

Syntax of Personal Pronouns and Proper Names, and the Notion of Direct Reference^{*}

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Based on so-called pronoun-noun construction in Japanese, this article first establishes categorial distinction among nominal elements in the language. The distinction is connected to philosophical notions of Indexicality, direct reference, and extension-intension divide. It is claimed that these notions are represented quite straightforwardly by means of syntactic phrase structure. The result urges formal linguists to pay more attention to philosophical literature on language.

Keywords: personal pronouns, proper names, Indexicality, intension, extension

1. Introduction

This article provides a rough sketch of the syntactic properties of proper names and their semantic interpretation on the basis of Japanese data. The theses I would like to put forward in this article are given in (1).

- (1) a. Proper names do not have intension; and they are extensional elements.
- b. Intensional and extensional elements occur in different positions in syntax.

The statement in (1a) apparently argues against Russellian descriptive view of proper names, and instead suggests Millian-Kripkean non-descriptive view of proper names, although the philosophical aspects of these issues go way beyond the scope of this article. Rather the focus is put on the syntactic aspects of proper names, as stated in (1b), with a minimal goal being to show that proper names and ordinary lexical nouns occupy syntactically different positions in DPs.

To put the current idea in more concrete, syntactic terms, I would like to claim that proper names have a syntactic structure like (2), where Indexicality is informally defined as (3).

- (2) *Syntactic Structure of Proper Names*
 - a. [DP [IndexP *proper name*] D⁰ [NP *lexical noun*]]
 - b. [IndexP [*proper name*] Index⁰ [PRO]] (order irrelevant)

- (3) *Indexicality*

A direct-referring relationship between a linguistic form and an individual object established between the speaker and the hearer, in each context of utterance, without recourse to descriptive contents.

To put proper names and lexical nouns in syntactically different base positions may seem to be a bold move at the first glance. A Japanese construction, however, provides a piece of evidence for this analysis, to which we will turn in the next section.

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2. So-Called Pronoun-Noun Construction in Japanese¹

Postal (1969) gives an early attempt to distinguish functional elements, namely pronouns, and lexical nouns. The construction he discusses is called “pronoun-noun construction,” as exemplified in (4).

- (4) a. we/us linguists
b. you linguists
c. % them linguists

Postal claims that the personal pronouns in English should be treated as a sort of determiners. Employing the current terminology, the examples in (4) are given the structure as in (5).

- (5) a. [_{DP} *we/you/them*_D [_{NP} *linguists*]]
b. [_{DP} PERSONAL PRONOUN_D [_{NP} LEXICAL NOUN]]

The analysis eventually leads to the now standard DP-NP hierarchy (Abney 1989).

Noguchi (1997) and Furuya (2004) among others note that we can find a similar construction in Japanese.

- (6) a. *watashi-tachi* *gengogakusha*
1SG-TACHI *linguist*
b. *anata-tachi* *gengogakusha*
2SG-TACHI *linguist*
c. *kare-ra* *gengogakusha*
3MASC.SG.-RA *linguist*

As the above authors note, despite the apparent similarity, the two constructions in English and Japanese cannot be unified in any simplex fashion.

2.1. The Non-Head Status of Pronouns and Proper Names

The data in (6) tells us two things about the syntax of Japanese personal pronouns. Firstly, since Japanese is a head-final language, pronouns would be expected to follow lexical nouns if they were D⁰ heads, contrary to the fact seen in (6). Secondly, since these pronouns co-occur with lexical nouns following them, these two classes must occupy syntactically different base positions². I suppose these two points suffice to show that Japanese pronouns lie in a Spec position within the DP structure in the language rather than in some head position on the N-to-D spine.

To be discussed in this connection are examples like those given in (7).

- (7) *Taroo-tachi* *daigakusei*
Taro-TACHI *undergrad*
'Taro and his folks undergrads'

With an associative plural marker *-tachi* attached, a proper name can be used as the first element in the “pronoun-noun construction” in Japanese. By much the same reasoning as above, the proper names in this construction must be in a Spec position rather than a head position. The question I hope to answer is thus this: what makes personal

¹ The discussion in this section is based on Inokuma (2009).

² One possibility might be that the following lexical noun is an adjunct, which seems to me implausible, given the head-final character of the language, cf. Fukui (1995), Saito and Fukui (1998).

pronouns and proper names behave in the same fashion in Japanese?

2.2. Two Classes of Japanese Nominal Elements

The background issue in the present discussion is the existence of functional categories in Japanese nominal phrases. Japanese nominal phrases are traditionally assumed to be “bare” in that they lack (active) functional categories such as DPs. This assumption finds some support when we notice an impoverished agreement system, a relatively free word order and an apparent non-configurationality in the language. One of the consequences of this assumption is that, other things being equal, there is no way of distinguishing among proper nouns, pronouns, and lexical nouns in syntactic terms; they are all simply Ns (cf. Chierchia 1998; Longobardi 2008). Japanese nominal elements, however, require a much more fine-grained classification.

First, it is well-known that Japanese lexical nouns are morphologically neutral with respect to number. Thus a bare noun can denote either singularity (8a) or plurality (8b).

- (8) a. Daigakusei-ga hitoride sono ronbun-o kakiageta.
 university.student-NOM alone that paper-ACC wrote.up
 ‘A university student wrote up that paper alone.’
- b. Daigakusei-ga kooen-ni atsumatta.
 university.student-NOM park-in gathered
 ‘University students gathered in the park.’

But we do not find this number-neutrality with personal pronouns or proper names (9); they necessarily denote singularity. To denote plurality, they have to be overtly marked as plural, typically by the use of the associative marker *-tachi* (10).

- (9) a. *Watashi/kimi/kare-ga kooen-ni atsumatta.
 I/you/he-NOM park-in gathered
 b. *Taro-ga kooen-ni atsumatta.
 Taro-NOM park-in gathered
- (10) a. Watashi-tachi/kimi-tachi/kare-ra-ga kooen-ni atsumatta.
 I-ASSOC/you-ASSOC/he-ASSOC-NOM park-in gathered
 ‘We/you/they gathered in the park.’
- b. Taro-tachi-ga kooen-ni atsumatta.
 Taro-ASSOC-NOM park-in gathered
 ‘Taro and his folks gathered in the park.’

We can state this property of pronouns and proper names as in (11).

- (11) A personal pronoun and a proper name must denote a singular individual in Japanese.

Second, turning back to the “pronoun-noun” construction, personal pronouns and proper names on the one hand and lexical nouns on the other exhibit a striking contrast. The former two can occur as the first element in this construction, as already noted, but the latter cannot.

- (12) a. watashi-tachi gengogakusha
 1SG-TACHI linguist
 ‘we/us linguists’

- b. Taroo-tachi daigakusei
Taro-TACHI undergrad
'Taro and his folks undergrads'
- c. *wakamono-tachi daigakusei
young-man-TACHI undergrad

Conversely, personal pronouns and proper names cannot be used as the second element in this construction, while lexical nouns can (and thus, must).

- (13) a. *Taro-tachi watashi/kimi-tachi
Taro-TACHI 1SG./2SG-TACHI
- b. *Watashi/kimi-tachi Taro-tachi
1SG./2SG-TACHI Taro-TACHI
- c. Watashi/Taro-tachi daigakusei
1SG./Taro-TACHI undergrad

Notice that the situation is more complicated here, however. As a reviewer points out, the repetitive use of *-tachi* as in (13a, b) sounds awkward, regardless of the type of the nominal elements to which *-tachi* attaches.

- (14) ??Watashi-tachi/kimi-tachi daigakusei-tachi
1SG./2SG-TACHI undergrad-TACHI

But the bare use of a proper name necessarily denotes a singular individual if we accept (11). To avoid the repetition of *-tachi*, consider (15).

- (15) a. Wareware/kare-ra gengogakusha
1PL./3SG-RA linguist
'we/them linguists'
- b. ??Wareware/kare-ra gengogakusha-tachi
1PL./3SG-RA linguist-TACHI
'we/them linguists'
- c. *Wareware/kare-ra Taro-tachi
1PL./3SG-RA Taro-TACHI

In these examples, a reduplicated 1PL form and another associative marker *-ra* are used to form plural pronouns *wareware* and *karera*, respectively. As shown by the unacceptability of (15c), proper names (and personal pronouns as well) cannot appear as the second element in this construction.^{3, 4}

Finally, as reported in Inokuma (2008), personal pronouns and proper names are banned from the “N-*no hito* (the person-of-N)” construction, while lexical nouns quite freely occur in the construction.

³ A reviewer suggests explaining away the unacceptability of examples like (13b) and (15c) by means of semantic incompatibility. I am not sure whether these examples could indeed suffer from a semantic problem; why can they not have an interpretation “the group of people including me (the speaker) and Taro”?

⁴ In fact, the awkwardness of (15b) casts another question: it might be the case that the second element does not tolerate *-tachi*-attachment in any cases, regardless of the type and form of the first element. If this is the case, given (11), proper names and personal pronouns never appear as the second element in this construction. This possibility nullifies, though not disconfirms, the argument here. The awkwardness of *-tachi* on the second element calls for a more elaborated analysis anyway.

- (16) a. *Watashi/kimi/kare-no hito (^{ok}Watashi/kimi/kare)
 1.SG/2.SG/3.M.SG-GEN person
 b. *Taro-no hito (^{ok}Taro)
 Taro-GEN person
 c. Daigakusei/kitsuensha-no hito (^{ok}Daigakusei/kitsuensha)
 undergrad/smoker-GEN person
 ‘an undergrad, a smoker’

To sum up, given the combination of the three criteria above and the head-final structure in Japanese, we get the following schema for the syntactic distribution of nominal elements in Japanese.⁵

- (17) [DP [_{Spec} *personal pronoun/proper name (+TACHI)*] [_{NP} *lexical noun*] D⁰]
 (where D⁰ may be realized as *hito*)

Though the empirical data presented in this section is robust, a theoretical question to be answered at this point is the rationale for treating personal pronouns and proper names in a uniform fashion, to which we now turn.

2.3. *Proper Names and Pronouns as Directly Referring Elements*

The notion of Indexicality introduced at the beginning of this article needs some clarification. The notion of indexicality (or deixis) is usually applied to expressions like *here*, *now*, or *I*, whose referents vary according to the context of utterance. To borrow Abbot's (2010) terms, indexical expressions are characterized as follows.

- (18) INDEXICAL or DEICTIC expressions are those which determine a referent only in conjunction with elements of the context of utterance --- the text-external world. (Abbot 2010: 180)

With this characterization, we have personal pronouns as indexical elements, as expected, but proper names fall out of it. In fact, proper names apparently have an opposite property as rigid designators in the sense of Kripke (1980).

- (19) A RIGID DESIGNATOR picks up the same, invariant individual as its referent from every possible world.

It may seem rather surprising to have personal pronouns and proper names, elements at each end of the referentiality scale, behave in the same fashion in Japanese, as we witnessed in the previous section. If we employ the revised definition of Indexicality (hence beginning with a capital letter), however, it becomes obvious that the two fall into a single natural class (cf. Matushansky 2008).

- (20) *Indexicality*
 A direct-referring relationship between a linguistic form and an individual object established between the speaker and the hearer, in each context of utterance, without recourse to descriptive contents.⁶

What ties personal pronouns and proper names together is their ability to refer directly to objects, without recourse to any description (contra e.g., Russell 1905 and pro e.g., Kripke 1980). In this respect they form a natural class as directly referring, or extensional, elements, as opposed to descriptive, intensional elements represented by ordinary

⁵ For the purpose of exposition, I tentatively label the projections involved as DP and NP. Nothing theoretical hinges on this choice. More enriched structures might turn out to be necessary in the ultimate analysis. See e.g., Watanabe (2004) for elaborated syntactic structures for Japanese nominal phrases.

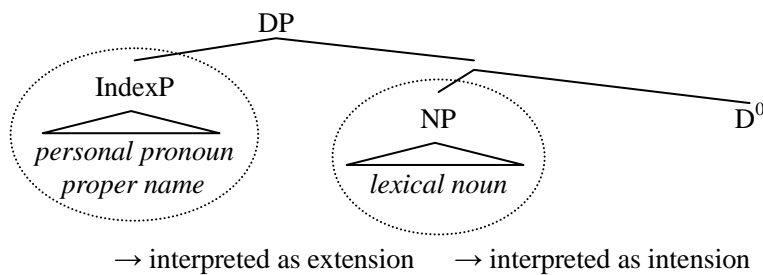
⁶ I adopt the term "direct reference" from Kaplan (1989).

lexical nouns.

3. Referring in Spec; Describing in Complement

The central idea in the present article is getting clearer. Extensional elements, including personal pronouns and proper names, on the one hand, and intensional elements, including lexical nouns, on the other, are allotted to the different, designated positions in the syntactic component. This is schematized in (21).

- (21) [DP [IndexP EXTENSION] [NP INTENSION] D⁰]
 where extension is a personal pronoun or proper name; and intension a lexical noun.

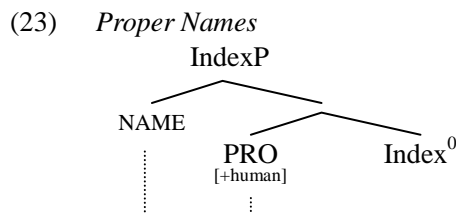


Here, the reference of nominal expressions is fixed by IndexP lying in Spec,DP, rather than D⁰ head or N-to-D head movement of N⁰, contrary to Longobardi (1994). Intuitively speaking, IndexP picks up an individual; NP gives descriptive content to it. The much-debated divide in the philosophical discipline, that is, the divide between *extension* and *intension*, *objects* and *properties*, or *reference* and *sense*, or whatever you may call it, is structurally realized in the syntactic component.

In this context we also have to take into account the structure of IndexP. Now that personal pronouns and proper names are analyzed as Spec elements, they have to be phrasal categories rather than heads. Interestingly, it is not that proper names, as their inherent (lexical) properties, function as rigid designators. Sometimes they refer to a name itself instead of the individual called by that name (cf. Matushansky 2008).

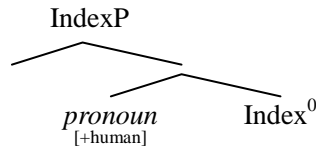
- (22) a. The girl's name is Sakura, which means cherry blossoms in Japanese.
 b. *The girl's name is Sakura, who means cherry blossoms in Japanese.

The proper name *Sakura* in this example denotes not an individual (person), but just a name. When the proper names are used as rigid designators, then, we need a mechanism that allows proper names to refer to an individual rather than to a name. I suppose Index⁰ makes this mechanism available by way of “control” of an empty category PRO by the NAME.⁷



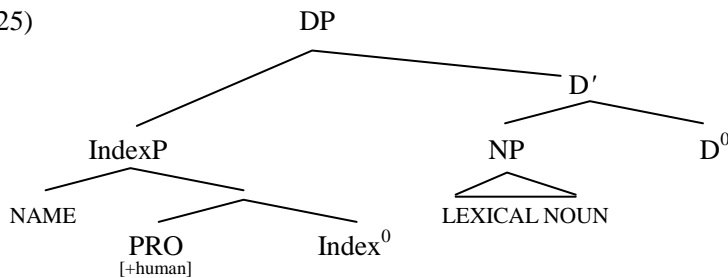
In turn, personal pronouns are analyzed as IndexP with a phonetically realized pronoun, but without a name.

⁷ Positing PRO here guarantees that the referent has [+human] feature, though I am not ready to tell whether this PRO is the identical element to PRO as the subject of controlled infinitives. The PRO in the text is a quite “small” (compared to the full-fledged DP), atomic element, which suggests PRO in controlled environment might also be further decomposable. I leave this issue open for future study.

(24) *Personal Pronouns*

The structures in (23) and (24) are then embedded in the DP structure in (21) to form full-fledged argument DPs. In singular DPs, the structure will be like (25).

(25)



With regard to this structure, recall the singularity restriction on personal pronouns and proper names in (11). (11) states that IndexP in (25) must denote a singular individual. This restriction is imposed by Agree relationship between IndexP and D⁰, or more likely, some intermediate head below D⁰, say Num⁰.⁸ In case of lexical DPs, IndexP is simply left empty, or filled by an empty operator like the one proposed by Campbell (1996). Since the present approach is led by a uniformity consideration of mapping from DP structure to its reference, we expect there to be a syntactically active element in IndexP, regardless of its phonetic manifestation.^{9,10}

In the case of plural DPs, we have to take associative *-tachi* into consideration. If we accept the idea that IndexP is necessarily singular, *-tachi* must occur in another projection above IndexP. Let us propose that this above projection is GroupP, with *-tachi* being its “group forming” head (cf. Nakanishi and Tomioka 2004; McNally 1993). Then the structure looks like (26). According to Inokuma (2009), the plurality formed with *-tachi* denotes extensional plurality, that is, no property needs to be shared among the members of this plural entity. In other words, the expression *X-tachi* denotes “X_[SG] and others,” hence the group is a non-uniform, “exceptional” plurality (Nakanishi and Tomioka 2004).¹¹

⁸ Thus in the ultimate analysis, there has to be at least one intermediate head on the N-to-D spine.

⁹ What is excluded from this structure is the co-occurrence of (overt) IndexP and a lexical noun, for instance *kimi daigakusei* “you_{SG} undergrad.” See below and Inokuma (2009) for detail.

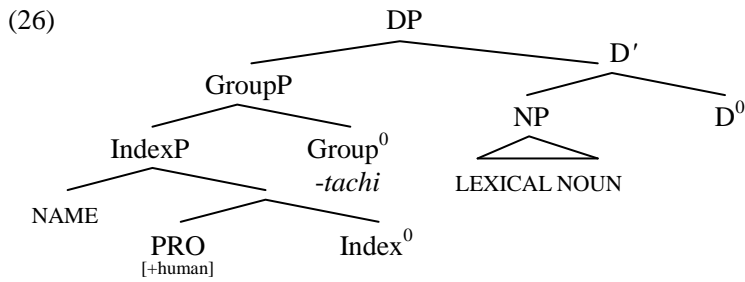
¹⁰ Also of concern here is the correspondence of DP projection with argumenthood; see Stowell (1989).

¹¹ An extra advantage of positing PRO here is that it enables us to explain away the lack of inanimate “pronoun-noun” construction in Japanese.

- (i) a. kore-ra gaisha
this-ASSOC foreign.car
b. kore-ra-no gaisha
this-ASSOC-GEN foreign.car
'these foreign cars'

In fact, quite a few speakers accept (i-a), but this expression has a structure different from that of the “pronoun-noun” construction discussed in the text, despite its surface similarity. In this inanimate version, we can insert Genitive *-no* after the first element, as shown in (i-b), with acceptability higher than (i-a). The true “pronoun-noun” construction in Japanese does not allow this option (ii).

- (ii) a. *watashi-tachi-no gengogakusha
1SG-ASSOC-GEN linguist
b. *kare-ra-no butsurigakusha
3M.SG-ASSOC-GEN physicist



Turning back to the “pronoun-noun” construction in Japanese,¹² which has been the major basis of the present analysis, the role of lexical NPs in this construction should be straightforward. Since these elements occupy the complement position to D^0 , and are interpreted as intension of the whole DP, they supply the extensional plurality denoted by the first element, i.e., GroupP, with appropriate property (in the technical sense). Hence in the expression like (27a), for instance, all we can grasp is the denoted entity is a group including Taro; while in (27b), we can be sure that every member of the denoted group (including Taro) has a shared property, namely, being a high school student.

- (27) a. Taro-tachi
Taro-TACHI
- b. Taro-tachi kookoosei
Taro-TACHI high.school.student

Note that this way of characterizing *-tachi* as an extensional group marker also explains the unacceptability of a singular counterpart of “pronoun-noun” construction as in (28).

- (28) a. *Watashi/kimi/kare kookoosei
1SG./2SG./3M.SG high.school.student
'I/you/he, who is a high school student'
- b. *Taro kookoosei
Taro high.school.student
'Taro, who is a high school student'

In a nutshell, the (singular) referent is unambiguously and exhaustively fixed by the directly-referring elements in IndexP, i.e., *watashi/kimi/kare* and *Taro*. Since the referents are exhaustively fixed, lexical nouns need not (and hence must not) occur to supply the property of the whole DP. See Inokuma (2009) for a more concrete discussion.

4. Concluding Remarks

I hope to have drawn the overall picture of the approach clear enough. Building on Japanese “pronoun-noun” construction, I have shown that personal pronouns and proper names on the one hand and lexical nouns on the other are clearly distinguished in syntactic terms, even in an allegedly non-hierarchical language like Japanese. Personal pronouns, which are prototypical indexical/ deictic elements, and proper names, which are prototypical rigid designators, are unified syntactically in terms of the notion of extension, or direct reference.¹³ Linguistic

¹² The name is no longer appropriate for this construction, at least in Japanese, since we know that the first element does not have to be a pronoun in this language.

¹³ Longobardi (1994), a significant source of inspiration for the present work, captures the similarity of these two categories by stating that both (can) end up in the D^0 position, either by base generation (in the case of pronouns) or by N-to-D head movement (in the case of proper names). His analysis cannot be applied to Japanese data, for in Japanese, they can co-occur with lexical nouns.

investigation of personal pronouns and proper names inevitably calls for philosophical issues; the present article could be read as an attempt to find a connection between the formal linguistic tradition and the philosophical tradition. In the end, the connection might be a surprisingly direct one; via syntactic phrase structure.

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