

Shifters, Grammatical Categories and Distinctive Features

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Proceedings of the Twenty-Third Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on Pragmatics and Grammatical Structure (1997), pp. 446-458

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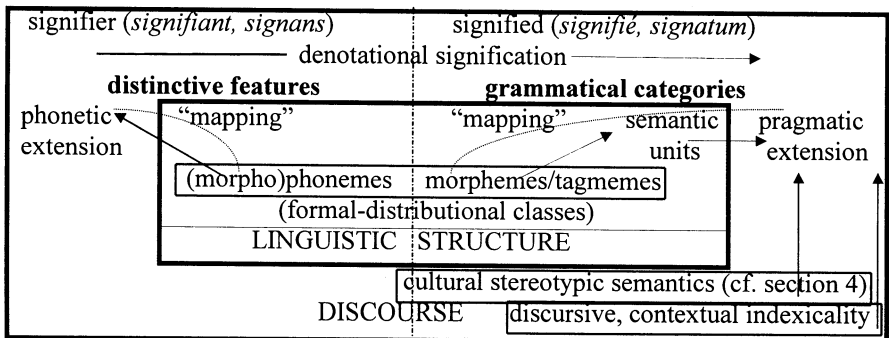
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"Morphology will thus include those classes of words which we define, by analogy with phonology, as bundles of grammatical categories." —E. Stankiewicz (1991:23)

1. Grammatical categories are distinct from formal-distributional classes.¹

Drawing a right analogy from phonology—this has been a central problem in the domain of (morpho)syntax and semantics (cf. Jakobson 1971[1957], Aronson 1991, Silverstein 1993a), since the arguably inceptive phase of modern structural linguistics, when the “phoneme” idea was theoretically articulated by Baudouin de Courtenay, Kruszewski, Sweet, Saussure, Boas 1889, Sapir 1925, Bloomfield 1984[1933], *et al.*, all the way through the inter-war phase, when “the markedness hierarchy of distinctive features” was formulated by the Pragueans (and hinted at by Bloomfield 1984:79), up to, and, unfortunately, partially not including, today, when phonologists (or “phonotacticians”) in some quarters have started to destroy phonology by drawing a wrong analogy from the “filter” idea in a syntactic theory which is, in the first place, based on a wrong analogy drawn from pre-“OT” phonology. That is, as I shall try to show, [1] the correct analogues of regular correspondences between phonemic *forms* and phonetic “*substances*” in the domain of (morpho)syntax and semantics are those between (morpho)syntactic *forms* and semantico-pragmatic “*substances*” (Lyons 1966, 1977); [2] the correct analogue of the *N*-dimensional space of distinctive features hierarchized on the basis of markedness asymmetry (cf. Cherry 1956, Silverstein 1985a, 1987) is “grammatical categories” in the classic sense, as in Bloomfield 1984:270[1933], Whorf 1945, Jakobson 1971[1957], to be strictly distinguished from (morpho) syntactic *form*-classes, discoverable through formal-distributional analyses, be they morphemic (most locally segmentable), morphological (focused on paradigmatic interrelations among morphemes and those syntagmatic units which are highly locally segmentable, coherent and thus “analogizable” with simplex morphemes, such as “words”) or syntactic (“tagmemic”; focused on syntagmatic interrelations among morphological units *qua* sentential and phrasal constituents or bearers of so-called “grammatical relations” or “functions”); [3] the correct analogue of “phoneme” is “morpheme/tagmeme”; hence, *just as* a phoneme is a bundle of features, a morpheme/tagmeme is a bundle of grammatical categories, though, in the case of so-called “function (*vs.* “content”) words,” the number of categories might be a few or “ideally” single (i.e., *no* multiple or overlapping exponence in *any* syntagmatic position where such formal units have the privileges of occurrence); [4] *just as*, to derive an optimal set of distinctive features of the kind called “inherent” (Jakobson and Halle 1956: i.e., “local, segmental”; *vs.* “prosodic, global, supra-segmental”), it is not sufficient—though

necessary—to consider the privileges of occurrence of phonemes in formal syntagmatic positions, e.g., in syllabic structure (onset, nucleus, coda) *or* the articulatory, acoustic or perceptual correlates of phonemes, but *both* are required—that is, just as such “formal-functional double characterization” (*à la* Martinet) is required for getting a right set of distinctive features, a right set of grammatical categories cannot be obtained unless we take into consideration *both* (morpho) syntactic formal-distributions *and* semantico-pragmatic categories; [5] thus, *just as* the markedness hierarchy of distinctive features, partially characterized by *universal* phonetics (*humanly* perceivable and differentiable sounds, *inter alia* those which are saliently so), is needed to map one *L-specifically autonomous* phonological system onto another, a structured set of grammatical categories, partially characterized by universal semantico-pragmatics, is needed to map one *L-specifically autonomous* (morpho)syntactic system onto another (cf. Koyama 1999); [6] similarly, *just as* the markedness hierarchy of distinctive features may be used as a universal, cross-linguistically valid “metagrammar” (cf. “evaluation procedure”) for measuring the “naturalness” of a “structural (re)statement” of a phonological system, which is otherwise purely “autonomous” and the grammatical description of which should proceed completely system-internally in terms of maximal pattern congruity, maximal regularity and “the genius of the language” (e.g., VH in Turkish, palatalization in Russian) *insofar as* it conforms to the universal matrix of “naturalness” (cf. Kisseberth 1969, Hyman 1970, Haiman 1972)—that is, just as the markedness hierarchy of features provides universal constraints (“a calculus of possibilities”) on phonological “spaces” in which particular phonological systems construct unique, autonomous and regular formal patterns, a structured set of grammatical categories provides universal constraints on the freedom of particular (morpho)syntactic systems to build unique, autonomous and regular formalisms (cf. Silverstein 1995, Koyama 1999); and, finally, [7] *just as* “formal-functionally” characterized distinctive features “map” (in the sense specified thus far) phonemic forms onto phonetic “substances,” grammatical categories map (morpho)syntactic forms onto semantico-pragmatic substances (cf. Silverstein 1993b, Koyama 1999). See the following schematization for a two-dimensional visual display of the arguments.



2. Linguistic structure is a formal code for denotational signification.

In view of the current popularity of, on the one hand, reductionist formalism—which infers from the well-argued-for *irreducibility* of linguistic structure to pragmatic factors (be they social, psychological, neuro-physical) the dubious conclusion that the latter are *irrelevant* to the former—and, on the other hand, reductionist functionalism—which infers from the well-argued-for necessary existence of pragmatic constraints on linguistic structure, the similarly dubious conclusion that the *specifics* of formal-structural regularities are *directly determined* by some *general* cognitive/neural factors (cf. Koyama 1997c)—in view of such reductionisms, it is important to recall the double implication of a “discovery” on which modern linguistics has been built: the phoneme idea. First, as is well recognized, the fruitfulness of this idea in attaining theoretical coherence and empirical findings has made it clear that, as most forcefully articulated by Saussure, Hjelmslev, Bloomfield, Chomsky, *et al.*, the domain of “phonemics” (or, more generally, linguistic structure) is irreducible to phonetics (or, more generally, “(per/il)locutionary” speech or *parole*, “what we do with words,” or even “pragmatics” in a wide sense of *Praxis*, “what we do” *simpliciter*; cf. Koyama 1997a). Note that phonemes are *not* mere phonetic *regularities* (not to mention particular phonetic tokens), which allophonic “surface representations” are. Similarly, sentence-*types*, which belong to linguistic structure, are distinct from (though interrelated with), and irreducible to, the statistical regularities of sentence-*tokens*, which belong to the domain of phonetics and *pragmatics* (cf. Lyons 1977).² Notice, then, what (morpho)syntacticians ought to study, if we are to draw a correct analogy from phonology, which, of course, centrally studies regular correspondence patterns between (morpho)phonemes and allophones, is correspondence patterns between (morpho)syntactic formal-distributional structural types and the pragmatic “extensions” (cf. Lyons 1977, Koyama 1997c) which regularly correspond to them, such as reference and modalized predication—or more precisely, the (semantic-)denotational parts of these illocutionary types,³ since not only the denotational extensions of linguistic semantics, but also discursive indexicality (cf. Halliday and Hasan 1976, Bolinger 1979), sociohistoric continuity of usage (cf. Kripke 1972) and “cultural stereotypes” (Putnam 1975) *regularly* contribute to reference and predication in discourse (cf. Silverstein 1981, 1987; Koyama 1997a, b, c, 1999). Thus, it is an error to find analogues of phoneme-to-allophone correspondences in “DS”-to-“SS” interrelationships (or their more “surface-y” equivalents), while marginalizing what deserves to be a central focus of structural analysis—that is, correspondence patterns between (morpho)syntactic forms and semantico-pragmatics—in an awfully powerful “filter”-like “module” of “semantic interpretation” (“LF”), with its radically reconstructive logico-*semantic* devices yielding, moreover, (*not* purely semantico-denotational, but *pragmatico-referential*) *propositions* associable with the *pragmatic* regularities of sentence-*tokens*.

This is, in fact, what the other half of the “double implication” teaches us. The fertile consequences of the “phoneme” idea have decisively shown us that what matters is not mere physical (articulatory, acoustic or perceptual) sounds, but their capacity to signal *denotational signification qua signifiants* (cf. “minimal pair”). Thus, though structural forms—be they phonemic, morphemic or tagmemic (syntactic)—have “autonomy” of their own insofar as they have *sui generis* characteristics (cf. categorical perception; structure sensitivity of, say, movement “rules” and binding conditions; endocentric and exocentric “projections”; *valeur « purement » oppositive, relative et négative*; etc.) and are irreducible to, and only *indirectly* and *interactively* interrelated with, phonetico-pragmatic externalities as a systemic totality (“*un système où tout se tient*,” as Meillet taught us)—despite such formal autonomy, linguistic structure has denotational signification as its teleological, pragmatic-functional *raison d’être* (cf. “means-ends” model of Jakobson 1960). In fact, the most deeply entrenched, if not necessary, conditions for us to call something “a (natural) language” are: [1] its regularities are maximally (relative to those of other semiotic phenomena) *irreducible* to pragmatic, behavioral regularities (“arbitrary,” “symbolic”; *faculté de langue*) and [2] it functions *denotationally* (cf. Benveniste’s papers in his *PLG I, II*). From this, it follows that both reductionist formalism and reductionist functionalism are, *in principle, wrong*.

Thus, pragmatics is important for (morpho)syntax at least as much as phonetics is important for phonology. In fact, this is a correct lesson we should draw from Jakobson’s 1971[1957] seminal paper “Shifters, verbal categories, and the Russian verb” (cf. Aronson 1991). To understand this, recall that, earlier, Jakobson formulated a theory of “markedness hierarchy of distinctive features” on the basis of formal-functional *double* characterization, the one phonological (formal) and the other phonetic (extensional, non-structural, “functional”). First, distinctive features are the logical consequences of the idea of phonemes as distinctively signifying forms; just as phonemes distinguish morphemes one from another, distinctive features distinguish phonemes one from another. What is important to note here, however, is that the inverse relationship also holds, though this may be obvious only in some transparent cases. That is, as clearly seen in minimal pairs, phonemic distinctions are *also* based on morphemic/tagmemic (and ultimately semantico-denotational) differences. Now, morphosyntactic forms, of course, distinguish semantico-denotational units. Inversely, morphemic and syntactic differences are based on semantico-denotational (*as well as*, of course, phonemic) differences. This is clear in some transparent cases where phonemically identical morphemes are distinguished on the basis of their semantico-denotational differences (homonyms). Thus, if we want analogues of distinctive features *within* (morpho)syntax/semantics/denotation, we should use semantico-denotational units (as well as formal ones). But, of course, we need something as universal (cross-linguistically applicable) and widely recurring across languages as distinctive features. Clearly, then, we should not start from

what distinguishes, say, *bank*₋₁ from *bank*₋₂, but *from the top down*, from general and from simple, that is, from universally manifested illocutionary types (reference, predication, deictic types, etc.) and their semantico-grammatical correlates, as Jakobson indeed did in "Shifters," by characterizing grammatical categories by general features based on cross-linguistically valid pragmatics, such as "P(articipant)," "E(vent)," "S(peech)," "N(arrated)."

Second, formal-distributionally, the privileges of occurrence of various phonemes in asymmetric positions in the formal structure of syllable, as investigated cross-linguistically, lead to empirical generalizations about the sonority hierarchy, which may be formulated in terms of the hierarchy of privatively asymmetric, marked-*vs.*-unmarked features and the neutralization of (un)markedness. For instance, a set of phonemes which have maximal privileges to occur in the syllable peak position, i.e., vocalic phonemes, has a characteristic which distinguishes this set from the rest, [+syll]. Moreover, they also have characteristics shared by the less privileged phonemes that are, however, more privileged than other phonemes: e.g., [+son], [+voi], etc. Hence, [+syll] \supset [+son] \supset [+voi], but not the inverse, so that vocalic phonemes are *unspecified* for the features [son] and [voi] (whose markedness values are thus *intensionally* neutralized) and the sonorant-ness and voicedness of their phones are automatically implicated at the level of phonetic discourse, though, such implicatures (*vs.* entailment: cf. Levinson 1983) are contextually defeasible, as in Japanese, where vocalic phonemes have devoiced allophones in some interconsonantal environments. Inversely, those phonemes which have much less privileges to occur in the syllable peak position, e.g., oral plosive phonemes, must be *specified* for the privatively (not equipollently) oppositional values of "+" or "-" for [voi], where "+" signals the specific information about voicedness which "-" fails to signal (i.e., "~(signaling voicedness)," but not "signaling(~voicedness)" (cf. Waugh 1982, Silverstein 1986)). At the level of phonetic discourse, of course, [-voi] implicates unvoicedness, in an effectively equipollent opposition to [+voi], without which, note, such a mere implicature *disappears*, as in the classic Trubetzkioian (*extensional*) neutralization, where the *unmarked* value appears, not signaling voicedness (*vs.* signaling *unvoicedness*).

Observe, now, as pointed out by H. P. Grice, Horn 1984 and Silverstein 1985c, 1986, an exact parallel obtains in the interrelationships between formal (morpho)syntax, grammatico-semantics and pragmatics. As Silverstein 1976, 1981, 1985a, 1987 has articulated in a series of papers, a set of morphosyntactic forms which have maximal privileges to occur in the formal positions that (not necessarily uniquely) correspond to the grammatical category "first person" (a subordinate, specific, complex grammatical category derived from interactions among superordinate, general, simple ones such as "nominal," "nominative/ergative/'agentive' case," "argument of true transitive predicate," "indexical-denotational," etc., as is widely known after Silverstein 1976)—i.e., "first person" forms—has a characteristic which distinguishes this set from the rest, [+ego].

Moreover, they also have characteristics shared by the less privileged forms that are, however, more privileged than other formal units: e.g., [+human], [+animate], etc. Thus, at the level of NP grammatical categories (analogous with that of distinctive features), [+ego] \supset [+human] \supset [+animate] obtains, but not the inverse; hence, the formal unit which corresponds (not necessarily uniquely) to the grammatical category of "first person" is *unspecified* for the features [human] and [animate] (whose markedness values are thus *intensionally* neutralized) and the humanness and animacy of its denotatum are automatically implicated at the level of discourse, though, such implicatures are contextually defeasible, as in syntactically well-formed, yet semantically contradictory/referentially infelicitous or metaphorically effective sentence-types/tokens, such as *I am a book*, etc. (cf. the "colorless green ideas" sentence-type). Inversely, those (morpho)syntactic forms which have less privileges to occur in the syntactic positions corresponding to the superordinate grammatical categories noted above, e.g., (non-speech participant) "animate" nouns (such as *dog-s*, *govern-or-s*) must be *specified* for the privatively (not equipollently) oppositional values of "+" or "-" for [human], where "+" signals the specific information about 'humanness' which "-" fails to signal (i.e., "~(signaling 'humanness')," *but not* "signaling(~'humanness')"). At the level of pragmatic discourse, of course, [-human] implicates un-humanness, in an effectively equipollent opposition to [+human], without which such a mere implicature disappears, as in (*extensionally*) neutralized uses of *animal-*, whose denotational extensions in a universe of discourse include humans, when its contexts of use make the opposition pragmatically insignificant. Note that, again, it is the unmarked value that appears, not signaling humanness (*vs.* signaling *unhumanness*). The parallelism stands.

Third, the hierarchical stratification of distinctive features is constrained/reflected by cross-linguistically manifested formal patterns of phonemic inventories. For example, a cursory look at typological comparisons of phonemes across languages makes clear the "basic-ness," generality, superordination, prototypicality of the distinction between vocalic and consonantal phonemes, in relation to more specific, subordinate distinctions between, say, [acute/grave] (i/u, t/p), between [voiced/unvoiced] (p/b, t/d, k/g), etc. (cf. Jakobson and Halle 1956), as can be formulated in implicational hierarchy. To be sure, such *inductively* derived cross-linguistic generalizations allow exceptions: e.g., despite the overwhelmingly manifested prototypicality of voiceless oral plosive phonemes (p/t/k) in the consonantal set, some Australian languages have only *voiced* oral plosives. This sort of exceptionality clearly indicates the futility of any reductionistically functionalist enterprise which mistakenly locates—essentializingly hypostatizes—typological universals (cross-linguistic generalizations, many of which are extensionally, structure-externally motivated) *within* particular languages *by piecemeal*, thereby destroying their systemic integratedness (e.g., "OT"). Typological universals, being *cross-linguistic* generalizations, do not belong to the same epistemico-ontic order as particular

languages (“grammars”); they are to be seen as indicating the organization of a “metagrammar” which we construct as the markedness hierarchy of distinctive features or the hierarchy of grammatical categories, which we use to *predict* the organizations of particular languages on the basis of cross-linguistically valid implicational relationships, measure the “*naturalness*” of structural (re)statements of languages in view of their conformity to cross-linguistic generalizations, and *explain* the existence or the lack thereof of some phonemic or (morpho)syntactic form-classes on the basis of “functional unity.” For instance, Heath 1975 shows that if a language has a maximally elaborately “grammaticalized” (formalized) system of gender and number, it has a minimally elaborately formalized system of switch-function (e.g., formally calculable anaphoric coreference) and switch-reference (coded by, e.g., “same/different” formal markers), and inversely (cf. Foley and Van Valin 1984:321-74). Only by understanding the *distinct* morphosyntactic form-classes not only as structurally different, but also in relation to these grammatical categories, and the latter in relation to the superordinate grammatical category of reference maintenance, can we satisfactorily *explain* the organizations of particular languages (cf. Koyama 1999). Formal-distributional generalizations yielding hypotheses to be “tested” (“explanations” in some theories), albeit necessary, are not enough.

Similarly, note, different phonological systems use *distinct* formal means (“rules”) to achieve similar ends (“functions”) which conform to typological generalizations obtaining across languages. For instance, Haiman 1972 shows that *structurally varied* VH rules in Turkish, palatalization in Russian, etc., function (“conspire”) to achieve the vocalic triad of /a, i, u/, the prototypicality of which is universally manifested (cf. Jakobson and Halle 1956, Lass 1984). Note, then, that universal generalizations/constraints, which we formulate in terms of the hierarchical organizations of distinctive features and grammatical categories, are satisfied by particular languages in *distinct* formal-distributional means (“rules”), which are *fully integrated* in the particular and “autonomous” *systèmes où tout se tient* (“interactions of rules”). That is, *interactions* of structurally, formally distinct elements correspond to “significant generalizations” and “functional unity,” which are usually phonetically and pragmatically motivated. From this, it follows not only that writing a grammar (e.g., constraints ordered in ranks) that purports to “collapse” (Kisseberth 1970) phonetically/functionally identical, yet structurally distinct rules and *directly* inscribe (essentialize) phonetic/functional characteristics in “rules” (a.k.a. “constraints,” “correspondence patterns”) is *wrong*, but also that there are no one-to-one correspondences between specific forms (be they phonemic or (morpho)syntactic) and “functions” (be they distinctive featural, phonetic, grammatical categorial, semantic or pragmatic), but only many-to-many, “bi-*non*-unique,” “prototypic” *correspondences* (which, alas, many confuse with the non-discreteness of formal classes or featural, grammatical and semantic categorial “functions” *within their own respective domains*, thereby making inexplicable the empirically attested phenomena of “categorical

perceptions," where, e.g., glottalized or aspirated *peripheral* phones and *prototypic* phones of a voiceless oral stop are phonemically *no different*; and Donnellan's (1966, 1978) "attributive" or "*semantic*" (vs. "*referential*" or "speaker") use of definite NPs: e.g., *the animals lions eat* [*whatever they are*], where zebras and penguins are semantico-denotationally *no different*; prototypic correspondences are not the same as non-discrete categorizations).

In so comparing formal systems and deriving typological generalizations from them, we have already made an implicit appeal to phonetic correlates of phonemes (just as formalists make an implicit appeal to semantico-pragmatics in substantively labeling nodes in (morpho)syntactic configurations, setting up *ad hoc* "features" and selection restrictions, etc., in *unprincipled* ways), since cross-linguistic comparison is, strictly speaking, antithetical to the formalist doctrine of the purely "negative" (contrastive, system-internal) definitions of the *valeurs* of structural units (cf. *CLG*). Now, what is so significant about the theory of distinctive features is that generalizations about perceptual characteristics of phonetic units turn out to relatively transparently map onto cross-linguistic generalizations derivable from phonemic inventories of particular languages, and such "mapping" is *principled*, in that the most basic, prototypical distinctions observable across linguistic structures (e.g., [vocalic/consonantal]) are the ones which differentiate those which are perceptually maximally distinctive "polar opposites" (e.g., low vowels vs. unvoiced oral plosives) (cf. Jakobson and Halle 1956, Silverstein 1993a). In other words, the hierarchization of features "evolves"—proceeds—from maximal to minimal contrastiveness: i.e., from general to specific, from more to less salient, and from simplex to complex, a pattern which is also seen in the linguistic coding of "basic color terms" (cf. Sahlin 1976, Silverstein 1993a). Then, we expect to find that superordinate, basic, general and simplex grammatical categories differentiate the most general, simplex illocutionary types such as referring, predicating, deictic indexing, etc., as Jakobson 1971[1957] saw clearly.

3. Grammatical categories, from the top down.

Thus, in the spirit of "Shifters," we try to identify maximally basic, prototypical illocutionary types. By the "functional definition" of linguistic structure made explicit above, it is clear that (1) *reference* and (2) (tensed-and-modalized) *predication* must be one of such prototypic dimensions which "functionally" constrain the organization of grammatical categories (cf. Dixon 1982:1-62). It is easy to see that this dimension is orthogonally cross-cut by that of (a) *paradigmatic* selection and (b) *syntagmatic* sequence.⁴ Consequently, they generate a space of four pragmatically characterized "modules": 1a) *referential paradigm*, 2a) *predicational paradigm*, 1b) *referential syntagm* and 2b) *predicational syntagm*. Note that 1a) corresponds to *nominal* (NP) grammatical categories (e.g., roughly, person deictic, anaphor, demonstrative, proper name, human term, animate term, etc.⁵; further cross-cut by noun class/nominal

classifier, number, etc.; cf. Silverstein 1976, 1986, 1987); 2a) corresponds to *predicate* grammatical categories (e.g., denotational verb class, valence, case *vis-à-vis* arguments, topical ordering of arguments: cf. *give-* vs. *receive-*, aspectual *Aktionsart*); 1b) corresponds to the categories of *reference maintenance* (cf. Heath 1975, Silverstein 1985a, Koyama 1999); and 2b) corresponds to the categories of *interclausal linkage* (cf. Foley and Van Valin 1984, Van Valin 1993). These “modules” seem to comprise a pragmatically correlated general matrix of grammatical categories which maps (morpho)syntax to semantico-pragmatics. See below for a 2-D visual representation of the arguments.

	(1) referential	(2) predicational
paradigm (a)	nominal categories (1a)	predicate categories (2a)
syntagm (b)	reference maintenance (1b)	interclausal linkage (2b)

Recall, here, Heath 1975, which shows that the morphosyntactic form-classes corresponding to the grammatical categories of gender and number in the *paradigmatic* module of nominal categories (1a) “function” as important part of the grammatical category of reference maintenance (1b), which, being a *syntagmatic* phenomenon, is “prototypically” marked by *syntactic* formal-distributional mechanisms of switch-function/switch-reference. This illustrates *interactions* of grammatical categories where paradigmatic grammatical categories are “projected” onto syntagmatic ones (1a→1b), thereby generating the “functional unity” of distinct formal classes. And it is these interactional behaviors of grammatical categories (*independent* variables) that serve as *explicata* for the *dependent* phenomena of prototypic-to-peripheral, *differential gradience* and *gradation* of “grammaticality” of syntactic formal-distributional patterns, such as Rossian “squishes” (cf. Silverstein 1993b, Koyama 1999): e.g., (*syntactic*) (anti)passivizability of sentence-types, a *dependent* variable, is differentially affected by the differences among *independent* variables such as the (*paradigmatic*) categories of NPs as well as the (*paradigmatic*) categories of predicates that figure in such *syntactic* sentence-types, as well as, to be sure, such pragmatic variables as referential thematicity and social indexical deference (as in Malagasy and, metaphorically, Japanese.)⁶

As Jakobson 1971[1957] pointed out, this “matrix” of grammatical categories is orthogonally cross-cut by another “prototypical” opposition, non-indexical types vs. denotational-indexicals (“deictics” and “shifters”; cf. Jespersen 1922): e.g., this dimension of (non)indexicality intersects 1a), 1b), 2a) and 2b), as pervasively manifested in such diverse phenomena as noun compounds (“semantic” vs. “deictic” in Downing 1977), attributively modifying adjectives (“reference-” vs. “referent-modification” in Bolinger 1967), sense vs. referent anaphora, nonspecific vs. specific indefinite NPs, Donnellan’s (1966) “attributive” vs. “referential” uses of definite NPs, etc.⁷ Moreover, once we understand this opposition in terms of the *degrees* of pragmatic (deictic, indexical)

presupposability of referents in felicitous reference, it becomes immediately clear that the very same principle generates, in the domains of 1a) and 1b), the *gradiently* organized “agency” hierarchy of NPs (cf. Silverstein 1976, 1981) and the *gradiently* organized order of co-referential NPs from *less* presupposing (e.g., full NP-*cum*-embedded S) to *more* presupposing ones (e.g., zero anaphora) (cf. Halliday and Hasan 1976, Bolinger 1979, Silverstein 1985a), respectively. With an even finer distinction between two kinds of “presupposability,” i.e., Searle’s (1969) distinction between the pragmatic presupposability of existence and other *quantifiability* of referents, on one hand, and the presupposability of their *characterizability* (“descriptive backing” in Searle 1969), on the other, we can reticulate, in the domains of 1a), 1b), 2a) and 2b), nominal categories in terms of number vs. noun class (cf. Jakobson 1971), predicate categories in terms of aspect vs. verb class (cf. *Ibid.*), nominal classifiers in terms of mensural vs. sortal (cf. Lyons 1977:463), verbal classifiers in terms of aspectual vs. predicate structural (cf. Silverstein 1986), the tightest interclausal linkages in terms of aspectual vs. causative, the tightest non-complement interclausal linkages in terms of temporal adverbial clause vs. conditional, etc., respectively. Thus, *just as* distinctive features reticulate a phonetico-phonological universe, grammatical categories reticulate a universe of denotational-semantics and (morpho)syntax. The parallelism stands.

4. A plea for *grammatical semantics* (vs. *lexical, pre-structural(ist) semantics*).

Semantics, then, should be construed in such grammatical categorial terms from the top down. This is, indeed, what Putnam 1975 has taught us: e.g., the *grammatically* encodable, linguistic semantics of *water-*, e.g., ‘substantive,’ ‘inanimate,’ ‘mass,’ is to be distinguished from its cultural stereotypic semantics, e.g., ‘colorless,’ ‘transparent,’ ‘tasteless,’ ‘thirst-quenching,’ ‘H₂O,’ etc., which varies across speech communities *within* a single linguistic community (cf. Gumperz 1972, Koyama 1997a.)⁸ That is, like (morpho)syntax (cf. Bloomfield 1984:274) and grammatical categorial structure (cf. Whorf 1945), we deal with (linguistic structural) semantics *from the top down*: i.e., those which correspond to superordinate grammatical categories. For example, the *structurally* semantic “content” of the (formally) simplex morpheme *I* is *indirectly, interactingly* and *complexly* determined by its privileges of occurrence in various (morpho)syntactic configurations (e.g., NP slots, case-markings, etc.), which have more direct, more transparent and simpler correspondences with superordinate, basic grammatical categories (e.g., nominal, nominative case, etc.), semantics (e.g., ‘substantive,’ ‘Agent-of,’ etc.) and pragmatics (entity, agent-of-speech, etc.), which generate the more specific and subordinate correlates of the morpheme *I* (e.g., the grammatical category of “first person singular”), by multiply intersecting, and interacting with, one another. Lexicon is, let us recall, a *fully interlocked part* of grammar, as Saussure and Boas taught us in the earliest phase of the first century of structural linguistics.

5. Interlockedness of *langue* and *parole*, or “formalism” and “functionalism.”

And with remembrance we end off this *explication de texte* (jakobsonian). As this century of structural linguistics comes to its *dénouement* (or anticlimax, possibly), let us recall a truth on which our discipline is founded: “*There is no langue without parole and no parole without langue; these two aspects of language presuppose each other, as Saussure put it*” (Jakobson 1990:109). *Linguista sum; linguistici nihil a me alienum puto. Langue and parole: autonomous, yet interlocked. A science of langage, a totality.*

Notes

Acknowledgments: I am grateful for questions, encouragement, and critical comments received from Asif Agha, Bernard Comrie, Daisuke Hara, Isamu Kawaguchi, Jim McCawley, David McNeill, Michael Silverstein and Ming-yu Zheng. I am, of course, solely responsible for the result.

[1] This paper is an extensively revised and, hopefully, improved version of Koyama (1997c).

[2] Similarly, moods and modalities (in structure) are distinct from, though interrelated with, pragmatic regularities of “speech acts” (in the sense of Austin and his followers), as is known by anyone familiar with the vast literature on “indirect speech act” (cf. Koyama 1997a). Similarly, *mutatis mutandis*, for any other “denotational-indexical” types (cf. Jakobson 1971[1957]) and, though more opaquely, for any other linguistic types, the semantico-denotational correlates of which should not be equated with the regularity of reference and modalized predication associable with their occurrences.

[3] They are major parts of what is called “attributive use” or “semantic reference” in the literature of pragmatics, after Donnellan 1966, 1978 and Kripke 1979.

[4] Recall that Saussure postulated paradigmatic (“associative”) and syntagmatic axes in structure *on the basis of* the pragmatic “reality” of such axes in discourse. Note that, in referential pragmatics, as articulated by Firbas, Daneš, and other Pragueans, a theme-to-rheme *sequence* obtains on syntagmatic axis, and a *first* rheme (R1) becomes a theme (T1) in relation to a *second* rheme (R2; note the ordinal *sequence*), where the principle of (referential) equivalence obtains between R1 and T1 along paradigmatic axis (cf. Jakobson 1960 on “the principle of equivalence”). Similarly, in non-referential, social indexical pragmatics (cf. Koyama 1997a, b), as articulated by Ervin-Tripp 1986[1969] under the rubric of “alternative” vs. “(horizontal) co-occurrence” rules, a request-to-reply *sequence* obtains on syntagmatic axis, and the subcategories of reply such as reject and comply are distributed on paradigmatic axis and are (non-referentially) equivalent to the extent that they are replies. Similarly, again, deference (defeasibly) indexed by the use of a token of an honorific “register” may be *followed*, on syntagmatic axis, by another deference similarly indexed, or (paradigmatically) *alternatively*, by the lack thereof indexed by the use of a token of a “plain” or “derogatory register.” Among these (tokens of) alternative registers, the principle of equivalence obtains not only non-referentially (to the extent that they signal degrees of “honorificity,” positive or negative), but also referentially (but not exactly semantico-denotationally, to be precise) (cf. Koyama 1997a, b).

[5] The stipulation of these grammatical categories is constrained morphosyntactically by behaviors of accusative/ergative case-markings (“split case-marking”), and pragmatically by the degrees of presupposability of denotata in speech events (cf. Silverstein 1976, 1981, 1985a, 1987).

[6] *Pace* reductionistic formalists, such pragmatic variables must be *identified and controlled* if we try to describe the linguistic structural, non-pragmatic characteristics of (anti)passives. Also, *pace* reductionistic functionalists, to conflate them under the all-encompassing rubric of some putative, ill-defined and ill-understood “prototype” (e.g., “de-agentivization”) does us no good and is circular as explanation, however intuitively appealing it might be (cf. Agha 1993).

[7] The Donnellanean distinction, in fact, seems to be reducible to the combination of (1) indexical (= pragmatic) vs. “symbolic” (= syntactico-semantic), understood in terms of (2) the Jakobsonian

subtaxonomization of "metalanguage" (*métalanguage*) to "metasemantics" (*métalangue*) and "meta-pragmatics" (*métaparole*); and (3) the Searlean distinction between the presupposability of existence and quantifiability (e.g., uniqueness) vs. that of descriptive characterizability (cf. Silverstein 1985b).

[8] This does not mean, of course, there is no *interaction* between the two *distinct* kinds of semantics. Structural-discursive processes of encoding of such cultural stereotypes into noun classes and nominal classifiers in structure are analyzed in Silverstein 1985c, 1986, 1993b (e.g., *vis-à-vis* Dyrbal); Compound nouns, as analyzed by Downing 1977, show more "micro-level," discursively centered processes.

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