phrase, too. Bach (1968:117) observes

the following contrast:

(12) a. He's an idiot to go.

b. *He's a cook to go.

In (12), the quality predicate NP can be followed by a *to*-infinitive in a way that the class predicate NP cannot. Note that there is a proposition established by control between the subject NP of the main clause and the *to*-infinitive phrase. The contrast shows that a quality predicate, but not a class predicate, can be predicated of the control relation. This is an outcome of the fact that a class predicate is only predicated of the referent of a subject NP which is a member of a class or range of referents, but a quality predicate is predicated not only of the referent that it describes, but also of the proposition in which another predicate that is provided by the *to*-infinitive is predicated of that referent.

3.4. Indefinite Singulars in Generic Use

What we have argued about the quality predicate NPs sheds light on the generic use of indefinite singular NPs in subject position. It is argued that the quality predicates are relevant to making explicit a generic sense specific to indefinite singulars, namely, that it stands for the defining quality of some individual entity, i.e. a proposition in which that individual is defined by that quality.

Burton-Roberts (1976:433) cites the following contrast, which was brought to his notice by Bolinger; an indefinite singular NP having a class noun head like *doctor* is perfect on a specific reading of that NP, but an indefinite singular NP with a quality noun head stands only unnaturally in subject position.

(13) {A doctor/A politician/A bachelor of arts/?A fool/?A scoundrel/?An

angel} condescended to see me.

This contrast shows that indefinite singulars having a quality noun head are unfit for referent-oriented uses; they describe the quality of some individual in propositional terms, and so their designatum is hard to pinpoint as a specific topic to talk about.[3] Indefinite singulars having a class noun head, by contrast, may be used as referring expressions; they assist reference by classifying someone as a member of some class.

It is important that indefinite singulars with a quality noun head make good subject NPs when the sentences in which they are employed are generic. This point is illustrated by the following data, taken from Burton-Roberts (1976:433):

(14) a. An angel is a girl who smiles on a rainy day.

b. A fool is happy to be robbed.

This is quite as it should be, for the indefinite singulars in generic use are not referent-oriented expressions. The contrast between (13) and (14) suggests that the contexts in which generic statements introduced by *a N* are appropriately used are

contexts in which *a N* is translated into a predicate to be predicated of a proposition expressed, independently of whether the information conveyed by that proposition applies to any specific referent.

Notably, Plötz (1972:23, 102f.) observes that an indefinite singular in generic use has as its connotation the propositional content equivalent to a conditional clause, a clause in which the subject NP is rearranged into a predicate NP, and the subject position is filled by *something*, which has no fixed referent.

(15) a. A language is a set of sentences.

b. If something is a language, it is a set of sentences.

It is formally an NP, but what is expressed by it is a conditional clause in content. This paraphrase is not available to other forms of generic NPs such as articleless abstract nouns, however. There is a qualitative difference between (15) and (16):

(16) a. Language is a human characteristic.

b.??If something is language, it is a human characteristic.

While the genericity of (15a) must be tested by individual language after individual language, that of (16a) will be tested by languages in general. That is to say, the latter genericity hinges on a class or classes of languages, the former genericity hinges on a quality of one language, i.e. a condition under which a series of phonemic signs qualifies as a language.

The paraphrase assigned to *a N* in generic use makes sense once we see that indefinite singulars of this type are not predicated of class, but of quality, i.e. a property in terms of which an individual is defined in exclusive reference to its own, and not to others. Since qualities of this sort are obtained only by describing some individual, namely, by making a proposition about that individual, the context in which such qualities are expressed without reference to something particular is exactly the one in which it is taken for granted that those qualities are applicable to one randomly chosen individual (as suggested by *something* in (15b)); this is the reading conventionally associated with indefinite singulars in generic use, and *a N* as a generic NP is an NP whose connotation is propositional in nature.

Nunberg and Pan (1975:416) note that indefinite singulars as generic NPs are suitably used when they carry a prescriptive connotation. As shown in (17), *Christian* is a noun which connotes religious morality, and may be used to express what a Christian is expected to be in a way that *programmer* may not.

(17) a. A Christian is forgiving.

b. *A programmer is smart.

Nunberg and Pan further point out that sentence (17b) improves if the prescriptive connotation is added to the sentence by modifying the subject NP with an adjective

or putting a modal auxiliary like *should* in the sentence in which it is used.

    (18) a. A programmer should be smart.

        b. A good programmer is smart.

Modifications of this type serve to highlight the quality of being a programmer rather than to a class of programmers. These facts lend themselves to a description to the effect that the indefinite singular in generic use is a quality description.

    So far, so good. Nevertheless, it is important that the prescriptive connotation explicitly expressed is only one of the factors which make possible the generic use of *a programmer*. Consider the following example of definitive statement, adopted by *COBUILD*, in which the condition for 'programmerhood' is defined:

    (19) A programmer is a person whose job is to write programs for computers.

It is now necessary for us to examine the nature of the unacceptability of (17b) and that of the acceptability of (19). Aside from the basic difference between definition of a word and prescription for one's career, these two acts have in common the fact that they are able to talk about what does not exist in the world in which they are carried out. Even in the absence of programmers, one can hypothetically define or prescribe the quality of 'programmerhood', i.e. one's impression about a programmer, given one condition that he has enough evidence to think so. In light of this reasoning, it is too hard to warrant the assertive strength of the proposition that the quality of a programmer is defined or prescribed solely in terms of smartness. Thus, sentence (17b) is odd unless it would be used in a world in which smartness is to a programmer what the job assignment stated in (19) is to a programmer in this world, or what forgivingness is to a Christian in this world.

    These facts about indefinite singulars in generic use accommodate themselves to the principle stated in (11); NPs in quality use may generically denote something that cannot be classified, but only can be evaluated, i.e. the prescription or definition according to which an individual identifies itself.[4]

3.5. Referent-Orientedness of Class Predicate NPs

    The viewpoint that I adopt toward class predicate NPs is exactly the opposite to the one that I have adopted toward quality predicate NPs, namely, that they are oriented to classes of referents, rather than predicates of propositions meant. Arguments to this effect can be made in relation to restrictive relatives added to predicate NPs. Consider the following example:

    (20) Ed Rollins is a Republican strategist who managed the Reagan campaign

          in 1984 and was an adviser to the Perot campaign.

Ed Rollins is a referring expression, and cannot be modified by a restrictive relative clause. In this case, we do interpret Ed Rollins seen *as a member of the class* who

managed the Reagan campaign in 1984.... This means that the predicate NP with a restrictive relative is interpreted as a class predicate rather than a quality predicate.

Restrictive relatives are introduced via the coreference between the head in a main clause and the gap in a relative clause. Since the property described by a class predicate is defined in reference to a range of referents, a referential index may be assigned to it, and so it comes to be modified by a relative clause.

I have argued that quality predicate NPs are covertly propositional in nature in that they are readily translated to predicates of the propositions that are involved in reference assignment or comparison. It is shown that the defining characteristic of class predicate NPs is that even if they are formally singular, they are covertly plural.

Relative clauses like the one in (20) also show the plurality associated with the designatum of a class predicate NP, for restrictive relatives will not occur with the head that has unique reference, i.e. a nominal expression whose designatum lacks the sense of extensible plurality. Consider the following examples:

(21) a. The brother of mine who goes to Rome is John.

b. *John who goes to Rome is my brother.

Sornicola (1988:346f.) notes that (21a) can be used only on the reading 'I have more than one brother,' but (21b) is out because the proper name has unique reference by itself. This means that the covert plurality of class predicate NPs is well-motivated.

On the other hand, predicate NPs denoting qualities are only unnaturally restricted by relatives. The following examples are low in acceptability:

(22) a.??Bill is a fox who managed the sales campaign in1987.

b.??Mary is an angel whom we met yesterday.

A restrictive relative requires that the head be coreferential to the gap in the clause, but the property offered by the head of a quality predicate NP is not the same kind as what is denoted by the gap in the clause. A property whose designatum is of a propositional nature will not be equated as a member of the class who managed a sales campaign, or a member of those persons whom we met yesterday.

3.6. Summary of Section 3

The facts we have observed thus far all point to the same direction. While class nouns are used in contexts in which a person described by a class predicate is understood against the background of a range of persons, quality nouns are used in contexts in which the quality of a person is described in propositional terms. Differently put, class nouns as predicates denote a property which is defined in terms of persons who constitute a social class, i.e. the social relationships one has to others. Quality nouns as predicates denote a property in terms of which a proposition is made to characterize the way the described referent is, or should be. This

characterization depends on the speaker's subjective judgment. Because a quality noun is readily translated into a predicate of some proposition meant, it may participate in a wider range of predications than a class noun, for example, vocatives, circumnominal comparatives, and indefinite singular generics.

4. Anaphoric Epithets

A further class/quality contrast is given by anaphoric epithets. Quality nouns, but not class nouns, may be used in anaphoric epithets, a type of definite NPs which behave like pronouns (cf. Bolinger (1972:301-305)). In this section, I will attempt to account for this pronoun-like behavior of definites in light of principle (11). The arguments are developed in three steps. First, basic facts are presented. Second, I introduce the basics of Referential Uniqueness, for uniqueness is characteristically involved in the use of definite NPs. Third, I propose to reduce the facts to the (in)compatibility between Referential Uniqueness and the class/quality distinction.

4.1. Basic Facts of Anaphoric Epithets

I first provide an array of examples of anaphoric epithets, which are largely collected from previous works. The following example is due to Clark (1977:414f.):

(23) I met a man yesterday. The {bastard/*rancher/*robber} stole all my
money.

Clark observes that *the bastard* can refer back to *a man* in the preceding sentence, but the other nouns *rancher* and *robber* fail to refer back to that expression. While *bastard* is a quality noun, *rancher* and *robber* are class nouns. By employing a quality noun like *bastard* in a definite NP, one can not only refer back to the person previously mentioned but also make a subjective evaluation of his/her personality in terms of degree. The man whom the speaker of (23) met was evaluated as a bastard, because what he did to the speaker was regarded as being extremely low on the scale of morality. In other words, the speaker was insulting him. This account makes clear that when an anaphoric epithet is used, that anaphoric reference is covertly colored by a proposition.

Similar remarks apply to the following example:

(24) If your brother insults me again, I'll punch the {idiot/*teacher/
*Windows-user} in the nose.

We have seen that what is meant by a quality predicate is the speaker's impression, and the speaker's intention of using a quality noun like *idiot* instead of a class noun like *Windows-user* in an anaphora must be traced to this fact.

The success of an anaphoric epithet depends on the quality-oriented content of the head nominal. Bolinger (1972:302) offers the following contrast:

(25) a. I gave Mary a present, but your ungrateful daughter never thanked me
for it.

b. *I gave Mary a present, but your daughter never thanked me for it.

In virtue of modification with an adjective, what is originally a class noun like *daughter* may turn into a quality noun, and thus comes to be used in an anaphoric epithet, a fact which shows a revealing parallel to the modified predicate NP in (7).

Again, the class/quality distinction depends not on the lexical classification of nouns, but on how to use a noun with the intention of expressing the speaker's attitude by that noun. Nunberg (1996:121) offers the following example:

(26) The Austrians managed to elude Napoleon for a week, but the eagle

finally swooped down on them at a small town near the border.

Only through the subjective judgment can such a metaphorical use of referring expression be made possible. It is not until we come to the second-half of the sentence that it is made clear that Napoleon is asserted to have had the property that an eagle is supposed to have. Such information does not contribute to enlarging knowledge about the social class to which Napoleon belonged. Rather, it has to do with the speaker's attitude toward Napoleon that he intends to convey to the reader, which is expressed by the metaphorical proposition that Napoleon was an eagle.

There have been few attempts to account for the fact that quality nouns, but not class nouns, may be employed in anaphoric epithets. I argue that a clear account is available once we adopt the class/quality distinction that is defined in terms of covert plurality and covert proposition. In particular, the covert plurality is instrumental in excluding class nouns from anaphoric epithets.

4.2. Referential Uniqueness of Definite NPs

It is now time to divert momentarily attention away from anaphoric epithets themselves, and focus on the implication of uniqueness associated with definite NPs in referential use. In accounting for the contrast observed in anaphoric epithets, we have to think about the compatibility between the Referential Uniqueness associated with definiteness and part-whole relation on the one hand, and the incompatibility between the Referential Uniqueness and plurality on the other.

Adapting the convention given by Clark and Marshall (1981:26) and that by Hawkins (1991:414), I assume the following convention for the referential use of definite NPs:

(27) Referential Uniqueness: *The* conventionally implicates that both speaker
and hearer in a situation can understand the existence of a designated
object and the uniqueness of that object.

To put it more informally, this convention says that what is denoted by a definite NP

is included in the situation in which it can be pinpointed uniquely by both speaker and hearer. Obviously, the referential use of a definite depends on two aspects of a designated object, i.e. the existence and the uniqueness of that object.

The force of Referential Uniqueness is most strong when it enables the hearer to pick out one specific object from a set of objects. There are cases where no explicit antecedent shows up for a definite NP in referential use, as in (28):

(28) I met two people yesterday. The woman told me a story.

No linguistic antecedent appears for *the woman*, but the reference by the definite NP is successful because there is a cooperation of both speaker and hearer in the establishment of a uniquely identifiable object. Clark (1977:415) analyzes the reference made by the definite NP *the woman* as follows: one of the entities referred to by "two people" is a woman and the other is not: this woman is the antecedent of *the woman*. What is important in this analysis is that in virtue of the singular count head noun, the definite NP helps the hearer draw the inference that the predicate obtained from the head noun, *(be) a woman*, applies to only one of the two people mentioned. It is clear that the reference made by such a definite NP inclusively covers a set of objects that are described by the head nominal of that NP. When the head noun is a singular count, that which can be referred to by a definite NP with that head in a given situation is necessarily a single entity, and the uniqueness of that entity too can be guaranteed.

Note further that the successful reference in (28) is a reference to *part* of the whole set up in the situation, that is, the woman is part of the set consisting of two people. This part-whole relation enables us to understand the metonymy or synecdoche involved in reference assignment.

Clark (1977:417) notes that in each case of the following, the first sentence has no implication that there was only one murderer or truck in the situation described, but the second sentence forces us to assign uniqueness to the murderer or the truck.

(29) a. John was murdered yesterday. The murderer got away.

b. I trucked the goods to New York. The truck was full.

These facts are exactly the result of Referential Uniqueness exhibited by definite NPs. Even in the absence of an explicit antecedent, a definite NP may create a situation in which the existence and the uniqueness of the object to which that NP is used to refer are taken for granted.

The force of reference by means of a definite NP may be weakened. The plurality of a head noun is a factor which weakens the force. When the head noun is a singular count, a definite NP can inclusively refer to one particular object in the set of objects which are described by that noun. But when the head noun is plural, a

definite NP fails to cover inclusively the set of objects describable by that noun. Unlike singular count nouns, plural nouns have no specified boundary. This means that one may refer to some plural entities by means of *the Ns*, but one cannot be sure that such plural entities are the *only* entities that are referred to by *the Ns*.

Plurality thus serves to weaken the force of Referential Uniqueness. Consider the following sentences, which are taken from Van Langendonck (1979:44):

(30) a. The boys are fighting over there, though not all of them.

   b. Boys fight, though not all of them.

Definite plural NPs do not inclusively refer to the objects which would be described by such NPs, which suggests strongly that the definite article associated with such NPs is not strict in expressing "the existence of a designated object and the uniqueness of that object," as stated in (27). In this respect, definite plurals are similar to bare plurals in generic use, as shown in (30b). The genericity expressed by bare plural NPs may be qualitatively different from the reference made by definite plural NPs, but the two can converge on at least one point: they refer to plural objects with patent exceptions to the reference.

As Van Langendonck (1979:35) shows, *the Ns* means the same as *all the Ns* when the plurality expressed is specified with respect to its number.

(31) a. The ten soldiers were killed.

   = b. All the ten soldiers were killed.

This paraphrase relationship is a natural consequence of the fact that unlike the examples in (30), the definite NP in (31a) can inclusively cover the total set of objects which are described by the nominal *ten soldiers*.

4.3. An Explanation in terms of the Class/Quality Distinction

We now return to the main theme of anaphoric epithets, paying special attention to the number semantically involved in the descriptive content of a head noun. Class nouns make a sharp contrast with quality nouns in this respect.

Being unbounded in number, overt plurality militates against linking a definite NP with Referential Uniqueness. The same is true of the covert plurality attached to a class noun when there is no hint that the reference made is to part of the contextually assumed set. The descriptive content of a class noun covers a range of persons surrounding the person who is named by that class noun, and so there is no part-whole relation between the content of a class noun and the person whom that noun is used to name. In fact, the reverse is true of the relation between the two. The person is part and the descriptive content is whole. What is taken as whole cannot be used to pinpoint the part of that whole. Thus, class nouns are excluded from anaphoric epithets.

The descriptive content of a quality noun, on the other hand, is exemplified by a quality of the qualities which characterize a person. A part-whole relation obtains between the content of a quality noun and the person characterized by that noun: the descriptive content is part of the qualities which the person possesses. As is usually the case with metonymy, pinpointing a remarkable part of something can stand for pinpointing the whole of that something, and not vice versa. Thus, quality nouns are accepted in anaphoric epithets.[5]

The contrast in anaphoric epithets is in the scope of principle (11): quality predicates exhibit a wider range of predications than class predicates. Quality predicates may be predicated not only of some mention of an intended referent, but also of the relation between first mention and second or subsequent mention of that referent. Class predicates may be predicated of the former, but not of the latter.[6]

As has been suggested by (7) and (25), modification by an adjective helps to make a quality noun. Arguably, a lexical quality noun like *fool* or *angel* is a noun which has as its part an abstract adjective which roughly means 'remarkable.' It is this adjective-like element that provides a common ground for a variety of quality descriptions. A parallel between circumnominal comparatives and anaphoric epithets suffices to show that this element has a syntactic correlate to the adjective in prenominal rather than postnominal modification.

There is evidence that the circumnominal comparative is a comparison of propositions rather than just referents. Consider the following example, taken from Chomsky (1965:180f.):

(32) John is a more clever man than {Bill/*Mary}.

What matters in (32) is the comparison of "John is a clever man to extent x" and "Bill is a clever man to extent x" with respect to the degree of cleverness. Reference to a woman like Mary is excluded because it would wrongly mean the contradictory proposition that Mary is a clever man.

As Chomsky (1965:234) notes, comparatives of this kind are syntactically constrained in that they always accompany the form of prenominal modification. There is no similar condition on comparatives which make use of postnominal modification. The following sentence is perfect.

(33) I know a man (who is) more clever than Mary.

This fact illustrates that the comparison involved in (33) is a comparison of referents with respect to the property of cleverness.

Sadler and Arnold (1994:223) point out a positive correlation between the circumnominal comparative and anaphoric epithets. Anaphoric epithets too are licensed only through prenominal modification.

(34) a. I tried to visit the mayor last week, but the angry old man refused to talk to me.

      b. *I tried to visit the mayor last week, but the man angry at his constituents refused to talk to me.

These syntactic phenomena corroborate our view that anaphoric epithets stand for propositions in a telescoped manner. In our terms, prenominal modification makes a predicate which covers a wider range of designata than postnominal modification.[7]

5. Conclusion

In this paper, I have argued that quality predicates exhibit a wider range of predications than class predicates. Specifically, I have focused on the relation between nouns in quality-use and the reference colored by such nouns. I have argued that the descriptive content of quality nouns is readily translated into the predicate of propositions meant, and in this sense, they are covertly propositional in nature. By contrast, class nouns are characterized in terms of the plurality on which their descriptive content is based. In this sense, they are covertly plural. A battery of arguments has been given in support of these contrastive characterizations.

As I have argued in Nishida (1999: Ch.8), the range of predications exhibited by quality nouns do not just give an account of the way some quality is predicated of a reference, but have profound implications for a variety of constructions in which quality nouns play a formative role.

I have emphasized the role of naming rather than reference performed by lexical NPs. Naming involves predication in that it sets up a proposition in which the NP used in a particular act of naming is translated as a predicate of that proposition. This idea will be extended even into the deixis made by *this* or *that*, for it also involves some primitive predication to the effect that 'the object referred to is located in the near or distant position from the speaker.' Of course, the concept of naming proposed here awaits further investigation.

NOTES

¹ Nunberg (1978:Ch.4) provides good examples of how important it is to take into account the metonymy involved in reference assignment; it shows that the referent does not have to satisfy the descriptive content of the NP which is used to refer to that referent. Imagine a waiter in a restaurant pointing out a ham sandwich and saying to another waiter *The ham sandwich is sitting at table six.* In this utterance, *the ham sandwich* is used to refer to the customer who ordered the sandwich, and that customer is obviously not a ham sandwich.

² My understanding of quality and class nouns is close in spirit to the quality/non-quality distinction originally advanced by Milner (1978:Chs.4-7) in French linguistics. Ruwet (1982:Ch.7) criticized Milner's distinction by saying that there are a large number of nouns which fall in a gray area, as suggested by *plumber* in (8). This criticism hits a sore point, but is not totally correct. It is true that there are gray areas in the dichotomy of class nouns and quality nouns. As I have emphasized, however, it is based not on a classification in the lexicon, but on how to use nouns in the purpose of naming things. Moreover, the presence of the gray area does not necessarily render otiose the class/quality distinction, for it is not until we set up the distinction that the gray areas become recognizable.

³ Although Burton-Roberts has nothing to say about the context in which the sentences in (13) may be felicitously used, the context he assumes for them is arguably different from the one that Rouchota assumes for (2) and (4a). In Rouchota's context, an NP in referential use is an NP whose referent is manifest to both speaker and hearer. It is highly likely that Burton-Roberts' context is one in which the speaker introduces a new discourse topic, irrespective of whether it is manifest to the hearer; narration, for example.

⁴ Our analysis of the generic sense conveyed by *a N* is based on the assumption that indefinite singulars with count noun heads, as distinguished from definites and plurals, are the forms of NPs that contain the predicate obtained from the descriptive content of a head nominal in a pristine manner. This assumption is in line with the fact that there are three forms of generic NPs in English; definite singulars, *the N*, indefinite singulars, *a N*, and bare plurals or articleless mass nouns, *N(s)*. Each of these three has its own characteristic interpretation of genericity. Interested readers are referred to Nishida (1999:Ch.3 and Ch.5) for a survey of the relevant data accumulated to illustrate the interpretive differences among these NPs.

⁵ The present analysis of anaphoric epithets has a close link to what Lakoff and Johnson (1980:38f.) call the CONTROLLER FOR CONTROLLED metonymy:
  (i) a. *Nixon* bombed Hanoi.
     b. *Ozawa* gave a terrible concert last night.

It may be that Nixon himself did not bombed Hanoi; the US Air Force did. However, (ia) means that Nixon is noteworthy part of the whole of the US Air Force. That is, Nixon is used in reference to the US Air Force which he was the controller of. The same applies to *Ozawa* in (ib).

As Shoichi Yamada (p. c.) has pointed out to me, there appear to be cases in which "whole" referentially stands for "part." For instance:

(ii) The kettle is boiling.

Evidently, a kettle itself is not something that boils, but a container of liquids. Assuming that in metonymy, the container plays the role of whole, and the content the role of part, one might say that this is an example which shows that pinpointing whole would stands for pinpointing part. However, it seems that this reasoning involves a bit of a leap. It may be that container stands proxy for content, but this does not mean that container or something that plays the role of whole helps pick out *uniquely* the content or part that is included by that container; it can be inferred, but it is not referred to, or pinpointed. Aside from our usual ways of life, reference to the boiling kettle does not necessarily mean reference to boiling water; the boiling entity in the kettle might be benzine.

[6] The present discussion does not deal with cases where anaphoric relationship is established by the paraphrase relationship between two referring expressions.

(i) I called Nixon, but the president didn't answer.

As Bolinger (1972:304) points out, the coreference between *Nixon* and *the president* hinges on the uniqueness of role associated with the presidential office. In this respect, it differs qualitatively from the anaphoric epithet as it is made by *the idiot* in (24); *idiot* is the name of a quality, not that of a unique role.

Clark and Marshall (1981:40) offer data which fall outside of the present analysis of anaphoric epithets in terms of the part-whole relation. They say that (iia) makes a coherent discourse, but (iib) does not:

(ii) a. I bought a lathe, but {the machine/it} didn't work right.

b.??I bought a machine, but the lathe didn't work right.

They argue that *the machine* can be used in the anaphoric relation to *a lathe* because this order matches with the categorization that a lathe is a machine. On the other hand, *the lathe* cannot be used in the anaphoric relation to *a machine* because not all machines are lathes; machines make the whole of which lathes are part.

[7] Prenominal modifications by adjectives are classified into what Bolinger (1967) terms "reference-modification" type and "referent-modification" type. Our interest is in the reference-modification. While a referent-modification is typically translated into a postnominal modification, a reference-modification cannot be translated in this

way, as shown by contrasts like *that red barn/that barn which is red* vs. *a mere boy/*a boy who is mere.* Campbell (1996:161) gives an inkling of the correlation between reference-modification and the modification predicated of a proposition meant. Campbell says that in the modification involved in *the alleged thief, alleged* is predicated not of the referent of *the thief,* but of the proposition that the referent is a thief. See Radford (1993) for a discussion of the grammatical correlation between prenominal modification and reference-modification.

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