Author(s): Kazuhiko Fukushima

Proceedings of the Twenty-Sixth Annual Meeting of the Berkeley

Linguistics Society: General Session and Parasession on Aspect (2000),

pp. 89-100

Please see "How to cite" in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via http://linguistics.berkeley.edu/bls/.

The Annual Proceedings of the Berkeley Linguistics Society is published online via <u>eLanguage</u>, the Linguistic Society of America's digital publishing platform.

KAZUHIKO FUKUSHIMA Kansai Gaidai University

0. Introduction

Pragmatics has traditionally and generally been viewed as a performance-based post-grammatical filtering device (see Levinson 1986). An explicit designation of pragmatics as a post-grammatical filter is seen in Gazdar and Klein (1977) who treat it as a kind of 'surface filter', taking effect post-grammatically. Such a position seems to be justified to the extent that the traditional distinction between 'competence' and 'performance' can be maintained. Thus an infamous example like *Colorless green ideas sleep furiously* is a grammatical sentence competence-wise but will be deviant performance-wise.

Or is it? Though the point goes through with the Chomsky sentence, this seems to be only part of the entire picture regarding pragmatics' status as a performance-based filter. A filter-oriented pragmatic approach becomes problematic if what is deemed to be pragmatic turns out to have significant bearing on the workings of the 'core' grammar. The term 'pragmatics' here means "the study of language in a human context of use" (a preliminary definition given by Mey (1998b): 724)¹. But linguistic matters attributed to a human context of use are not necessarily uniform in quality. As shown in the rest of this paper, subsuming them uniformly under the traditional notion of performance is implausible.

This paper proposes NEED-BASED PRAGMATICS: inclusion of (or reference to) pragmatic information in grammar is effected only if *independently* required by grammar. Pragmatics (as a linguistic component if conceived as such²) is distributed over (a) grammatical and (b) non-grammatical domains. The former encompasses, among other things, lexical CONVENTIONAL IMPLICATURES and lexically underspecified grammatical features the values of which are to be determined

¹ This definition is revised by Mey to "the study of language from a user point of view, where the individual components of such a study is joined in a common, social perspective" (p. 725). Since, as Mey notes, this retains a user context as a central notion, I assume the simpler preliminary definition. ² Kasher (1998) clearly states that pragmatics is not a module. The author includes in pragmatics (a) deixis, (b) lexical pragmatical presuppositions, (c) forces of speech acts, (d) performatives, (e) conversational implicatures, (f) talk in interaction, and (g) politeness principles.

Kazuhiko Fukushima

contextually. The latter is absorbed by an inferential system of socio-cultural interactions and includes, inter alia, CONVERSATIONAL IMPLICATURES (Grice 1975). What is attempted here is a re-negotiation on the boundary between competence and performance in such a way that the reference to context of use per se does not demarcate the boundary automatically. The two traditional notions are replaced with (a) the GRAMMATICAL PROCESS(OR) and (b) the COMMUNICATIVE PROCESS(OR), respectively, corresponding to what Green (1982) calls 'knowledge of language' and 'knowledge about language.' This move is not just cosmetic. The former, the focal point of this paper, deals with FORMAL (phonology, syntax, and semantics) aspects of language regardless of the role played by context. The latter, not discussed here (see Green (1982)), forms a complement set of the former.

1. Context and grammar

Among numerous examples of lexically coded contextual aspects that are significant for grammar, we find focus, e.g. English lexical items like *even* and *only*. Focus, as a conventional implicature, is known to influence truth conditions (Rooth 1985). In a context where the speaker introduced Bill and Tom to Sue, and no other introductions took place, (1a) is false but (1b) is true.

- (1) a. I only introduced BILL to Sue
 - b. I only introduced Bill to SUE (Rooth's (3a, b): p. 3)

Grammatically relevant focus information also arises non-lexically from a context of use captured by Engdahl and Vallduví (1996) as INFORMATION STRUCTURE—an updateable information state encompassing FOCUS and GROUND which is independent from a truth conditional dimension of meaning. According to Engdahl and Vallduví, there is a strong correlation between information structure and prosody (i.e. phonology) in English-type languages on the one hand and between information structure and word order (i.e. syntax) in Catalan-type languages.

Penetration of pragmatics into grammar is seen even in the most recent version of transformational grammar, the minimalist program (Chomsky 1995). Uriagereka's (1998: 237) 'topic feature' triggering topicalization is a lexically specified pragmatic feature—after all topicality is a pragmatic notion par excellence. Topic here is a functional feature which is to be syntactically checked by an element that agrees with it along the lines of a derivation seen in (2). (I eschewed movement viewed as 'copy & delete'.)

- (2) a. [$_{Comp}$ [$_{Comp}$ [$_{Comp}$ Top] [I dislike [$_{Top}$ this government]]]]
 - b. $[C_{\text{comp}}]_{\text{Top}}$ this government] $[C_{\text{comp}}]_{\text{comp}}$ [I dislike t_i]]]

For such an account, we need an abstract functional feature hosted in some functional head as well as some lexical designation of topicality for whatever lexical element that gives rise to topichood. This choice is forced, as described below in

more detail, due to the framework's commitment to the competence-performance distinction. Lexical designation of topicality is easy for a language like Japanese where the topic marker -wa exists³ but not very straightforward for a language like English where topicality is indicated by word order. Treating topicality in English as a lexical property strikes me as awkward at best. The account like Engdahl and Vallduví (1996) mentioned above where topicality can be derived from a context of use seems to be a more plausible method.

As examples of lexically underspecified contextual aspects, I will introduce the referential properties of Japanese 'social role terms' (kin and occupational expressions) seen in (3a) (SRTs hereafter; see Suzuki's (1974) socio-pragmatic descriptions on their use⁴). SRTs constitute the central evidence of this paper.

With regard to SRTs which show a high degree of deictic flexibility, we observe instances of underspecified but grammatically relevant features (person/number/gender). As in (3b) below, a (normally) 3rd person lexical item, *sensei* 'teacher', can be used to signify 1st (3b") or 3rd person (3b') depending on the availability of a proper context. We note that the initial NPs in (3b, c) are nominative not vocative, qualifying it for a grammatical subject.

- (3) a. okaasan 'mother' otoosan 'father', sensei 'teacher', omawarisan 'police officer', etc.
 - b. Sensei-ga odor-u(-zo) teacher-NOM dance-PRES(-EMPHATIC)
 - (b') 'The teacher (s/he) dances!' (no special context)
 - (b") 'The teacher (I) dances!' (SPEAKER referring to SELF)
 - c. Sensei-ga utatte-kudasa-i
 teacher-NOM sing-REQUEST-PRES
 'The teacher (you), please sing' (SPEAKER referring to ADDRESSEE only)

Moreover, (3c) is a striking example where the same word can be neither 1st nor 3rd and is forced to be exclusively 2nd person due to the speech act property of the sentence, namely a request.

³ See Fukushima (1999) for a lexical treatment of topicalization in Japanese which remedies short-comings of transformationally oriented accounts. This lexical approach is interesting in the present context due to its demonstration about the effect of pragmatics on lexical rule applications (i.e. a matter of grammar). It is shown that the presence of a purely pragmatic argument of some predicate (e.g. a topic NP) prevents a certain type of lexical rule application to that predicate.

⁴ In a nutshell, SRTs can be used in the following fashion. (a) As non-self addressing/referring terms for people who are socially (age/status-wise) superior to SELF: e.g. you can call your father otoosan 'father' but cannot call your daughter musume 'daughter.' (b) As self addressing/referring terms when conversing with addressees who are socially inferior to SELF: e.g. you can call yourself otoosan 'father' when talking to your daughter but cannot call yourself musuko 'son' when you talk with your mother.

2. Against pragmatics as a post-grammatical filter

Viewed from a perspective of real-time language use (especially comprehension), SRTs seen above render a grammar with filter-oriented pragmatics to be either lexically quite redundant or grammatically (i.e. representationally/ operationally) inefficient and superfluous. To demonstrate this point, let us take the PRINCIPLES AND PARAMETERS (P&P) model (Chomsky and Lasnik 1995)⁵ as an example.

Due to its strong commitment to modularity and information encapsulation, P&P, just as its transformational predecessors (Chomsky 1981; 1986), allows overgeneration and supports strict traditional segregation between competence and performance. In P&P, a linguistic structure is built *step by step* and completed after the progression from an underlying structure to a surface one. Syntax, semantics, and phonology are the 'core' areas of encapsulated grammar where linguistic information flows *uni-directionally* from 'generative' syntax to 'interpretive' semantics and phonology. No provision (other than lexical designations) is made for the incorporation of contextual information into the workings of grammar. In such a model, then, pragmatics (if it were to play a role) would take a backseat and be relegated to a post-grammatical filter⁶.

2.1. Massive lexical redundancy

For a grammar like P&P with a (presumed) pragmatic filter, if no feature underspecification is assumed (see below), an SRT like *sensei* 'teacher' (and numerous others) must have at least three lexical entries differing, for example, only in person. If we consider number (needed for quantification and reflexive agreement; see below) and gender (needed additionally for reflexive agreement; see below), superfluous lexical redundancy of this sort becomes simply overwhelming.

2.2. Representational/Operational inefficiency

If SRTs are to be underspecified for person/number/gender, then filter-oriented pragmatics would make syntax-semantics non-parsimonious. This point is demonstrated based on the following four facts in Japanese: (1) quantification, (2) whstructures, (3) reflexive agreement, and (4) compound formation.

2.2.1. Quantification

SRTs' effect on quantification is shown in (4). Only when *sensei* is 3rd and plural, (4a) is scope ambiguous as indicated in (4b, c). Due to underspecification of feature values and the fact that the actual person value is unknown pre-pragmatically, it is necessary, on the one hand, to tentatively construct (with QR) and retain both (a) an LF structure with wide scoped *sensei* (5a), and (b) another with narrow scoped

⁵ As long as the traditional opposition between competence and performance is maintained, arguments made here will apply to any grammatical theory.

⁶ As Levinson (1983) notes, however, designation of pragmatics as a post-grammatical filter is viable only if a systematic pragmatics already exists. Otherwise counter examples for a grammatical theory would be attributed to presumed pragmatic factors in an ad hoc way.

sensei relative to *dareka* 'someone' (5b). On the other hand, at least one scope-insensitive counterpart like (5c) is needed. Only one of these two possibilities will be relevant when actual person and number values are made available⁷.

- (4) a. Sensei-ga dareka-o sikat-ta teacher-NOM someone-ACC scold-PAST 'The teacher/a teacher/(the) teachers/I/You scolded someone'
 - b. There are teachers such that they scolded a (possibly distinct) person.
 - c. There is an individual such that teachers scolded him/her.
- (5) a. [s teachers $_i$ [s someone $_j$ [s t_i scolded t_i]]]
 - b. [s someone_j [s teachers_i [s t_i scolded t_j]]]
 - c. [$_{\rm S}$ someone $_j$ [$_{\rm S}$ TEACHER scolded t_j]] (with TEACHER = the teacher, I, or you)

If only one derivation/representation is to be constructed deterministically by the grammar, then looping back from pragmatics to syntax will be necessary.

2.2.2. Wh-structures

Continuing with underspecification of grammatical features, if no looping from pragmatics to syntax is supposed, there has to be a tentative derivation for either of (6a, b) pre-pragmatically treating it as a legitimate *wh*-sentence (with *wh*-movement in s-structure (Watanabe 1992) or in LF (Huang 1985)) just in case *sensei* turns out to be 3rd post-grammatically.

- (6) a. Dono <u>sensei</u>-ga utat-ta-ka which teacher-NOM sing-PAST-Q 'Which teacher sang?'
 - b. Sensei-ga dotira-no <u>gakusei</u>-o suisensu-ru-ka teacher-NOM which-GEN student-ACC recommend-PRES-Q
 'Which student does the teacher recommend?'

But, if the person value for the SRT, say 2nd, were already available in syntax, *dono* sensei 'which teacher' would immediately disqualify as a wh-NP: c.f. *dono anata 'which you'. There will be no further syntactic consideration needed, let alone wh-movement.

⁷ Since two co-occurring existential quantifiers do not effect scope ambiguity, we ignore other possible LF structures where *sensei* signifies 'some teacher'

2.2.3. Reflexives

We observe that in (7a) *sensei* is 3rd, masculine, and singular for the reflexive *karezisin* 'himself' but in (7b) it must be 1st, masculine, and singular for *boku-zisin* 'myself'.

- (7) a. Sensei-ga kare-zisin-o home-ta(-noda) teacher-NOM he-self-ACC praise-PAST(-DEC) 'The teacher (he) praised himself' (no special context)
 - b. Sensei-ga boku-zisin-o home-ta(-noda)
 teacher-NOM I_{masc}-self-ACC praise-PAST(-DEC)
 'The teacher (I) praised myself' (SPEAKER referring to SELF)

These facts will receive a non-uniform account in P&P with a pragmatic filter. First, syntax has to establish configurational prerequisites (e.g. the c-command condition, etc.) for binding. Second, person/gender/number feature value agreement between the antecedents and reflexives needs to be examined by pragmatics.

2.2.4. Compounds

The underlined SRTs in compound nouns seen in (8) are exclusively 3rd. If feature underspecification for SRTs is to be retained, P&P with a filter-oriented pragmatics has to suppose a special and arbitrary lexical statement/rule making the person value 3rd for the SRTs participating in compound formation. Such an idiosyncratic and context specific rule is highly suspect. (See section 4 for some discussion on the importance of the person value of a non-head component of a compound.)

- (8) a. okaasanko 'mother.child (i.e. child attached to a mother)'
 - b. <u>omawarisan</u> nakase 'police officer cry.CAUS (i.e. annoyance to a police officer)'

2.3. Summary

With SRTs in Japanese, it has been demonstrated that there are indeed important grammatical features the values of which are lexically underspecified but necessary for adequate descriptions of grammatical phenomena. Inability to access grammatical feature values for person, number, gender that are contextually determined renders a grammatical theory like P&P with a pragmatic filter lexically highly redundant and/or grammatically inefficient and superfluous. Under the current analysis proposed below, the problems are resolved simply as automatic consequences of the theoretical architecture assumed.

3. A monotonic account of social role terms

Though any monotonic/monostratal framework would be able to offer an adequate account for the facts seen above, we assume HPSG (Pollard and Sag (P&S) 1987/1994; Sag 1997; Levine and Green 1999) here. HPSG represents lexical and non-lexical

linguistic signs as a collection of ATTRIBUTE-value pairs that are grouped into PHONOLOGY and SYNSEM. The latter further divides into CATEGORY (syntax), CONTENT (semantics), and CONTEXT (pragmatics). In contrast to P&P, there is no directionality of an information flow between different 'components' of grammar and, for example, information in CONTEXT is accessible from any other components and vice versa. Among the items crucial for this paper, we count (a) CATEGORY with, among other things, part of speech information and ARG[ument]-ST[ructure] attribute indicating valence of predicates, (b) CONTENT including INDEX with PER[son], NUM[ber], GEND[er], etc. for nouns, and (c) CONTEXT encompassing C[ontextual]-INDICES which includes SPEAKER and ADDRESSEE.

Various universal and language specific constraints simultaneously regulate cooccurrence of signs that share information via structure sharing. Thus, contextual information, if deemed relevant, can play an active role in the GRAMMATICAL PRO-CESSOR.

3.1. Basic facts

Unlike pronouns such as *kanozyo* 'she' or *kare* 'he', SRTs like *sensei* 'teacher' are lexically given a 'defeasible' default PER value '/3rd'⁸ (after Lascarides et al. 1996): i.e. *kare*: NP[PER 3rd] vs. *sensei*: NP[PER /3rd]. Pronouns must be referentially rigid or they would disrupt communication totally. Over-riding the default, however, the universal constraints on feature structures (9a, b) force any NP identified with the speaker or addressee to be 1st or 2nd person, respectively.

(9) a.
$$\begin{bmatrix} \text{category NP} \\ \text{content|index [1][per]} \\ \text{context|c-indices [speaker [1]]} \end{bmatrix} \Rightarrow \begin{bmatrix} \text{category NP} \\ \text{content|index [1][per 1si]} \\ \text{context|c-indices [speaker [1]]} \end{bmatrix}$$
b.
$$\begin{bmatrix} \text{category NP} \\ \text{content|index [1][per]} \\ \text{content|index [1][per]} \\ \text{content|c-indices [addressee [1]]} \end{bmatrix} \Rightarrow \begin{bmatrix} \text{category NP} \\ \text{content|index [1][per 2nd]} \\ \text{context|c-indices [addressee [1]]} \end{bmatrix}$$

This accounts for (3b", c) above. If none of (9a, b) holds due to the lack of relevant context, *sensei* will be defaulted to NP[PER 3rd] giving rise to (3b').

At this point, some readers might wonder whether P&P plus a pragmatic filter can be improved to offer a better account than what was described in the previous section, only if we assume the same kind of default. Unfortunately, this is not the case. To avoid inadequacies pointed out above, P&P needs the person (and number/gender) feature specified one way or the other *during* the syntactic computation. Since pragmatics is post-grammatic, an underspecified person feature will always end up being 3rd at the end of syntax. This leaves no room for an SRT like *sensei* to be 1st or 2nd failing to account for (3b", c). What is needed is a pragmatic rule that

⁸ For SRTs, it is also assumed that the NUM attribute has a defeasible default value '/sing' and the GEN attribute is specified as '/neut'. The discussion in the text, however, focuses on PER values for expository simplicity for the most part.

rewrites feature values, but the plausibility and adequacy of such a powerful rule are questionable.

3.2. Quantification

Without tentative multiple representations, the relevant scope-sensitive and ambiguous interpretations and scope-insensitive interpretations become available for (4a) above. With a relevant context (9) or the default, along with other general principles of HPSG, renders the PER and NUM values of *sensei* accordingly. For example, if the NP is [PER 3rd; NUM pl], then interpretations corresponding to (5a, b) (repeated here as (10a, b)) are obtained.

- (10) a. [s] teachers_i [s] someone_i [s] [s] t_i scolded [t]
 - b. [S someone, [S teachers, [S t_i scolded t_i]]]
 - c. [S someone_j [S TEACHER scolded t_j]] (with TEACHER = the teacher, I, or you)

Though narrowing down to one of (10a, b) will depend on further contextual elaboration and the workings of the COMMUNICATIVE PROCESSOR not considered here, we at least eliminated the scope-insensitive readings (5c) (repeated as (10c)) from further consideration. (10a), for example, will be analyzed as (11a). (11b, c) are AVMs corresponding to the quantificational NPs *sensei* 'teachers' and *dareka* 'someone', respectively. ('CARD' is a cardinality function on sets.)

(11) a.
$$\left[\begin{array}{c} \text{QUANTS} < [3], [4] > \\ \text{NUCLEUS} \left[\begin{array}{c} \text{RELATION } scold \\ \text{SCOLDER } [1] \\ \text{SCOLDEE } [2] \end{array} \right] \\ \text{QSTORE } \left\{ \begin{array}{c} \\ \\ \\ \\ \\ \end{array} \right\} \\ \text{RETRIEVED} < [3], [4] > \end{array} \right]$$

b.
$$\begin{bmatrix} \text{DET exists & CARD}([5]) \ge 2 \\ \text{RESTIND} & \begin{bmatrix} \text{INDEX [1]} \\ \text{RESTR } \left\{ \begin{bmatrix} \text{QUANTS } <> \\ \text{NUCLEUS} \begin{bmatrix} \text{RELN [5] teacher} \\ \text{INST [1]} \end{bmatrix} \right\} \end{bmatrix} \end{bmatrix}$$

C.
$$\begin{bmatrix} \text{DET exists} \\ \text{RESTIND} \begin{bmatrix} \text{INDEX [2]} \\ \text{RESTR } \left\{ \begin{bmatrix} \text{QUANTS } <> \\ \text{NUCLEUS } \begin{bmatrix} \text{RELN person} \\ \text{INST [2]} \end{bmatrix} \right\} \end{bmatrix} \end{bmatrix}$$

The analysis here assumes the SEMANTIC PRINCIPLE (final version) of P&S (1994) which divides a sentence into two main components: (1) a list of quantifiers (QUANTS)

reflecting scope relations between multiple quantifiers and (2) a quantifier-free predicative core (NUCLEUS). QSTORE and RETRIEVED attributes are in a set complement relation and, a la Cooper (1983), indicate if a given quantifier has already been scoped or not.

3.3. Wh-structures

The problem concerning *wh*-structures seen in (6) above are handled simply as a matter of lexical compatibility between a *wh*-determiner like *dono* 'which' and its N' sister. Whether or not Japanese has so called '*wh*-movement' needs not to be considered. If it turns out that there is indeed *wh*-movement (not merely 'scrambling' of *wh*-phrases) in Japanese, an account is readily available in HPSG.

The wh-determiner dono has the following lexical entry.

(12)
$$\begin{bmatrix} \text{PHONOLOGY} < dono > \\ \text{SYNSEM}|\text{LOC} \begin{bmatrix} \text{CATEGORY} \begin{bmatrix} \text{HEAD} & \text{det}[\text{SPEC N'[CONTENT}|\text{PER }3rd]]} \\ \text{SUBCAT} < > \\ \text{CONTENT ...} \end{bmatrix} \end{bmatrix}$$

An NP like *dono sensei* 'which teacher' is a *head-marker* structure in which the marker *dono* syntactically selects the head N' that is [PER 3rd]. This means that any instance where an SRT has a non-default PER value would disqualify as a possible wh-NP.

3.4. Reflexives

The current account offers a simpler solution for (7) since binding and accessing of contextual information are achieved simultaneously. With no special context, sensei-ga in (7a) will be NP[PER 3rd; NUM sing] (a default) which can antecede kare-zisin. Due to (9) and the context given, the same NP is [PER 1st; NUM sing], hence a legitimate antecedent of boku-zisin in (7b).

Following P&S's BINDING THEORY, a simplified analysis for (7b) is given in (13) where $NP_{[1]}$ and $NP_{[2]}$ correspond to *sensei* 'teacher' and *boku-zisin* 'I_{masc-self'}, respectively.

(13)
$$\begin{bmatrix} & \text{CATEGORY NP} \\ & \text{NON-HD-DTRS} < \begin{bmatrix} & \text{CATEGORY NP} \\ & \text{CONTENT} | \text{INDEX [1][PER } \textit{Ist}; \text{ NUM } \textit{sing}] \\ & \text{CONTEXT} | \text{C-INDICES [SPEAKER [1]]} \\ & \text{PHONOLOGY } \textit{hometa} \\ & \text{CATEGORY V[ARG-S < NP_{[1]}, NP_{[2]} >]} \\ & \text{CONTENT} \begin{bmatrix} & \text{RELATION } \textit{praise} \\ & \text{PRAISER [1]} \\ & \text{PRAISEE [2]} \end{bmatrix} \end{bmatrix}$$

We notice that, in accordance with HPSG's Principle A, the anaphor *boku-zisin* is LOCALLY O-BOUND by the antecedent *sensei* which LOCALLY O-COMMAND the anaphor. ('O-' stands for OBLIQUENESS of grammatical relations with the subject

Kazuhiko Fukushima

being least oblique.) This holds since the two NPs are co-arguments of the predicate *hometa* 'praised' and the antecedent *sensei* is less OBLIQUE than the anaphor *bokuzisin*.

3.5. Compounds

It is recalled that SRTs in compounds like (8) (repeated here as (14)) are strictly [PER 3rd].

- (14) a. okaasanko 'mother.child (i.e. child attached to a mother)'
 - b. <u>omawarisan</u> nakase 'police officer cry.CAUS (i.e. annoyance to a police officer)'

According to the current approach, this is just an automatic consequence of (a) the lexical default, and (b) LEXICAL INTEGRITY which is a highly plausible and independently motivated assumption. For example, after *okaasanko* is formed in the lexicon, lexical integrity prevents the PER value of the SRT *okaasan* from being altered one way or the other from the 'outside.' But thanks to the default, it will end up being 3rd. We do not need a highly specialized feature-value-altering rule to account for these cases that P&P plus a pragmatic filter has to assume. Such a rule, however, will violate lexical integrity, if applied post-lexically.

Some readers may question the necessity of specifying the PER value of a non-head component of a compound. This is indeed necessary. For one thing, a compound expression like *okaasanko* cannot be used, for example, to indicate the speaker's child in the same way *wagako* 'my.child' can. Also there are compounds like *anata-gonomi* 'you.preference (i.e. a favorite (type/person) of the addressee)' the pronoun in which cannot be used to indicate the speaker or the third party. Thus, though an SRT or pronominal is a non-head element of these compounds, their PER values have an important role to play in interpreting the compound as a whole⁹.

3.6. Summary

The grammatical facts surrounding SRTs in Japanese are shown to be simple consequences of the grammatical architecture assumed (HPSG). There is no need for massive lexical redundancy or superfluous grammatical representations/operations. The GRAMMATICAL PROCESSOR's reference to contextual information (in C-INDICES) is justified (or necessitated) due to the fact that the formal grammar of quantification, *wh*-sentences, reflexive binding and agreement, and compound formation in the language call for it independently.

⁹ The term 'indicate' here does not mean 'refer' because, due to lexical integrity, a non-head component of a compound constitutes an anaphoric island.

4. Discussion and concluding remarks

This paper reviewed the adequacy of the traditional distinction between competence and performance revealed through the designation of pragmatics as a post-grammatical filter. The central issue was the treatment of grammatically significant contextual information. It is suggested that the boundary between the two traditional notions should be re-drawn, as the distinction between the GRAMMATICAL PROCESSOR and the COMMUNICATIVE PROCESSOR, based on grammatical/formal necessity of such contextual information. This in effect, brings about re-distribution of pragmatic information and dissolvement of pragmatics as a linguistic component.

The opposition between the GRAMMATICAL PROCESSOR and the COMMU-NICATIVE PROCESSOR is interesting in the context of some recently developed UNIFICATION-BASED MONOTONIC GRAMMARS (Pollard and Sag 1987/1994; Engdahl and Vallduví 1996; Sag 1997; Fillmore and Kay 1999, etc.) which argue and open up the possibility for the inclusion of pragmatic information in grammatical descriptions. Though such a development is a realistic and positive move, it leaves matters open concerning how much and what kind of pragmatic information should be part of grammatical descriptions. After all an AVM—linguistic structural representation—in HPSG, for example, can include, in principle, any pragmatic information in its CONTEXT attribute. The answer offered by this paper to the open question is that it is not so much the presence or absence of pragmatic information in a structural representation per se as the nature of the two processors (the GRAMMATICAL PROCESSOR and the COMMUNICATIVE PROCESSOR) operating on a structural representation that is significant in discriminating formally relevant/irrelevant pragmatic information. What is allowed by the GRAMMATICAL PROCESSOR is well-formed and pragmatic filtering of well-formed sentences is unnecessary.

References

Chomsky, N. 1995. *The Minimalist Program*. Cambridge, Massachusetts: MIT Press.

Chomsky, N. 1986. Barriers. Cambridge, Massachusetts: MIT Press.

Chomsky, N. 1981. Lectures on Government and Binding. Dordrecht: Foris.

Chomsky, N. and H. Lasnik. 1995. The Theory of Principles and Parameters, in Chomsky 1995, 13-127.

Cooper, R. 1983. Quantification and Syntactic Theory. Dordrecht: Reidel.

Engdahl, E. and E. Vallduví. 1996. Information Packaging in HPSG, in C. Grover and E. Vallduví (eds.). *Edinburgh Working Papers in Cognitive Science*, Vol. 12: *Studies in HPSG*, 1-31.

Fillmore, C. and P. Kay. 1999. Grammatical Constructions and Linguistic Generalizations: the *What's X doing Y?* Construction, *Language* 75, 1-33.

Kazuhiko Fukushima

- Fukushima, K. 1999. A Lexical Comment on a Syntactic Topic, in Levine and Green 1999, 199-222.
- Green, G. 1982. Linguistics and the Pragmatics of Language Use, *Poetics* 11, 45-76.
- Grice, P. 1975. Logic and Conversation, in P. Cole and J. Morgan (eds.). *Syntax and Semantics, Vol. 3: Speech Acts*, 41-58. New York: Academic Press.
- Huang, C.-T. J. 1982. Logical Relations in Chinese and the theory of Grammar. Ph.D. dissertation, MIT.
- Kasher, A. 1998. Modular Pragmatics, in Mey 1998, 739-739.
- Lascarides, A. T. Briscoe, N. Asher and A. Copestake. 1996. Order Independent and Persistent Typed Default Unification, *Linguistics and Philosophy* 19, 1-89.
- Levine, R. and G. Green. 1999. *Studies in Contemporary Phrase Structure Grammar*. Cambridge: Cambridge University Press.
- Mey, J. 1998a. Concise Encyclopedia of Pragmatics. Amsterdam: Elsevier.
- Mey, J. 1998b. Pragmatics in Mey 1998, 716-737.
- Pollard, C. and I. Sag. 1994. *Head-Driven Phrase Structure Grammar*. Chicago and Stanford: University of Chicago Press and CSLI.
- Pollard, C. and I. Sag. 1987. An Information Based Syntax and Semantics. Stanford: CSLI.
- Sag, I. 1997. English Relative Clause Constructions, Journal of Linguistics 33, 431-483.
- Suzuki, T. 1973. Gengo-to Bunka (Language and Culture). Tokyo: Iwanami.
- Uriagereka, J. 1998. *Rhyme and Reason: an Introduction to Miminalist Syntax*. Cambridge, Massachusetts: MIT Press.
- Watanabe, A. 1992. Subjacency and S-structure Movement of WH-in-situ, Journal of East Asian Linguistics 1, 225-292.

Kansai Gaidai University 16-1 Kitakatahoko-cho, Hirakata-shi Osaka 573-1001 Japan

kaz@khc.kansai-gaidai-u.ac.jp