

Title	On the syntactic basis of specificational sentences
Sub Title	
Author	外池, 滋生(Tonoike, Shigeo)
Publisher	慶應義塾大学言語文化研究所
Publication year	2020
Jtitle	慶應義塾大学言語文化研究所紀要 (Reports of the Keio Institute of Cultural and Linguistic Studies). No.51 (2020. 3) ,p.115- 147
JaLC DOI	10.14991/005.00000051-0115
Abstract	<p>本論は指定文の意味論を支える統語的基盤を明らかにすることを目的として、以下の提案を行う。指定文を構成する変項名詞句と指示名詞句 (または値名詞句) の区別は、同定されているかどうかを区別する決定詞Dにおける素性 [Specific] が担い、変項名詞句は [-Specific]、値名詞句は [+Specific] であることによって捉えられ、指定文の意味論は、この2種類の名詞句が主述関係を司る機能範疇Prにより繋がれることにより成立していると主張する。さらに、指定文の値名詞句が文の焦点であることを捉えるために [Focus] という素性を使うことを提案し、英語ではこれが対比強勢として現れ、日本語では、これが「は」を排除する働きを持つことを主張する。</p> <p>これにより、指定文とは違って主語と述語を入れ替えることが可能であること、また、[-Specific] なD は、その補部のNP のϕ素性にかかわりなく、単独で使われると英語ではit/that という中性単数ででてくることが、また日本語では、ゼロ代名詞で出てくるか、中性の「それ」または「そのX」という補部をともらったときには通常の格助詞としてでてくることが、捉えられる。そして、[-Spec] と[+Spec] の関係は、WH 疑問文とその答え、(疑似) 分裂文などと共通に見られる関係であることも捉えられる。</p>
Notes	論文
Genre	Departmental Bulletin Paper
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00069467-00000051-0115

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

On the Syntactic Basis of Specificational Sentences*

Shigeo Tonoike

要旨

本論は指定文の意味論を支える統語的基盤を明らかにすることを目的として、以下の提案を行う。指定文を構成する変項名詞句と指示名詞句（または値名詞句）の区別は、同定されているかどうかを区別する決定詞 D における素性 [Specific] が担い、変項名詞句は [-Specific]、値名詞句は [+Specific] であるとすることによって捉えられ、指定文の意味論は、この2種類の名詞句が主述関係を司る機能範疇 Pr により繋がれることにより成立していると主張する。さらに、指定文の値名詞句が文の焦点であることを捉えるために [Focus] という素性を使うことを提案し、英語ではこれが対比強勢として現れ、日本語では、これが「は」を排除する働きを持つことを主張する。

これにより、措定文とは違って主語と述語を入れ替えることが可能であること、ま

* I am grateful to Yuji Nishiyama for his encouragement to come up with a syntactic account of specificational sentences. It was over a quarter century ago when I had recently returned from MIT that he started to give me, on various occasions, repeated and patient explications of various aspects of specificational and predicational sentences, as well as for the numerous exchanges of emails on this topic. It took me a long time to grasp what he was trying to tell me and I am still not sure that I have fully digested all of it. And I don't think this will meet his expectations, but at least it is my first attempt in a written form. I am also grateful to Yoji Kanbayashi and Chiaki Kumamoto for sharing their ideas and papers with me. I am also grateful to the audience of the 87th meeting of Keio Study Group of Semantics and Pragmatics (April 2017), especially Yuji Nishiyama, Ken'ya Nishikawa and Yoji Kanbayashi, for their comments on an earlier version of this paper. This paper is a drastically revised version of the talk. I am also grateful to the audience of Aoyama Linguistics and Literature (December 20th, 2019), especially to Makoto Kaneko, Kozue Ogata, and Kazuo Nakazawa for their helpful comments on a more recent version. Needless to say, any mistakes and misinterpretations that this paper might contain are strictly mine.

た、[-Specific] な D は、その補部の NP の ϕ 素性にかかわらずなく、単独で使われると英語では it/that という中性単数ででてくること、また日本語では、ゼロ代名詞で出てくるか、中性の「それ」または「その X」という補部をともなったときには通常の格助詞としてでてくることが、捉えられる。そして、[-Spec] と [+Spec] の関係は、WH 疑問文とその答え、(擬似) 分裂文などと共通に見られる関係であることも捉えられる。

1. Introduction

In the literature on specificational sentences there is a general consensus summarized in (1) below.¹

- (1) a. Specificational sentences contain a “variable NP” and a “referential NP”, and the value of the variable NP is specified (i.e., supplied) by the referential NP (henceforth the value NP).
- b. The variable NP and the value NP in a specificational sentence are exchangeable without changing the specificational meaning.
- c. In English the value NP carries a (contrastive) stress whether it is in the subject position or the predicate position²; in Japanese the variable NP is marked by the topic marker *wa* if it is in the subject position whereas the value NP is marked by the nominative marker *ga* if it is in the subject position.
- d. In English the variable NP can be referred to only by *it* or *that*, regardless of the gender and number of the “head” noun; in Japanese, only *sore* ‘it’ or *sono* *N* ‘that N’ can be used.

1 The following abbreviations will be used:

Spec=Specific, Foc=Focus, Nom=Nominative, Acc=Accusative, Dat=Dative, Gen=Genitive, Ess=Essive, 3rd=3rd Person, Mas=Masculine, Fem=Feminine, Neut=Neuter, Sing=Singular, Pl=Plural, Top=Topic (marker), Pres=Present.

2 Notice that here (and later) I am using the term *predicate* in contrast to *subject*, to refer to what is usually referred to as the (predicative) complement of a copular verb, without committing myself to whether we are dealing with a predication sentence or not.

Regarding the use of the terms “variable” and “value” mentioned in (1a), it was Akmajian (1970b) who, first in the tradition of generative grammar, introduced the notion of “variable” and “value” in his analysis of specificational pseudo-cleft sentences and likened them to WH questions.

The essential feature that distinguishes pseudo-cleft sentences from other copula constructions is that the initial clause of the pseudo-cleft contains what is essentially a semantic variable, a semantic ‘gap’ which must be ‘filled’ or specified by the focused item. In this respect, pseudo-cleft sentences are related to WH questions and their answers, which also enter into a relation of specification. ... The focus item must specify a value for the variable of the clause, and it thus follows that the focus item must belong to the appropriate semantic class, i.e. the class represented by the variable. (Akmajian 1970b:19)

Higgins (1979), while disagreeing with Akmajian in how pseudo-cleft sentences are generated, retained his characterization of specificational sentences and likened them to listing.

Although this use of “variable” and “value” may well make no sense in mathematical terms, it gives an intuitively satisfying account of the specificational function of pseudo-cleft sentences. This function is, in effect, closely akin to listing, and sentences containing terms such as the *following*, followed by a list, have essentially the same function, with the difference that a pseudo-cleft sentence usually lists only one item. (Higgins 1979:153)

This essential part of the tradition is retained in Declerck (1988), who has this to say about (2).

- (2) The bank robber is John Thomas. (Declerck 1988: 5, (1a))

Specifying a value (or values) for a variable (or enumerating the items on a list) is very similar to providing an answer to a question. The reason is that in a question that has narrow scope the WH-word functions as a variable for which

a value must be specified. It follows that specificational sentences will often be used in answer to explicit WH-questions, or, if this is not the case, imply such a question. Thus, the sentence *The bank robber is John Thomas* is naturally felt to provide an answer to the question *Who is the bank robber?* (Declerck 1988: 5)

Similarly, Kanbayashi (1984), Nishiyama (1985), Kumamoto (1989) as well as Nishiyama (2003), retain the core of the distinction. Nishiyama (2003), for instance, talks about a referential NP (*ano hito* ‘that person’) specifying the value of a variable NP (*Yoko-no shidookyooju* ‘Yoko’s academic advisor’) in (3), where the subject and the predicate are interchanged between (3a) and (3b) without changing the specificational meaning.

- (3) a. Yoko-no shidookyooju-wa ano hito da (Nishiyama 2003: 75)
 Yoko-Gen advisor-Top that person is
 ‘Yoko’s academic advisor is THAT person’
 b. Ano hito-ga Yoko-no shidookyooju da
 that person-Nom Yoko-Gen advisor is
 ‘THAT person is Yoko’s advisor’

The exchangeability of the variable NP and the value NP mentioned in (1b) as well as the association of the value NP with a contrastive stress in English and the curious distribution of *wa* and *ga* in Japanese mentioned in (1c) are illustrated in the following English examples. adapted from Mikkelsen (2005), and their Japanese counterparts.³

3 The uppercase indicating contrastive stresses in (4a-d) is based on Declerck’s (1988) (16a-b) given below.

(i) a. The murderer is JOHN
 b. JOHN is the murderer

(4c-d) are marked as ungrammatical because that is what is implied by the absence of comparable examples in Declerck’s exposition.

(4) English	Japanese
a. The culprit is JOHN	a' hannin-wa John-da culprit-Top John-is
b. JOHN is the culprit	b' John-ga hannin-da Nom culprit-is
c. *The CULPRIT is John	c' *hannin-ga John-da culprit-Nom John-is
d. *John is the CULPRIT	d' *John-wa hannin-da Top culprit-is

Furthermore, (4a) and (4b) show that in English the value NP must carry a contrastive stress and that the variable NP and the value NP can be interchanged without affecting the specificational meaning so long as the value NP retains the stress. (4c) and (4d) show that under the specificational reading, the variable NP cannot carry a contrastive stress.

Turning to the Japanese examples, it is to be noted that the variable NP and the value NP are interchangeable, but that the variable NP in the subject position must carry the topic marker *wa* as in (4a'), but not the nominative marker *ga* as in (4c') whereas the value NP must be marked by the nominative marker *ga* if it is in the subject position as in (4b'), and not by the topic marker as in (4d'). (4c') is not a licit specificational sentence equivalent to (4a), though it is acceptable as a specificational sentence with *John* functioning as a variable NP and *hannin* 'culprit' as a value NP. (4d') is not a licit specificational sentence, though it is a perfect predication sentence, ascribing a property of being the culprit to John.

(1d) can be seen in the following examples.

- (5) a. The culprit is JOHN: it/*he is not BILL.
 b. hannin-wa John-da: ({sore/soitu/*kare}-wa) Bill de-wa nai⁴
 culprit-TOP John-is: ({that/that thing/guy/*he-TOP) Bill is-TOP-not
 ‘The culprit is John, it/that is not Bill’

In English the variable NP as shown in (5a) can only be referred back to by the neuter singular pronoun *it*, and not by the masculine singular pronoun *he*. Similarly in Japanese, as noted by Nishiyama (2003) and others, the variable NP as shown in (5b) can only be referred back to by the neuter pronouns like *sore* ‘that’ and *soitu* ‘that thing/guy’, not by a personal pronouns like *kare* ‘he’.

Thus, any adequate syntactic account of specificational sentences in English and Japanese (and other languages as well) has to answer the following four questions.

- (6) a. What is the “variable” NP in syntactic terms?
 b. Why is the “variable” NP treated as singular neuter in pronominal reference?
 c. Why can the variable NP and the value NP be exchanged without changing the specificational meaning?
 d. Why does the value NP receive a contrastive stress in English whereas it is marked by the nominative marker *ga* when it occurs in a subject position in Japanese?

2. A Proposed Syntactic Account: Two Features

2.1. Specificity

As noted in (1a), the crucial notion in the analysis of specificational sentences is that of “variable”. Yet, it is not clear what it is in syntactic terms. As Higgins notes in the quote above, the term *variable* is not a mathematical one. Variable NPs are so called to distinguish them from “referential/value NPs”, but in Binding Theoretic terms they

4 The particle *de* here is glossed as ‘is’ but it will later be proposed that it is a determiner with Essive Case.

are referential expressions. So-called variable NPs are certainly not part of operator-variable constructions, either. What is it about the variable NPs that makes them variables?

Following and in fact significantly expanding Abney’s (1986) insight, Tonoike (2008, 2019) proposes that universally, so-called NPs are all DPs regardless of whether they contain an overt D or not, and furthermore that D and only D has the referential force. This means that the following expressions are all DPs where the head D is sometimes overt as in (7a) and sometimes covert as in (7b-c), with the covert D represented as *{the}*, and sometimes (i.e., when not followed by a complement NP) spelled out as so-called pronouns as in (7d). Furthermore, in (7b), the (covert) D functions as a variable in an operator-variable construction with *which/every/some/any/a*.

- (7) a. the man
- b. which/every/some/any/a {the} man
- c. {the} John
- d. The man told the woman that he doesn’t know her.

Since the distinction between variable and referential/value NPs is about their reference, I assume that it is encoded in the feature composition of D.

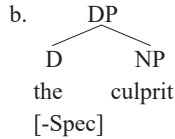
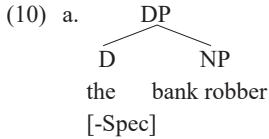
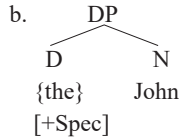
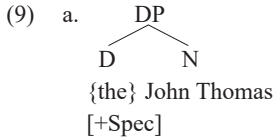
It seems that what the notions “variable NP” and “referential/value NP” are meant to capture is the fact that the referents of referential/value NPs are (assumed to be) identified by the speaker and possibly by the hearer, whereas the referents of variable NPs are not identified either by the speaker or by the hearer.⁵ If this is the correct way to capture the difference between the variable NP (henceforth, variable DP) and the referential/value NP (henceforth, value DP), it can be expressed by a feature, call it [Specific], contained in D and defined as below.

5 Chafe (1976) uses the notion “identifiable”. But I think “identified” is more appropriate because what matters is whether a DP is identified or not, and not whether it is identifiable.

(8) Specificity Feature

- a. D is [+Specific] if it is identified by the speaker and possibly by the hearer.
- b. D is [-Specific] otherwise (i.e., it fails to be identified by the speaker, as well as by the hearer.)

The referential/value DPs *John Thomas* in (2) and *John* in (4), and the variable DPs *the bank robber* in (2) and *the culprit* in (4), will then look like (9a-b) and (10a-b), respectively.



The analysis holds for Japanese also if it is assumed, following Ueda (1990) and Tonoike (1987 and 2019), that contrary to appearances, Japanese has determiners and they are realized as so-called case particles such as the nominative *ga*, accusative *o*, and dative *ni*,⁶ so that referential DP in (3), namely *ano hito-ga* ‘that-person Nom’ and the variable DP *Yoko-no shidookyooju-wa* ‘Yoko’s academic advisor Top’ have the following structures. Notice that nominative D in (11b) is spelled out as null (represented as $\{ga_i\}$) when it is followed by the topic marker *wa*.

6 Much the same way that the same definite determiner gets spelled out differently depending on the Cases it receives as observed in the German masculine singular paradigm.

(i) der	des	dem	den
Nom	Gen	Dat	Acc

- (11) a.
- Referential DP
- b.
- Variable DP

It still remains to show that in (3b), repeated below as (12a), *Yooko-no shidookyooju-da* 'is Yoko's advisor' contains a variable DP. In (3b) (=12a)) *da* was simply treated as a copular verb 'is', but it is in fact morphologically decomposable into *de+ar+ru* where *de* is, I propose, a D with Essive Case as shown in (12b). (We will come back to the clausal structure below, including the assigner of Essive Case.)

- (12) a. *Ano hito-ga Yooko-no shidookyooju da*
 that person-Nom Yoko-Gen advisor is
 'THAT person is Yoko's advisor'
- b.
- Value DP Variable DP

If this is the distinction that syntax offers, it can kill two birds with one stone. On the one hand, it answers (6a): the fact that variable DPs are perceived as variables falls out automatically from their status of not identified either by the speaker or by the hearer.⁷ Furthermore, the fact that in specificational sentences the variable DP and

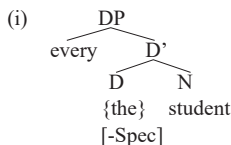
7 One interesting possibility is that true variables in operator-variable constructions also involve [-Spec] D as shown below, where following Tonoike (2019) it is assumed that operator-variable constructions hold in situ between the operator and the ([Specific]) definite

the value DP are exchangeable without affecting the specificational meaning (with some restrictions noted in (1b)) also falls out automatically if it is assumed that specificational meaning is the relation between [+Spec] DP and [-Spec] DP mediated by the copula, regardless of their position (i.e., subject or predicate) in the copular constructions.⁸ This answers (6c).

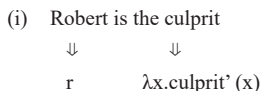
On the other hand, the fact noted in (1d) that only the singular neuter pronouns *it* and *that* can be used to refer back to the variable DPs also falls out automatically as well as the fact that only the *so*-series of pronouns can be used to refer back to variable DPs in Japanese. But to see how requires some assumptions as to how pronouns are introduced into the derivation.

Tonoike (2008b, 2019) proposes that pronouns are introduced into the derivation in one of two ways: Internal Merge (i.e., Move) or LF Recycling, to borrow Takahashi's (2002) terminology. Derivation by Internal Merge involves a generalized version of Sideward Movement of Nuñez (2001) across a clause boundary as shown below.

determiner.



It is possible to treat variable NPs as variables bound by a Lambda operator λ as proposed by Partee (1986) as shown below (taken from Mikkelsen (2005)).



However, it is not clear whether Lambda operator, though widely used in mathematics and computer science, exists as such in the syntax of natural language. One interesting possibility is that [-Spec] DPs contain a covert operator comparable to *which*. I would like to leave this possibility for future research.

8 We will see below that what really mediates the two DPs is Bower's (1993) Predication, not the copular verb, which simply acts as a tense carrier.

- (13) a. The student thinks that she is a genius.
 b. [v^* thinks [_{CP} that the² student is a genius]] Sideward Movement -->
 c. [the student v^* thinks [_{CP} that the is a genius]]

Suppose the derivation for (13a) has reached the stage given in (13b), where v^* is in need of a subject DP and the embedded subject has two copies of the same *the*, indicated by the superscript. The subject of v^* is supplied by Sideward Movement of the embedded subject *the student* to Spec v^* P, leaving behind one of the two Ds. This gives (13c), where the matrix subject and the embedded subject share the same D, capturing their coreference. The definite determiner with [Nom, 3rd, Sing, Fem] is spelled out as *she* at PF and we get (13a).

Sideward Movement across a clause boundary can happen to variable DPs. Consider the derivation of the two examples in (14a) from the two structures in (14b).

- (14) a. The culprit is John/John is the culprit, if it/that is not Bill.
 b. is John/John is , if the² culprit is not Bill
 c. the culprit is John/John is the culprit, if the is not Bill

The matrix clauses of (14b) are in need of a subject/predicate, while the conditional clause has two copies of the same D in the subject position. When *the culprit* undergoes Sideward Movement to the matrix subject/predicate position,⁹ leaving behind a copy of the definite determiner, we get (14c), where the identity of the two copies of *the* captures coreference. Suppose the copy of *the* in the complement clause with [-Spec] lacks ϕ -features in agreement with the complement NP *culprit*, and as such can only be spelled out as *it/that* with the default ϕ -feature values [3rd, Singular, Neuter] and the Case feature [Nominative] assigned by the copula *is*. This will give the PF representation in (14a).

9 Note that this derivation is simplified. As we will see below, the subject position where the subject DP *the culprit* moves to is SpecPrP.

Basically the same goes for the Japanese counterparts. Consider the derivations of (15a-b) starting with (16a-b), respectively. Here it is assumed tentatively that *de* is a spell-out of D with Essive Case assigned by the copula *ar*, though we will revise this later. (Notice that contrastive stresses are suppressed for simplicity.)

- (15) a. (sore-ga) Bill-de nakereba, hannin-wa John-de ar-ru
 it-nom Ess if-is-not culprit-Top Ess be-Pres
 ‘if it is not Bill, the culprit is John’
- b. (sore-ga) Bill-de nakereba, John-ga hannin-de ar-ru
 it-nom Ess if-is-not Nom culprit-Ess be-Pres
 ‘if it is not Bill, John is the culprit’
- (16) a. hannin-D² [-Spec] Bill-de nakereba, _ wa John-de ar-ru
 culprit Ess if-is-not Top Ess-be-Pres
- b. hannin-D² [-Spec] Bill-de nakereba, John-ga _ ar-ru
 culprit Ess if-is-not Nom be-Pres

Notice that in (16a) the matrix subject position is empty and needs a DP, while in (16b) the matrix predicate position is empty and needs a DP. In both (16a-b), the subject of the conditional clause has two copies of [-Spec] D. One of them has received Nominative Case from the Tense of the conditional, though it is not indicated. The gaps in the matrix clauses can be filled if the embedded subject *hannin-D* gets moved there by Sideward Movement, leaving a copy of D behind. This gives (17a-b).

- (17) a. D [-Spec, Nom] Bill-de nakereba, hannin-D-wa John-de ar-ru
 Ess if-not culprit Top Ess be-Pres
- b. D [-Spec, Nom] Bill-de nakereba, John-ga hannin-de ar-ru
 Ess if-not Nom culprit-Ess be-Pres

In (17a) D on the matrix subject has received Nominative Case from Tense, but it gets a null spell-out because of the existence of the Topic marker *wa*. In (17b) D on the matrix subject receives Nominative Case and gets spelled out as *ga*. D on the predicate

has received Essive Case from the copula *ar* and gets spelled out as *de*. Let us assume that in both (17a-b), [-Spec, Nom] Ds in the complement subject positions have [3rd, Singular, Neuter] just like the corresponding Ds in English do. They get spelled out as null (namely as a zero pronoun) because they lack a complement NP, but there is another option in Japanese, namely a resumptive “pronoun” option.

The embedded subjects can be made overt by using a pronominal form that is compatible with the [-Spec, Neuter, Singular] D, namely *sore* ‘it’. In that case the Ds get spelled out as a nominative marker *ga* since they have an NP complement.

- (18) a. *sore-ga Bill-de nakereba, hannin-D-wa John-de ar-ru*
 it Nom Ess if-is-not culprit Top Ess be-Pres
 ‘If it is not Bill, the culprit is John’
- b. *sore-ga Bill-de nakereba, John-ga hannin-de ar-ru*
 it Nom Ess if-is-not Nom culprit-Ess be-Pres
 ‘If it is not Bill, John is the culprit’

Thus, analysis in terms of [-Specific] D with the default ϕ -feature set [3rd Person, Singular, Neuter] can capture, on the one hand, the nature of “variable DP” as not identified either by the speaker or the hearer. The fact that a 3rd person, neuter, singular pronouns *it/that* in English and a zero pronoun or *sore*-D is used in Japanese, on the other hand, can be captured by associating the default ϕ -feature set [3rd, Neut, Sing] with [-Spec].

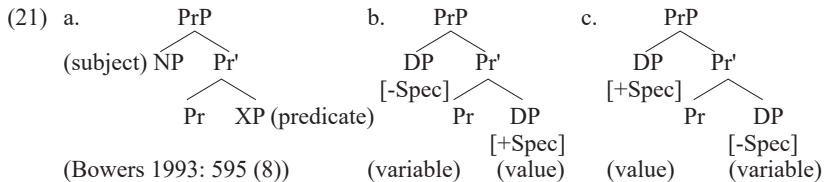
LF Recycling is illustrated in the following discourse fragments.

- (19) a. WHO is the [-Spec] culprit?
 b. It is JOHN < the [-Spec] is JOHN
- (20) a. *Hannin-{ga}-wa dare ka*
 culprit-{Nom}-Top who Q
 b. *(sore-{ga}-wa) John-da*
 it-{Nom}-Top is

In forming an answer to (19a), the speaker can recycle the [-Spec] D in (19a), which is spelled out as *it* as in (19b). Likewise, in forming an answer to (20a), the speaker can recycle the [-Spec] D, in this case hidden behind *wa*, and use it as the zero pronoun subject or combine it with a “resumptive” noun *sore*. In the latter case the D would be spelled out as *ga*, but it gets spelled out as null if it is followed by the topic marker *wa*, as is the case in (20b).

2.2. Syntactic Structure of Specificational Sentences

Now that we have seen that (1a-b) can be made to follow from the assumption that the two DPs involved in specificational sentences differ with respect to the specificity feature, what remains to be done is decide the syntactic configuration that mediate the two DPs in a specificational relationship. Bowers (1993) proposes a functional category Predication (abbreviated as Pr) that takes VP, NP(DP), PP and AP as its complement and the subject as its specifier as shown in (21a), where XP is either VP, AP, NP, PP.¹⁰



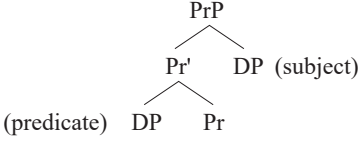
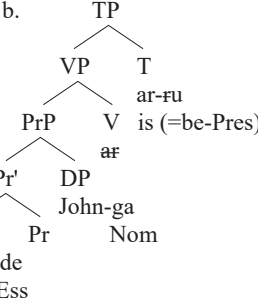
English specificational sentences are proposed to have the structures in (21b-c). The defining property of specificational sentences is that they contain one [-Spec] DP, either as the subject DP (as in (21b)) or the predicate DP (as in (21c)) and one [+Spec] DP either as the predicate DP (as in (21b)) or as the subject DP (as in (21c)). We say that the value DP “specifies” the value of the variable DP. This relation of specification is the semantic function of Pr of mediating the variable and value DPs. When this

10 I follow Bowers’ analysis in general, but I assume, following Chomsky (1995), that Pr should be replaced by v/v^* when XP is VP.

defining property does not hold, we have predicational (or identity, identificational and other types of) copular constructions. We can thus retain Pr as the mediating functional category neutral between predication and specification.

Furthermore, this explains the interchangeability noted in (6c): the two DPs can be exchanged because the defining property of specificational sentences is that they contain one [+Spec] DP and one [-Spec] DP mediated by Pr, and it does not matter whether the two DPs occupy the subject or the predicate position.

If this analysis of specificational (and predicational and other) copular sentences is correct, we can extend it to Japanese and say (following the proposal of Tonoike (2007, 2019)) that Japanese specificational as well as predicational and other copular sentences have the left-branching structure in (22a), where Pr assigns Essive Case to the predicate DP,¹¹ and that the clausal structure would be (22b) after head raising of V to T.

- (22) a. 
- b. 
- c. Hannin-de John-ga ar-ru (koto)¹²
culprit-Ess Nom be-Pres (that)
'(that) John is the culprit'

11 We can also assume that Essive Case is assigned by Pr in English, though it does not have a distinct form and is often homophonous with Nominative Case in other languages.

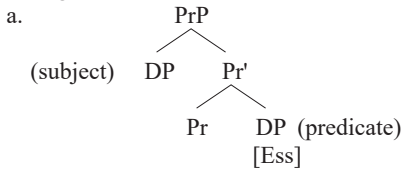
12 Here I am assuming that there is a morphological rule of deleting the initial /r/ in morphemes like the present tense /ru/, passive/potential morpheme /rare/ and /re/ when preceded by a consonant final morpheme like /ar/ 'be'. Similar deletion happens to the initial /s/ in the causative /sase/ and /se/ as in yasum-sase 'make rest'.

- d. John-ga hannin-da <de-ar-ru
 Nom culprit-is
- e. Hannin-da John-ga (*koto)
 culprit-is Nom (that)
 ‘(that) John is a culprit’

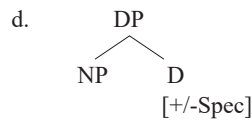
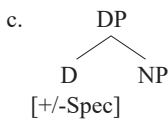
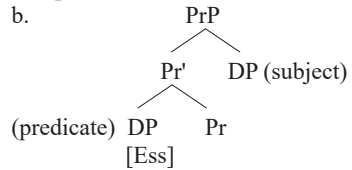
Though a little awkward, (22c) is a possible word order. A more frequently observed word order *John-ga hannin de-ar-ru* can be derived from (22c) by scrambling the subject to the sentence-initial position. But when the sequence *de-ar-ru* is contracted to *da* as in (22d) the predicate DP must follow the subject. This can be made to follow by assuming that the Essive D *de* is a bound morpheme (as are other case particles) and has to form a phonological word with the preceding NP and the whole DP must move when *de* is raised to V, to T and then to C, though not indicated in (22). (22e) is possible only as an example of the subject DP dislocated to the right.

To summarize, it has been proposed that copular sentences in English and Japanese contain Predication Phrase given in (23a-b), where Pr assigns Essive Case to its complement DP, and that specificational sentences are defined as those containing a [-Specific] DP either in the specifier or in the complement position of Pr and a [+Specific] DP in the other argument position.

(23) English



Japanese



2.2. Focus Feature

Now we are in a position to deal with (1c)=(6c), namely to account for the distribution of contrastive stress in English and the curious distribution of the nominative determiner *ga* and the topic marker *wa* in Japanese. Consider (4), repeated below as (24).

(24) English	Japanese
a. The culprit is JOHN	a' hannin-wa John-da culprit-Top John-is
b. JOHN is the culprit	b' John-ga hannin-da Nom culprit-is
c. *The CULPRIT is John	c' *hannin-ga John-da culprit-Nom is
d. *John is the CULPRIT	d' *John-wa hannin-da Top culprit-is

The situation can be recapitulated in a somewhat different way in terms of “variable DP” and “value DP”. In English specificational sentences, variable DPs cannot receive a contrastive stress and value DPs must receive a contrastive stress. In Japanese specificational sentences, the difference between the variable DP and the value DP manifests itself in subject positions: variable DPs in a subject position must be marked by *wa*, whereas value DPs in a subject position must be marked by *ga*.

In addition to the reference to variable DP, what is shared by all the researchers mentioned above is the insight that specificational sentences are similar to answers to questions. Declerck (1988), for instance, says “specifying a value (or values) for a variable ... is very similar to providing an answer to a question.” It is also widely assumed that both questions and answers contain a focus. The close connection between foci of questions and the foci of specificational sentences can be seen by comparing the following examples, where uppercase in the English version represents contrastive stress.

- (25) a. WHAT is your PIN? < your PIN is WHAT
 a'. Kimi-no password-wa nani-desu-ka?
 your password-Top what-is-Q
 b. WHAT is your password? < WHAT is your password
 b'. Nani-ga kimi-no password-desu-ka?
 what-Nom your password-is-Q
- (26) a. My PIN is my ROOM NUMBER.
 a'. Watashi-no password-wa (watashi-no) heya-bangoo-desu
 my password-Top (my) room number-is
 b. My ROOM NUMBER is my password.
 b'. (watashi-no) Heya-bangoo-ga watashi-no password-desu
 (my) room number-Nom my password-is

In English, (25a-b) are phonologically identical but are derived from different sources as indicated. Despite this difference, they share the similarity of having the same element as a focus, namely WHAT. (25a-b) can be answered by (26a-b), respectively, and the foci of the questions in (26a-b), namely the uppercase *my ROOM NUMBER*, correspond to the foci in (25a-b).

In Japanese, the two questions have different forms as shown in (25a'-b'), where *nani* ‘what’ is the focus. They are answered by (26a'-b'). In (26a') the *wa*-marked DP is a topic and hence cannot serve as a focus, and that leaves *heya-bangoo* ‘room number’ as a possible focus (assuming that an answer has to have one focus) and this corresponds to the focus of question in (25a'). In (26b') the subject (*watashi-no*) *heya-bangoo* ‘(my) room number’ has Nominative Case marker *ga*. *Ga* has been analyzed to have two distinct interpretations in matrix clauses: neutral description and exhaustive listing (Kuno (1973)). The two interpretations are exemplified below.

- (27) a. A! ame-ga hutte-i-ru
 look rain-Nom falling-is
 ‘Look, it’s raining’

- b. Yamada-ga waru-i
 Yamada-Nom is-to-blame
 ‘YAMADA (and only Yamada) is to blame’

(27a) has a neutral description interpretation: it just gives a neutral description of the situation that is taking place. (27b) has an exhaustive listing interpretation and has the connotation that the *ga*-marked subject is the only thing at the moment for which the proposition “X is to blame” holds. Nishiyama (2003) notes that the exhaustiveness is a matter of pragmatics (cf. Gricean maxim of quantify), and therefore only the notion of “listing” is sufficient. If we take this notion of listing as a reflex of focus. (*Watashi-no* *heya-bangoo-ga* ‘my room number’ in (26b’) is analyzed to be the focus of the answer, and if we assume that there can be only one focus in a sentence, the predicate DP *watashi-no password* ‘my password’ is a non-focus.

When (26a’) is embedded, it loses the topic marker *wa*, and the Nominative Case marker *ga* becomes visible.¹³

- (28) *Watashi-no password-ga* (*watashi-no*) *heya-bangoo de ar-ru koto* (-*wa minna sitte-iru*)
 my Nom (my) room number-Ess is that Top everybody knows
 ‘(Everybody knows) that my password is my room number’

Exhaustive listing interpretation is available only for matrix *ga*-marked DP, hence unavailable to the *ga*-marked subject in (28).

Exhaustive listing interpretation is not unique to the Nominative Case marker *ga*, though it is most salient in that position. Consider (26a’). The predicate DP (*watashi-no heya-bangoo-de* ‘my room number-Ess’ also has an exhaustive listing interpretation. Not only does (26a’) say that my password is my room number, but it implies that it is nothing else. Therefore, it can be assumed that (26b’) as well as (28)

13 The indicative ending *desu* (contracted from *de ari-mas-ru*) has to be replaced by adnominal ending *de-ar-ru* in order to be embedded as the complement of a noun *koto*.

contain a focus, namely the predicate DP.

A number of ways to deal with the association of focus with [+Spec] DP suggest themselves, but one thing that needs to be born in mind is that there can be [+Spec] DPs which are not foci as shown in the following examples, where the subject and the indirect object, namely *I* and *her*, are both [+Spec] and are not foci.

- (29) a. WHAT did you give her for her birthday?
b. I gave her a PEARL NECKLACE.

Therefore, it is necessary to assume that UG has a feature separate from [+/- Spec], call it [+/- Focus] to distinguish foci from non-foci, and make the following assumptions.

- (30) a. A sentence can contain at least one [+Focus] element.
b. [+Focus] is compatible with [+Spec] and incompatible with [-Spec].
c. [+Focus] is realized as a contrastive stress in English, and as (exhaustive) listing interpretation of *ga* (as well as other Ds) in Japanese.

In this connection, French offers an interesting way of realizing focus. Consider the following examples.¹⁴

- (31) a. Qui est le coupable? < le coupable est qui
who is the culprit
'Who is the culprit?'
b. Qui est le coupable? < qui est le coupable
who is the culprit
'Who is the culprit?'

14 I am grateful to Makoto Kaneko for pointing out the illicit status of (31b'). Sakahara (1989), however considers a similar example grammatical (namely, Baudelaire est l'auteur des "Fleur du Mal"). I am grateful to Yuji Nishiyama for bringing this to my attention.

- a'. Le coupable est JEAN
 the culprit is John
- b'. *JEAN est le coupable
 John is the culprit
- c. C'est JEAN (qui est le coupable)
 It-is John who is the culprit

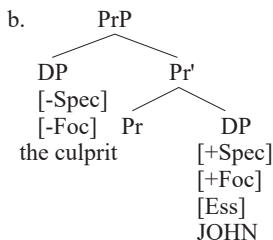
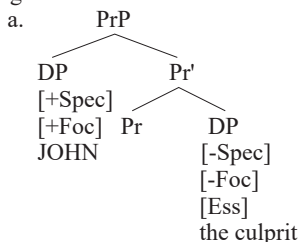
Just like (25a-b), the questions in (31a-b) are homophonous, but have different sources as indicated. In (31a), *qui* 'who' is the predicate, whereas in (31b) it is the subject. Interestingly, (31a) can be answered by (31a'). But (31b) cannot be answered by (31b'), which is ungrammatical unlike its English counterpart (24b). Instead, the pseudo-cleft strategy in (31c) has to be used. This might appear to constitute a counter-example to the analysis of specificational sentences as involving a [+Spec, +Foc] and a [-Spec, -Foc] DP either in the subject or in the predicate position. However, this is, in fact, a case of an exception proving the rule. French has a prosodic restriction that limits a (contrastive) stress to a clause final (hence post-copular) position, ruling out (31b') but ruling in (31c) where *JEAN* is after the copula *est*.

This answers the question in (6d) above: [+Focus] needs to be realized some way or other. In English, it has to be realized as a contrastive stress; whereas in Japanese it has to be realized on a non-topical DP. In French, it has to be realized in a clause final (post-copular) DP.

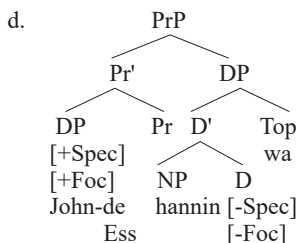
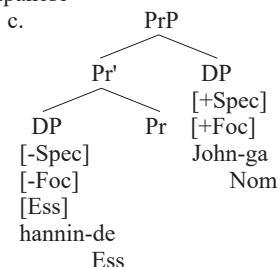
3. Concluding Remarks

It has been shown that specificational sentences in English and Japanese (and other languages) contain the following PrP structures, and that specificational meaning is the relationship between the [+Spec] DP and [-Spec] DP mediated by Pr.

(32) English



Japanese



In all the four structures, the predicate receives Essive Case from Pr, which is spelled out as *the* in English but as *de* in Japanese. [+Foc] is realized as a contrastive stress in English, whereas it is realized as the absence of Topic marker *wa*. Notice that the PrP structures of English and Japanese are mirror images of each other, and the surface order in Japanese is Predicate-Subject, though the more frequently observed order Subject-Predicate is derived by scrambling of the subject to the left, or by raising of the predicate DP to V, then to T and then to C.

The [+Foc] predicate in (24b') can appear with *wa* in negation as shown in (33) in the more frequently observed word order.

- (33) a. John-wa hannin-de-wa nai
 Nom culprit-Ess-Top is-not
 b. Hannin-wa John-de-wa nai
 culprit-Top Ess-Top is-not

But this use of *wa* is not that of Topic but that of Contrast in Kuno's (1973) classification

and so is compatible with [+Foc].

The four questions in (6), repeated below as (34), have been raised about the syntactic basis of specificational sentences.

- (34) a. What is the “variable” NP in syntactic terms?
b. Why is the “variable” NP treated as singular neuter in pronominal reference?
c. Why can the variable NP and the value NP be exchanged without changing the specificational meaning?
d. Why does the value NP receive a contrastive stress in English whereas it is marked by the nominative marker *ga* when it occurs in subject position in Japanese?

The answer to (34a) is that it is a DP with [-Specific] D, signifying that it is not identified either by the speaker or by the hearer. It has been suggested that the same feature is involved in regular variables in operator-variable constructions.

The answer to (34b) is that when [-Spec] DP undergoes “pronominalization,” only [-Spec] head D is left behind in Sideward Movement, or recycled in discourse, and it is spelled out as [Singular, Neuter] D, as *it/that* in English and as zero pronoun in Japanese (or as a Case marker when a neuter NP (*sore* or *soitu*) is supplied as a “resumptive noun.”

The answer to (34c) is that since the specificational meaning is defined as the relationship between a [+Spec] DP and a [-Spec] DP mediated by Pr, it does not matter which of them occupy the subject and the predicate position. Therefore, the two are exchangeable.

The answer to (34d) is that in specificational sentences, the [+Spec] DP that does the specification is required to be [+Foc], and [+Foc] is realized in English as a contrastive stress, and that in Japanese excludes Topic (i.e., [-Foc]) marker *wa*.¹⁵

15 For a detailed account of specificational sentences in a “information structure” account, using Topic, Focus and other related notions, including reference to “identifiability” borrowed

4. Epilogue: Cleft Sentences

This still leaves the obvious task of relating the proposed analysis to pseudo-cleft and cleft constructions. Instead of a full-fledged account of (pseudo-)cleft sentences, which will require another full paper, I will simply give an outline with crucial ingredients. Consider how the following pseudo-cleft and cleft sentences can be generated.

- (35) a. The one who robbed the bank was John Thomas
b. That which we call a rose (by any other name) would still be a rose.
c. What John read was a book about himself¹⁶
d. It was a book about himself that John read

The first task is to show how the relativized DPs in (35) are to be generated. Following Tonoike (2008a and 2019) I assume that Relativization involves three operations, Predicate Formation (aka WH-Movement), DP Extraction and CP Adjunction, as illustrated below.¹⁷ Here a syntactic object X is assumed to have its phonetic shape represented as /X/ and its semantic content represented as {X}. When X has both, it is represented simply as X.

- (36) a. [_{CP} C [_{TP} the² one robbed the bank]] --Predicate Formation-->
b. [_{CP} the+/the/ one C [_{TP} {the} robbed the bank]] --DP Extraction-->
c. [_{DP} the one] [_{CP} /the/ C [_{TP} {the} robbed the bank]] --CP Adjunction-->
d. [_{DP} [_{DP} the one] [_{CP} /the/ C [_{TP} {the} robbed the bank]]]

from Chafe (1976) see Lambrecht (1994). I am grateful to Makoto Kaneko for pointing out the relevance of this work to the present topic.

16 This example is taken from Akmajian (1970b).

17 These operation names are for expository convenience only. They are all instances of Merge.

Notice that the subject DP has two copies of the same D *the*, indicated by a superscript. The relative complementizer C, acting as a probe, searches its domain and locates a DP with two copies of D, and extracts the DP, leaving behind the meaning copy of *the*, indicated as *{the}*. Its phonetic counterpart, indicated as */the/*, is taken along with the moved DP to SpecCP, giving (36b). This extraction has the effect of turning the TP into a predicate by creating a gap, namely *{the}*, hence its name Predicate Formation. The fact that Predicate Formation (i.e., WH-Movement) takes the phonetic shape but leaves a semantic copy behind automatically accounts for the fact that WH-Movement leaves a gap. (The phonetic shape is needed in SpecCP where it is spelled out as a relative pronoun.) The DP in SpecCP is taken out to be merged in some θ -position (which is not indicated here), thus creating two independent syntactic objects, DP and CP, given in (36c). Before the DP has a chance to get merged in a θ -position, CP adjoins to it, and forms a newly created relativized DP, given in (36d). At this stage, it can be merged in a subject position and become part of the sentence in (35a). The two copies of the meaning of *the*, *{the}* in (36d), one in the subject position of TP, and the other contained in the head DP *the one*, are identical since they are copies, and their identity captures the coreference between the gap in the relative clause and the head DP. The phonetic shape of *the* in SpecCP, namely */the/* gets spelled out as *who*, as shown in (35a). The core PrP structure of (35a) can be derived by first creating $[_{Pr'} Pr [_{DP} John Thomas]]$, and then merging (36d) in SpecPrP.

The subject of (35b) *that which we call a rose*, I propose, is derived from (37a) containing two copies of the same D *that* in the object position. The three Merge operations derive (37b).

(37) a. $[_{CP} C [_{TP} we call that^2 a rose]]$

--Predicate Formation, DP Extraction, CP Adjunction-->

b. $[_{DP} [_{DP} that] [_{CP} /that/ C [_{TP} we call \{that\} a rose]]]$

The phonetic shape left in SpecCP */that/* gets spelled out as *which*, giving the subject

of (35b). Notice that again the identity of the two copies of *{that}*, one in the object position, the other contained in the head DP, captures the coreference between the gap and the head DP. The core PrP structure of (35b) can be generated by merging (37b) in the specifier position of $[_{Pr'} Pr [_{DP} a\ rose]]$.

Turning to (35c), because of the use of the reflexive *himself*, it is necessary (or at least natural) to assume that it is derived from the underlying structure in (38a). Notice that the object DP has a complex D structure, *a-the+what*². This sequence contains a regular definite determiner, *the* and two copies of free relative *what*. The definite determiner *the* forms an operator-variable construction with the existential quantifier *a*, as noted above about (7b). If all these elements are left as they are, the derivation will crash because they cannot be linearized. But a convergent derivation is possible if the complexity is resolved by the relativization processes and the cleaving operation illustrated below.

- (38) a. $[_{CP} C [_{TP} John\ read\ a-the+what^2\ book\ about\ himself]]$
 --Predicate Formation, DP Extraction, CP Adjunction-->
 b. $[_{DP} [_{DP}\ what] [_{CP}/what/ C [_{TP} John\ read\ \{what\}+a-the+book\ about\ himself]]]$
 c. $[_{PrP} [_{DP} [_{DP}\ what] [_{CP} C [_{TP} John\ read\ \{what\}]]] [_{Pr'} Pr [_{DP} a-the\ book\ about\ himself]]]$
- Cleaving
-

The same three operations of relativization gives (38b). The core PrP structure contained in (35c) can be generated by merging the object DP $[_{DP} a-the\ book\ about\ himself]$ with Pr as its complement, and then merging the rest of the relativized DP in the specifier position, giving (38c). The two merge operations surrounding Pr have the effect of *cleaving* (38b) into two constituents, resulting in a pseudo-cleft sentence in (35c), with the *pseudo* part coming from the source being a free relative. In (38c), everything is now linearized. If we assume that the phonetic shape of *what*, */what/*, is always spelled out as null, and that a definite determiner *the* is spelled out as null when preceded by a quantifier, we get (35c). (Needless to say, the identity of *{what}* in the

object position of *read* and *{what}* assumed to be contained in *what* captures the coreference between the gap and *what*.)

(35a-c) are interpreted as specificational sentences if the relevant subject DPs contain a [-Spec] D as their heads.¹⁸

The derivation of the cleft-sentence (35d) can be analyzed to start with a relative clause in (39a) and go through the following derivation.

- (39) a. [_{CP} that [_{TP} John read a-the³ book about himself]] --Relativization-->
 b. [_{DP} [_{DP} it] [_{CP} /the/ that [_{TP} John read {it}+a-{the} book about himself]]]
 Cleaving
 c. [_{PrP} [_{DP} [_{DP} it] [_{CP} that [_{TP} John read {it}]]] [_{Pr} Pr [_{DP} a-{the} book about himself]]]
 --Merge of Tense *was*, and A-Movement of the subject DP to SpecTP
 d. [_{TP} [_{DP} [_{DP} it] [_{CP} that [_{TP} John read {it}]]] was [_{PrP} t [_{Pr} Pr [_{DP} a-{the} book about himself]]]
 --Extrapolation of the relative CP
 e. [_{TP} [_{TP} [_{DP} it] was [_{PrP} t [_{Pr} Pr [_{DP} a-{the} book about himself]]]] [_{CP} that [_{TP} John read {it}]]

18 Specificational examples like (i) below from Higgins (1970: 104 (19b)) requires a bit more complicated derivation. A possible derivation starts with (ib), where the complement position of Pr is filled with AP as well as *what*.

- (i) a. What John is is important to himself.
 b. <sub>[PrP John Pr [what-_[AP important to himself]]] --Merge with T is, A-Movement of *John* to SpecTP-->
 c. [John is [what-<sub>[AP important to himself]]] --Merge with C, Relativization of *what*
 d. _{[DP [DP what] [_{CP} C [_{TP} John is {what} [_{AP important to himself}]]]}
 (Cleaving) Merge AP with Pr as its complement, Merge DP as its specifier-->
 e. _{[PrP [_{DP [DP [DP [DP what] [_{CP} C [_{TP} John is {what}]]]]] [_{Pr} Pr [_{AP important to himself}]]]}}</sub></sub>

Due to the fact that the AP contains *himself*, the AP and the subject *John* have to originate in the same PrP as shown in (ib). After the free relative is formed in (id), the free relative part and the AP must be separated and merged with a new Pr as in (ie). (ia) is derived from (ie) by Merge of *T* is, and A-Movement of the subject DP to SpecTP. Strictly speaking, given the proposed analysis the two copies of *what* in (ie) should be replaced by *it*.

Notice that in (39a) the object DP contains three copies of *the*. One of the copies is associated with an existential quantifier *a*, hence spelled out as null in (39b). Suppose this copy is a [+Spec] D, namely the regular *the*. Suppose further that the other two copies are [-Spec], which gets spelled out as *it*. Suppose it is this [-Spec] D that undergoes the three operations of relativization, giving (39b), where [-Spec] D is represented as *it*, and a copy of its meaning is represented as $\{it\}$, and the phonetic shape /*the*/ in SpecCP gets a null spell-out. I propose that the relativized DP in (39b) is *cleft* first by merging the object DP *a-{the} picture of himself* with a newly introduced Pr, then by merging the remaining relativized DP, giving (39c). Merging *was* with (39c) and moving the subject DP to its specifier position (by A-Movement) will give (39d). Here, the sequence *it that TP*, unlike *that which TP* in (35b) or *what TP* in (35c), is illicit presumably due to the fact that *it* is a weak relative head and cannot stand alone before *that*. Whatever is the cause of deviancy, it can be resolved by Extraposing the relative clause to the end of the clause, giving the cleft sentence in (39e). It is a specificational cleft sentence with a [-Spec] subject *it*.

Clearly this is a modern version of Akmajian's (1970a) proposal of "deriving cleft sentences from pseudo-cleft sentences". The difference between the cleft sentence and pseudo-cleft sentence stems from the difference between the relative heads, *it* and *what*, the rest of the structures are exactly the same.

Basically the same analysis holds in Japanese except that in Japanese pseudo-cleft sentences and cleft-sentences are indistinguishable in form. (40a) has two distinct readings given in (40b) and (40c). I tentatively propose that the pseudo-cleft and cleft examples are derived from the two distinct underlying structures in (41a) and (41b).

- (40) a. John-ga yon-da no-wa zibun(-ni tuite)-no hon-de at-ta¹⁹
 Nom read-Past C-Top self (about)-Gen book-Ess be-Past
 b. What John read was a book (which was) about himself
 c. It was a book (which was) about himself that John read
- (41) a. [[[John-ga [zibun(-nituite)-no hon_{NP}]-D³_{DP}] yon-da_{TP}] no_{CP}]
 Nom self(-about)-Gen book read-Past that
 ‘that Yamada read a book about himself’
 b. [[[[John-ga [zibun(-nituite)-no hon_{NP}]-D²_{DP}] yon-da_{TP}] no_{CP}]-D_{DP}]
 Nom self(-about)-Gen book read-Past that
 ‘that Yamada read a book about himself’

The difference between the underlying structure of the pseudo-cleft in (41a) and that of the cleft in (41b) is that the object DP has three copies of D in the former whereas it has two copies in the latter and that only the latter has a D on CP, which is possible in Japanese due to the fact that the complementizer *no*, I propose, is an N as well. Therefore, the whole thing is a DP as indicated. In both (41a) and (41b), however, the clause-final morpheme *no* is a complementizer. In order for all the three Ds in (41a) to be linearized, one of them has to undergo Relativization as shown below in (42a-b), where one D undergoes Relativization, leaving behind the NP *zibun(-nituite)-no hon*.²⁰ Notice that the direction of movement in the three operations is to the right as opposed to the left for English. Notice also that in this case only D, and not DP, is

19 The particle *no* in *zibun(nituite)-no* is here glossed as Gen(itive), but as indicated in parentheses in (40b-c) the whole sequence *zibun(nituite)-no* is a relative clause *which is/was about himself* comparable to the indicative form *zibun(nituite)-da < de-ar-ru*.

20 This is basically the derivation of “head-internal relative” that Takahashi (2015) proposes for examples like (i). The Nominative marker *ga* and the Accusative marker *o* are copies of each other, and the *o* on the complementizer *no* has been moved there by Relativization.

(i) Ringo-ga sara-no ue-ni at-ta-no-o (dareka-ga tabe-ta)
 apple-Nom dish-Gen top-on be-Past-C-Acc (somebody-Nom eat-Past)
 ‘(Somebody ate) the apple that was on the dish’

The existential (as well as copular) verb *ar* undergoes assimilation with the past tense morpheme *ta*, giving *at-ta*.

- (42) a. [[John-ga [zibun(-nituite)-no hon-D³_{DP}] yonda_{TP}] no_{CP}]
 Nom self-(about)-Gen book read that
 --Relativization-->
 b. [[John-ga [zibun(-nituite)-no hon-D_{DP}]+{D'} yonda_{TP}] no ~~D'~~_{CP}] D_{DP}]
 ↓ Cleaving ↓
 c. [[zibun(-nituite)-no hon D_{DP}] Pr_{Pr}] [[[John-ga {D'} yon-da_{TP}] no ~~D'~~_{CP}] D_{DP}] Pr_{TP}]
 self-(about)-Gen book Nom read-Past C
 d. zibun(-nituite)-no hon de John-ga yon-da-no-{ga}-wa at-ta
 e. [John-ga yonda-no-{ga}-wa [zibun(-nituite)-no hon de at-ta]]
 'What John read was a book about himself'

The cleft version can be derived from (41b), repeated below in (43a). Notice that Relativization need not apply here. (43b) (=43a)) can be *cleft* and merged around Pr as shown in (43c). Notice that cleaving leaves one of the two copies of D in the object position while taking the other with the whole DP.

- (43) a. [John-ga_{DP} zibun-(nituite)-no hon]_{-D²_{DP}} yon-da_{TP} no_{CP}]-D_{DP}
 Nom self(-about)-Gen book read-Past that
 b. [John-ga_{DP} zibun-(nituite)-no hon]_{-D²_{DP}} yon-da_{TP} no_{CP}]-D_{DP}
 Cleaving
 c. [zibun-(nituite)-no hon-D_{DP} Pr_{Pr}] [[John-ga_{DP} yon-da_{TP} no_{CP}]-D_{DP} Pr_{Pr}]
 self(-about)-Gen book Nom read-Past

- d. [zibun-(nituite)-no hon-de_{DP}] [John-ga D yon-da_{TP}] no_{CP}]-{ga}-wa] at-ta
 e. [John-ga D yon-da_{TP}] no_{CP}]-{ga}-wa] [zibun-(nituite)-no hon-de_{DP}] at-ta
 ‘It is a book about himself that John read’

Notice that in (43c) the two Ds are now split, though the one before *yon-da* gets a null spell-out because it lacks a complement NP. Notice that the D in the object position of *yon* (<*yom*) ‘read’, which is identical with the D after *hon* ‘book’, gets a null spell-out because it lack a complement NP. The rest of the derivation is the same as in (42).

The difference between the pseudo-cleft and the cleft in Japanese lies in the fact that the former contains a relative clause whereas the latter has a D on CP. If the D in the subject DP is [-Spec] and the D in the predicate DP is [+Spec], we have a specificational (pseudo) cleft sentence.²¹

21 Postscript

Here is a list of projected solutions of the remaining problems of this paper.

- (i) Redefinition of [+Spec] and [-Spec] Ds
 D is [+Spec] if and only if its semantic (as opposed to grammatical) ϕ -feature values are fully specified; otherwise it is [-Spec], which is spelled out as a default neuter singular 3rd person pronoun when it occurs without a complement NP.
- (ii) Hybrid Analysis: Asymmetrical PrP Structure with Predicate Raising
 - a. Moro’s (1997) predicate raising is adopted by allowing Pr to suspend assignment of Essive Case to its complement and assign it to its specifier instead, which forces the predicate to raise for Case, and gives rise to the following two derivations.
 - b. $[\text{DP}_i/\text{T-V}/ [\text{DP}_i \{V\} [\{DP_i\} \text{Pr } DP_i]]]$ (Raising of the subject through SpecVP)
 - c. $[\text{DP}_i/\text{T-V}/ [\text{DP}_i \{V\} [DP_i \text{Pr } \{DP_i\}]]]$ (Raising of the predicate through SpecVP)
 - d. Since either DP can be the variable/value DP, this gives four different possibilities.
- (iii) Moro’s mysterious paradigm: Of the four examples in Moro (1997: 274, Note 87) the only ungrammatical example (iiia) is ruled out as a Phase Impenetrability Condition violation.
 - a. *il suo alibi sono le lettere di Gianni “his alibi is Gianni’s letters”
 the his alibi are the letters of Gianni
 - b. $[\text{DP}_i/\text{T-V}/ [\text{VP}/\text{DP}_i/\{V\} [\{DP_i\} \text{Pr } \{DP_i\}]]]$
 Essive is assigned to DP_i and it further raises to SpecVP for agreement, while DP_j raises to SpecTP skipping SpecVP in vioation of Phase Impenetrability Condition assuming that VP here constitutes a phase. This explains the deviancy of (iia). (In Italian D with unspecified semantic ϕ -feature values cannot agree with V.)

References

- Abney, Steven (1987) *The English Noun Phrase in Its Sentential Aspect*, Doctoral dissertation, MIT.
- Akmajian, Adrian (1970a) “On Derivating Cleft Sentences from Pseudo-Cleft Sentences,” *Linguistic Inquiry* 1: 149-168.
- Akmajian, Adrian (1970b) *The Pseudo-Cleft Construction in English*. Doctoral dissertation, MIT.
- Bowers, John (1993) “The Syntax of Predication,” *Linguistic Inquiry* 24: 591-656.
- Chafe, Wallace (1976) “Givenness, Contrastiveness, Definiteness, Subjects, and Point of View,” In Charles N Li (ed.) *Subjects and Topic*, Academic Press, New York: 25-55.
- Chomsky, Noam (1995) *The Minimalist Program*. MIT Press, Cambridge MA.
- Declerck, Renaat (1983) “‘It is Mr. Y’ or ‘He is Mr. Y?’,” *Lingua* 59:209-246.
- Declerck, Renaat (1988) *Studies on Copular Sentences, Clefts and Pseudo Cleft*, Leuven University Press, Leuven.
- Higgins, Francis (1979) *The Pseudo-cleft Constructions in English*, Garland, New York.
- 上林洋二[Kanbayashi Yoji] (1984) 『指定と措定-ハとガの一面』 [Specification and Predication: Aspects of *Wa* and *Ga*] 筑波大学修士論文 [MA Thesis, Tsukuba University]
- 熊本千明 [Kumamoto Chiaki] (1989) 「日・英語の分裂文について」 [On the Pseudo-cleft Sentences in Japanese and English] 『佐賀大学英文学研究』 17:11-34.
- 熊本千明 [Kumamoto Chiaki] (1995) 「日英語のコピュラ文に関する一考察」 [A Thought on Copular Sentences in Japanese and English], 『佐賀大学英文学研究』 20:49-67.
- Kuno, Susumu (1973) *The Structure of the Japanese Language*. MIT Press, Cambridge MA.
- Lambrecht, Knud (1994) *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge University Press, Cambridge.
- Mikkelsen, Line (2004) *Specifying Who: On the Structure, Meaning and Use of Specificational Copular Clauses*, Doctoral dissertation, University of California, Santa Cruz.
- Mikkelsen, Line (2005) “Specificational Clauses and Clefts,” Paper read at Jahrestagung der Deutschen Gesellschaft für Sprachwissenschaft. Köln.
- 西山佑司[Nishiyama, Yuji] (1985) 「措定文・指定文・同定文の区別をめぐって」 [On the Distinction among Predicational, Specificational and Identity Sentences] 『慶応義塾大学言語文化研究所紀要』 (*Reports of the Keio Institute of Cultural and Linguistic Studies*) 17:135-165.
- 西山佑司[Nishiyama, Yuji] (2003) 『日本語名詞句の意味と語用論』 [*The Semantics and Pragmatics of Japanese Noun Phrases: Referential NPs and Non-referential NPs*] Hituzi Syobo, Tokyo.
- 西山佑司[Nishiyama, Yuji]・西川賢哉[Nishikawa, Ken'ya] (2017) 「指定文の分析において「中核名詞句」なる概念はどこまで妥当か—西垣内(2016)に対する批判的検討—」 [How adequate is the notion of “Core Noun Phrase” in analyzing specificational sentences?: a critical review of Nishigauchi (2016)], 第85 慶應意味論・語用論研究会 [85th Meeting of the Keio Study Group of Semantics and Pragmatics].

- 西山佑司[Nishiyama, Yuji]・西川賢哉[Nishikawa, Ken'ya] (2018) 「指定文の分析において「中核名詞句」なる概念はどこまで妥当か—西垣内(2016)に対する批判的検討—」(A Challenge to Nishigauchi's (2016) Analysis of the Specificational Sentence in terms of the 'Core Noun Phrase'), 『言語研究』(*Gengo Kenkyu*) 154: 177-192。
- Nuñez, Jairo (2001) "Sideward Movement," *Linguistic Inquiry* 32: 303-344.
- Partee, Barbara (1986) "Ambiguous Pseudo-clefts with Unambiguous Be," In S. Berman, J. Choe, and J. McDonough (eds.) *Proceedings of NELS* 16: 354-386. GLSA, Amherst, MA.
- 坂原茂 [Sakahara, Shigeru] (1989) 「コピュラ文と値変化の役割解釈」[Copular Sentences and the Role Interpretation of Value Change] *Etude Française* 25: 1-32. Osaka University of Foreign Studies.
- 高橋大厚 [Takahashi, Daiko] (2002) 「フェイズのリサイクル」[Phase Recycling] 『英語青年』[Rising Generation] Vol. 148: 270-273.
- Tonoike, Shigeo (1987) "Nonlexical Categories in Japanese," *Language and Culture* 4:83-97, Institute of Language and Culture, Meiji Gakuin University.
- Tonoike, Shigeo (2007) "Japanese and the Symmetry of Syntax," *English Linguistics* 24-2: 654-683. English Linguistic Society of Japan.
- Tonoike, Shigeo (2008a) "A General Theory of Relativization," MS, University of Hawaii and Aoyama Gakuin University.
- Tonoike, Shigeo (2008b) "Merge Theory of Binding," MS, University of Hawaii and Aoyama Gakuin University.
- 外池滋生 [Tonoike, Shigeo] (2017) 「指定文を巡って：「変項名詞句」「中核名詞句」についての覚書」[On Specificational Sentences: A Note on "Variable NP" and "Core NP"]、第85回慶應意味論・語用論研究会[85th Meeting of the Keio Study Group of Semantics and Pragmatics]。
- Tonoike, Shigeo (2019) 『ミニマリスト日英語比較統語論』[Minimalist Comparative Syntax of English and Japanese]. Kaitakusha, Tokyo.
- Takahashi, Yohei (2015) *On Relativization: A DP Movement Approach*, Doctoral Dissertation, Aoyama Gakuin University.
- Ueda, Masanobu (1990) *Japanese Phrase Structure and Parameter Setting*, Doctoral dissertation, University of Massachusetts, Amherst.