

Towards a Proper Treatment of “NP-Related” Floating Numeral Quantifiers in Japanese

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Abstract

One of the central questions in linguistics is whether or not the Japanese floating numeral quantifier (FNQ) is always a distributive operator, as Gunji and Hasida (1998), Nakanishi (2004, 2007, 2008), and Kobuchi (2003, 2007) contend. This paper argues against their view and that the interpretive ambiguity is resolved if the semantic ambiguity arises due to the existence of the two different types of FNQs. It is argued that, discourse-semantically, what is crucial to the distinction between the two types of FNQs is whether an FNQ is interpreted via quantificational adverbs or quantificational determiners. This distinction is required when variance in FNQ interpretation is considered. In particular, it is shown that NP-related FNQs have much in common with referential (-like) nouns, functioning as discourse anaphoric items.

Keywords

Floating Numeral Quantifiers, Japanese, Referential Nominals, Pronouns

1. Introduction

There are many cases in Japanese where floating numeral quantifiers (FNQs) that appear to be VP-related can actually receive the NP-related interpretation when the appropriate context is provided. In this paper, we will take a closer look at the nature of NP-related FNQs about which there is still room for argument in the literature (see, e.g., Kobuchi, 2003, 2007; Nakanishi, 2004, 2007, 2008). Our claim is that the assumption is valid that Japanese FNQs behave as either determiners or adverbs (see Partee, 2008 for the two kinds of quantification).

Previous syntactic and semantic accounts including Gunji and Hasida (1998), Nakanishi (2004, 2007, 2008), and Kobuchi (2003, 2007) need to be modified before they are able to incorporate data (1) and (2). Note that we

consider NP-related FNQs often show general deaccenting phenomena such as downstep or deaccenting effects¹.

(1)

Gakuseiga (/) *go-nin* *tsukue o* *mochiageta*.
student Nom five-Cl desk Acc lifted

(i) “Five (of the) students lifted a desk (individually).” [**Distributive**]

(ii) “Five students lifted a desk (together)” [**Non-distributive**] (Nakanishi, 2007, 2008)

(2)

a) **Gakuseiga** *kinoo* *san-nin//* *Peter o* *koroshita*.
student Nom yesterday three-Cl PeterAcc killed

“Three students (as a group) killed Peter yesterday.” (Nakanishi, 2007: 53)

b) **Otokonokoga** *kinoo* *san-nin* *isshoni* *booto o* *tsukut-ta*.
boy Nom yesterday three-Cl together boat Acc make-Past

“Three boys made a toy boat together yesterday.” (Nakanishi, 2007: 58)

The above data tell us that it is possible for the FNQ to have a non-distributive interpretation since the entities denoted by the FNQ are considered as an established group, though a distributive reading is also available for (1). In accounting for these interpretive effects, there seems not much to be obtained by viewing FNQs simply as VP-adverbs.

To gain a handle on the semantic variance observed in the FNQ construction, we suggest that the two distinct meanings of FNQs (distributive and non-distributive) can be compared to restrictive and non-restrictive modifiers. In particular, reevaluation of the NP-related FNQ from this perspective tells us that such an FNQ is primarily discourse-linked to its nominal status, rather than to its verbal status. In light of the assumption that an FNQ’s occurrence in float position localizes its interpretation, the FNQ’s association with the subject noun parallels that of a pronoun and its antecedent². A simple (but plausible) explanation for this is that FNQs (especially NP-related FNQs) have almost the same status—as nominals. From this perspective, the FNQ phrase (i.e., the subject noun and its associated FNQ) is coreferential. In other words, they can refer to the same “piece of reality” (Leech, 1981: 12). The obvious candidate for such a seemingly non-quantificational interpretation is a kind of referring expression (e.g., anaphoric pronoun).

The core of the above contention is that a given FNQ is construed as something like a property expression in non-focus position (though it is still a quantifier), but is changed to a full-fledged quantifier in the focus position (unmarkedly, in the verbal domain). In the next two subsections, we will particularly characterize the NP-related FNQ interpretation as exhibiting the same semantic/pragmatic properties that are typical of pronouns or definite description, where the FNQ informationally represents non-focus (e.g., topic, background) rather than focus. It then comes as no surprise that we may encounter the NP-related FNQ reading.

2. Analogy to Restrictive and Non-Restrictive Modifiers

Interestingly enough, in light of the differences between the uses of FNQ constructions, the NP-related FNQ is quite similar to a non-restrictive relative clause. In this subsection, we will discuss apparently unexpected parallels between FNQs and (non-)restrictive relatives in English. It seems that listeners may interpret the ambiguous FNQ as a type of non-restrictive modifier. There are cases in which FNQs function much like restrictive relatives. We assume that FNQs are interpreted ambiguously between a restrictive and a non-restrictive interpretation. The aspect of this novel approach that is of immediate interest is apparent in an example like (3), which has both a restrictive and non-restrictive interpretation, and in (4), which has only the restrictive one:

(3)

Every unsuitable word was deleted.

a) Restrictive: Every word that was unsuitable was deleted.

b) Nonrestrictive: Every word was deleted; they were unsuitable. (Larson & Marušič, 2004: 272)

¹According to Ladd (1980: 183-184), deaccenting can happen for quite a variety of reasons, including definiteness, the fact that the reference of proper names is usually fixed in the context, the fact that certain things are already under discussion in the context, etc.

²Pronouns represent familiar referents. Pronouns are anaphorically related to something already in the discourse and therefore cannot convey new information (see, e.g., Erteschik-Shir, 1997, 2007).

(4)

Every word unsuitable was deleted.

a) Restrictive: Every word that was unsuitable was deleted.

b) *Nonrestrictive: Every word was deleted; they were unsuitable. (Larson & Marušič, 2004: 272)

A plausible generalization is that the concept of restrictive/non-restrictive can be embodied in sentence structures of natural language by constructions with FNQs in Japanese. Here, let us take a different look at the situation, from the point of view of a speaker/writer in the discourse (e.g., a sequence of utterances, or a text) who is intent on conveying information to an addressee.

The current analysis is to derive this striking parallel from a broader principle governing how non-restrictive interpretations are built up. This leads to the assumption that non-restrictive modification always involves reference, or at least some form of quantificational independence. In other words, the modified expression appears to behave as if it were property-denoting.

As mentioned earlier, in certain cases definite NP(-like) FNQs can also function as E-type pronouns (Evans, 1980)³, and they are only suitable if the prior discourse or lexical items have established something for them to denote. Before developing a concrete analysis of FNQs, we will briefly review the basic assumptions of Peterson's (1997) theory, using illustrative examples from English, in order to more fully clarify the assumption that FNQs may be analyzed as equivalent to English relatives.

Peterson's main claim is that in terms of prosody the restrictive vs. non-restrictive distinction largely corresponds to narrow focus on the quantifier vs. broad (or sentential) focus⁴. This claim allows us to consider that there is a parallelism between VP-related FNQs and restrictive relatives, and between NP-related FNQs and non-restrictive relatives.

Peterson compares the restrictive vs. non-restrictive readings of adverbs with the restrictive vs. non-restrictive readings of adjectives in sentences like (5), taking into account the relation between focus and prosody. On the restrictive reading ((5) a) a set of chairs is presupposed (non-focused), and it is asserted (focused) that the old one was sold. The non-restrictive reading ((5) b) amounts to a double assertion, namely, "I sold the chair" and "it was old". (6) provides contexts for the two readings.

(5)

I sold the old chair.

a) I sold the chair which was old. [**Restrictive**]b) I sold the chair, which was old. [**Non-restrictive**]

(6)

a) I sold the old chair. But I didn't sell any of the others, the new one, the one you hate, etc.

b) I sold the old chair. Now I have nothing to sit on.

Translating these facts into a focus-theoretical framework, the adjective is narrowly focused on the restrictive use and the whole NP (or DP) is focused on the non-restrictive use (i.e., the adjective is integrated into a broader focus; it may, but need not, be associated with a pitch accent).

(7)

a) I sold the [_F OLD] chair. [**Restrictive**]b) I [_F sold [_F the old CHAIR]]. [**Non-restrictive**]

Peterson further argues that the same distinction holds for adverbs in gerundive constructions. The sentences in (7) favor either the restrictive reading (a) or the non-restrictive reading (b).

(8)

a) The candle's burning brightly was seen by Harold.

b) The candle's burning brightly ignited the curtains.

In ((8) a) the NP subject refers to a complex event of the candle's burning being bright. In this case it is asserted about an event e_1 , namely the candle's burning, that it is bright ($e_2 = e_1$ is bright). It is the brightness of

³According to Evans (1980), E-type pronouns refer to objects which satisfy the clause containing their antecedent—they are in effect equivalent to definite descriptions.

⁴The terms *broad* and *narrow* are often used in a relative sense. In this study, the term *broad* is used solely to refer to cases of verb phrase or clausal focus, and focus on all other smaller constituents is referred to as *narrow* (Kahnemuyipour, 2009: 127).

the burning candle that was seen by Harold. In ((8) b), the NP subject does not refer to the same complex event; it refers to the candle burning itself. The whole sentence asserts two things, namely, that the burning ignited the curtains and that the burning was bright.

Peterson argues that the same two readings can be found with adverbs in sentential constructions and that different contexts can disambiguate the two interpretations. This can be seen in (9) and (10). Peterson crucially makes use of presupposition and assertion in describing examples of this kind⁵. On the restrictive reading in ((9) b), the event of the candle burning (*e*1) is presupposed to exist and it is referred to in the assertion (*e*2 = *e*1 is bright). ((10) b) does not involve a complex event, but simply asserts that the candle was burning and that the burning was bright. Hence it is not structured into a presupposition and an assertion.

(9)

- a) How could you see any of the notes with only a candle to illuminate the music?
b) The candle burned brightly.

(10)

- a) What caused the curtains to catch on fire?
b) Well, there are a number of possibilities. One of the smokers may have dropped a live ash on them. Or maybe Harold's chafing dish did it. The candle (on the windowsill) burned brightly (all evening). That may have done it.
(Peterson, 1997: 238-239)

It is clear from the discussion of the parallel adjectival cases such as (9) and (10) that what is at issue here is structuring the propositions into a focused part and a background or presuppositional part. The contextualized examples (9) and (10) only show that in English the “restrictive” vs. “non-restrictive” distinction corresponds to narrow focus on the adverb vs. broad sentential focus⁶. The two sentences can be given the focus-structural representations in (11) with pitch-accent notations (where uppercase letters indicate position of focal accent). In ((11) a), only the adverb is associated with a focal accent; candle is associated with a default peak accent because the focal accent comes late in the utterance. In ((11) b), the adverb is included into the broad focus projected by the internal argument. The adverb is associated with an L* pitch accent and set off in its own prosodic phrase. The H-H% boundary tones mark a continuation rise since the sentence is non-final in the text ((11) b).

(11)

- a) The candle burned [_F BRIGHTly].
H* L+H* L-L%
b) [_F [_F The CANdle burned] BRIGHTly].
L+H* L-L% L* H-H%

Having established that the restrictive/non-restrictive construals discussed by Peterson have to be identified with the occurrence of an adverb in focus (broad or narrow), we will now look at examples involving restrictive and non-restrictive uses of NP-related FNQs in Japanese, as exemplified in (12) below. Given the correspondence between a comma and a prosodic break on one hand and the distinction between the restrictive and the non-restrictive reading for a relative clause created by a differing prosodic pattern on the other, it is not hard to imagine that the intonation pattern in which a break occurs immediately after the FNQ can be used for the non-restrictive reading. In (12), words in capitals indicate prosodic highlighting (normally marked by raised pitch), which are regarded as focus (i.e., most informative).

(12)

- a) **Non-restrictive use:**
[GAKUSEIga naná-nin]// hón o yón da(-yo).
student Nom seven-Cl book Acc read
“Seven students read a book/books.”
b) **Restrictive use:**

⁵The term *presupposition* is used here in the sense of Enç (1991), i.e., [+anaphoric] in the discourse.

⁶There is something inherently different between the default sentential stress and the focus stress rule. For instance, while focus stress is the phonetic realization of a syntactic property “focus”, which also has semantic implications, default sentential stress is simply a formal property with no corresponding feature in the syntactic or semantic domains (Kahnemuyipour, 2009:129).

[Gakuseiga // NANÁ-nin hón o yónnda (-yo)].
 student Nom seven-Cl book Acc read
 “Seven (of the) students read a book/books.”

Since, as we have seen above, the restrictive modifier of a noun has a function of restricting the set of a noun to the subset that has a certain property X (here *reading a book/books*), this presupposes that there are other members (here *students*) in that noun set that do not have that property X. This would mean that for ((12) b), there will be other students that do not read a book/books. On the other hand, the non-restrictive relative clause in ((12) a) simply provides further information about the preceding noun *gakusei* “student”. Both sentences in (12) are instances of narrow focus. ((13) a) and ((13) b) provide probable contextual questions asking for ((12) a) and ((12) b), respectively.

- (13)
 a) Who read a book?
 b) How many students read a book?

When we have a pragmatic context suitable for asking a question of this sort the intended interpretation becomes more readily available, as we see with the example in (12). For example, the *Wh*-question ((13) a) (*Who read a book?*) introduces an open proposition (Prince, 1986), or topic of conversation, corresponding once again to the concept of *a person who read a book*. It is thus the presence of the open proposition rather than some other that makes the intonation contour in ((12) a) felicitous.

Generally speaking, when a piece of information new to the listener is introduced in the discourse, it does not constitute a topic. It is more likely to be something the speaker wants to call to the addressee’s attention than something that is already in the focus of attention (Lambrecht, 1994: 126). More specifically, in ((12) a) the subject NP is narrowly focused on the non-restrictive reading, whereas in ((12) b) the FNQ is narrowly focused on the restrictive reading.

Under the non-restrictive reading in ((12) a), it is asserted about an individual, namely *students* reading a book, and the FNQ, which is defocalized, is neither topic nor focus, but background (or completive) information (see Butt & King, 2000 for details of information-structure roles). On the other hand, the restrictive reading in ((12) b) does not involve a complex individual, but simply asserts that the number of students was seven (not five, six, ...).

From the discussion above, we can say that sentences like (12) in the “written” mode are compelling examples of the role of prosody in focus/non-focus interpretation. The interpretation and acceptability should be accounted for in the light of focus/non-focus information. Non-restrictive readings generally involve non-focused modifiers and restrictive ones involve focused readings (see Peterson, 1997; Göbbel, 2004). In Peterson’s account, non-restrictive modifiers are in some sense secondary or additional (but not always redundant) extra comments on the current utterance that happen to be interleaved with it, resulting in a co-reference relation. On the other hand, a restrictive modifier is focalized and non-anaphoric. We will further discuss and set up a framework for elucidating FNQ effects that explains syntactic limitations displayed in virtue of the ongoing process of building up an interpretation.

3. Parallelism between Pronouns and NP-Related FNQs

From a processing perspective, contextual factors associated with noun phrase interpretation may not result from just a connection to the pragmatic context of utterance, but may be an essential part of the meaning of a particular expression in relation to a particular context (see, e.g., Kempson et al., 2001, 2004, 2006). We will devote some space to discussion in support of the view that the subject-oriented FNQ in Japanese may be considered such a case.

To capture characteristic properties of NP-related FNQs, we will argue that in the processing of FNQ constructions, an FNQ string (the subject NP and the associated FNQ) independently makes its contribution to sentence meaning, without stipulation of a construction specific device (e.g., movement motivated by non-syntactic factors), or providing (unnecessary) complications for the semantics like the one proposed by Kobuchi (2003).

Significantly, an NP-related FNQ can be viewed as an NP in the present analysis. This assumption seems feasible if we understand the FNQ in terms of a group denotation such as pronouns or definite descriptions. These two categories are generally considered to belong to a super-category of definite NPs (Abbott, 2008: 209). Intui-

tively and pre-theoretically speaking, both of the NP types are commonly used by a speaker to direct an addressee's attention to some particular entity (including a plural sum entity) that the speaker wishes to talk about.

The similarity between NP-related FNQs and pronouns is further apparent upon closer inspection of FNQ sentenceslike (1), repeated again in (14).

(14)

Gakuseiga *san-nin* sono hon o katta.
student Nom three-Cl that book Acc bought

(a) "Three of the students bought that book." [**Partitive**]

(b) "The three, the students, have bought the book." [**Non-partitive**]

For the [Subject NP, FNQ] fragment, the two different readings are compared to the different uses of indefinite NP construal. As has been traditionally assumed, NPs are ambiguous between their quantificational and referential(-like) uses (see Fodor & Sag 1982; Abbott, 2008, and references therein)⁷. With respect to the latter use, when we utter a phrase like *gakuseiga san-nin* "students Nom 3-Cl" as in (14), we are speaking about a set of three students (not, say, seven) and we refer to them as a plural specific/referential set.

Sentence ((14) a) yields a partitive reading, as indicated by the English gloss. In contrast, ((14) b) has a reading in which the NP is an additional description using a referential FNQ, which might either be used referentially and refer to the same individual its antecedent refers to, or may be used descriptively, i.e., as a substitute for its antecedent. The point here is that the FNQ in examples like ((14) b) is presumably used as anaphoric pronoun-like. In the NP-related FNQ pattern, the FNQ seems strictly anaphoric, and hence the pattern is only special in that the antecedent for the anaphor is introduced within the same clause.

The above idea needs to be examined in one further respect. We suggest that the presence of NP-related FNQs contributes to definiteness. It seems natural to consider an NP-related FNQ to be on a par with a definite determiner: that is, it is a sort of maximality operator, which entails that the quantifier takes the maximal member of the (given) set (see Giannakidou, 2004; Abbott, 2008 for further discussion of quantification and maximality)⁸.

Definiteness appears to be closely related to referentiality, and indeed definiteness and referentiality are often taken to be essentially the same thing (Abbott, 2008: 209-210). We should note that it is not just pronouns that can be used anaphorically. Interestingly, definite noun phrases can in certain cases operate in the same manner⁹. An apparent problem with the above assumption is that definiteness is often associated with referentiality, since referentiality has traditionally been regarded as inconsistent with quantification (Abbott, 2008: 213).

Determining whether definite descriptions are referential or quantificational is not a straightforward task (Fodor & Sag, 1982: 23). Yet, what seems most important is to show that FNQs, particularly NP-related ones, function as definite descriptions requiring there to be something that they identify in the discourse that is already salient or is not informative, (though not always anaphoric in the same way as true pronouns). In the case of NP-related FNQs, the FNQ is understood anaphorically as denoting, for instance, *san-nin* 'three people', which has been introduced into the context already and is uninformative. Hence, the availability of NP-related readings involving FNQs, which are not accounted for under the traditional FNQs-as-adverbs analysis, has led us to pursue an alternative analysis¹⁰.

4. Parallelism between E-Type Pronouns and NP-Related FNQs

The distinct semantic status of NP-related FNQs needs to be further investigated. In this subsection, We will argue that a striking difference in interpretation is in fact caused by the different quantificational status of FNQs: VP-related FNQs are quantificational, while NP-related FNQs are referential(-like), and co-referent with the

⁷Fodor & Sag (1982) present several tests that can be applied to identify the referential use of indefinites: i) an indefinite modified by a relative clause; ii) an indefinite modified by *a certain, specific or particular*; iii) an indefinite headed by referential *this*; iv) wide scope over other operators. See Heim (1990), Ionin (2003) and Abbott (2008) for further discussion of the problems that may be faced by the referential-quantificational ambiguity analysis.

⁸On a semantic account, the NP-related FNQ, could play the role of the type-shifter *iota* "ι" (rather than *lambda* "λ") when a definite/referential reading is needed in the non-distributive FNQ sentence (e.g. (1) and (2)). Another possibility is that in addition to contextual domain restrictions, the rough interpretations introduce a maximal sum (or supremum) operator that loosely corresponds to the definite determiner in the paraphrases (see Link, 1983; Landman, 2000 for discussion).

⁹Abbott (2008: 213) provides examples like the following: (i) John_i shouted at Mary_j again. The fools_{i+j} just won't accept that their marriage is over.

¹⁰We might say that in NP-related FNQ constructions the associated NP behaves like an "elliptical" NP in that it anaphorically picks up the property referred to (or introduced) by the FNQ (see Shimojo, 2004; Kiaer, 2005 for similar claims).

subject (intentionally or only accidentally). If such is the case, only the NP-related FNQ must be dependent on an antecedent in the sense that it refers to an exhaustive group of individuals (hence creating a non-partitive reading).

Importantly, the above difference is reflected in intonational realizations (see section 5.3 (Chapter 5)). In some cases, an FNQ is grouped prosodically with the preceding host NP rather than the following VP and interpreted as an NP-related FNQ. This special pattern is used to manipulate the flow of information in speech¹¹.

Let us consider further the function of the NP-related FNQ. It may help to momentarily revisit the analytical intuition that FNQ meaning involves, in some sense, interleaving two utterances, one commenting on or elaborating the other. Specifically, ((2) a), repeated as (15), can be paraphrased by sentences involving definite description construal as indicated in the English translation of (16):

(15)
Kodomoga kinoo *san-nin* // inu o koroshita.
 children Nom yesterday 3-Cl dog Acc killed
 “Three (and only three) children killed the dog.” (Nakanishi, 2004, 2007)

(16)
Kodomoga kinoo inu o koroshita. *San-nin* (ga) soo-shi-ta.
 children Nom yesterday dog Acc killed three Nom do. so-Past
 “(Intended meaning) Children killed a dog yesterday. Three of them did so.”

What is special about (15) is that it is a way of saying both sentences in (16) at once. Presumably, the semantic content of (15) and that of (16) are the same: “There are children, who are three in number, and they killed the dog yesterday”. The FNQ, *san-nin* “three (persons)” refers back to a plural individual consisting of the set quantified over by the subject *gakusei*. What the non-restrictive modifier (here *san-nin*) modifies is a potentially plural discourse referent such as the one the pronoun in (16) refers to.

Why is this special type of anaphoric *san-nin* possible in (15)? A possible explanation is that the FNQ may function roughly as if it were an E-type pronoun; that is, the special noun is interpreted in the same way as a definite description (Heim, 1990). Given this, the above paraphrase in (16) introduces a maximum operator by definition, which corresponds to the definite determiner (see Giannakidou, 2004; Abbott, 2008 and references therein for details). When it comes to the interpretation of some FNQs as E-type pronouns, we need a distinct approach to interpreting these FNQ sentences. This approach would require taking into account, in addition to truth-conditional content, the (direct or indirect) impact of the context in which processing of discourse occurs, rather than simply providing interpretations for isolated sentences as in previous studies.

As discussed in Section 2, a non-restrictive referential modifier is in some sense a secondary, additional or extra comment on the current utterance that happens to be interleaved with the preceding clause or phrase. The FNQ in (14b) and (15a) is presumably used as pronoun (-like), and appears to be anaphoric to a property-denoting NP (i.e., host noun). It seems reasonable to consider the NP-related FNQ to be special in the sense that the antecedent for this “anaphor” (here FNQ) is introduced within the same clause, and is identical to a contextually restricted definite description.

To sum up, first we have seen that VP-related FNQs and NP-related FNQs are parallel to restrictive and non-restrictive interpretations, respectively. An important finding is that non-restrictive readings largely involve non-focused FNQs (when the subject is focused) while restrictive readings involve focused FNQs (when the subject is not focused).

Second, we have seen that a striking interpretive difference is caused by the distinct semantic status of FNQs: the VP-related FNQ can be considered a quantifier, while the NP-related FNQ can be considered referential and co-referential with the subject (intentionally or only accidentally). If such is the case, only the NP-related FNQ must be dependent on an antecedent referring to an exhaustive group of individuals (i.e., on maximality).

Third, we have seen that the NP-related FNQ receives an interpretation that (loosely) reflects E-type anaphora (Heim, 1990). Consequently, the E-type pronoun approach to FNQs seems to hold more promise if an FNQ sentence can be analyzed as a single unit underlyingly containing two propositions (or clauses) (see (16)).

Given the correspondence between an FNQ and something resembling an E-type pronoun on one hand and

¹¹The notion of information flow is extensively discussed in Kuno (1976, 1978, 1987). The speaker in conversations keenly attends to the hearer’s current knowledge about a topic which is about to be discussed or under discussion, and selects appropriate forms (lexical, syntactic and phonological) for it.

the distinction between the restrictive and the non-restrictive reading for a relative clause created by a differing prosodic pattern on the other, it is plausible that an NP-related FNQ sentence may be used for the non-partitive reading, thus generating non-distributive readings. If so, it is reasonable to assume that there are two different prosodic structures appropriate for two distinct meanings, expected to show no sign of difficulty for either prosodic condition.

5. Conclusions

A major portion of the argument in this paper has been devoted to validating the presence and motivation of the presence of NP-related FNQs in order to fully explain FNQ placement and interpretation. To recapitulate, the NP-related FNQ often behaves as a sort of referring expression, when we consider the fact that the NP-related FNQs tend to be defocalized and anaphoric (-like) nominals rather than adverbials or (secondary) predicates (see Miyagawa, 1989; Fukushima, 1991 for analyses of FNQs as predicates). In discourse-semantic terms, the NP-related FNQ can be interpreted as something that denotes a speaker's/hearer's perception of the existence of some entity (or individual), whereas the VP-related FNQ is linked to the whole event (or action) described by the verbal predicate.

Further research is of course required to determine whether the approach illustrated in this paper is indeed plausible. However, it seems significant to point out that examples judged unacceptable in the literature turn out to be acceptable once they are put in the right context, specifically when either the FNQ or the subject NP receives focus in the sentence. Previous studies have taken little or no account of contexts in which FNQs are used. To solve the problem, we have attempted to argue for a more wide-ranging analysis of the semantic-pragmatics of Japanese FNQs, while maintaining an analysis that does not require a highly articulated semantics (proposed in Kobuchi, 2003). It seems unrealistic to assume that a semantic interpretation is derived (in a more complicated manner) only after a discourse as a whole has been proposed, as researchers including Kobuchi (2003, 2007) and Nakanishi (2004, 2007, 2008) suppose.

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