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Categories, features, attributes

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CATEGORIES, FEATURES, ATTRIBUTES

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The recent shift by which such things as Noun, Verb, Transitive, Animate, etc. are considered to be grammatical features rather than grammatical categories confers a gain in flexibility and economy. Instead of viewing words as members of classes, with resulting complications when classes intersect, the class itself becomes a mark of the word. The statement '*Boy* is a Human Noun' is replaced by '*Boy* has the feature [+ Human].'

The notion of member-and-class represents the maximum of dependence between two related entities; one is subordinated to the other. The notion of item-and-feature loosens the bonds somewhat: 'is a' becomes 'has a' and subordination is done away with. Nevertheless the relationship remains close. The lexicon is still required to assign definite features to a definite word, and changing a single feature may signify a change to a different word. A further step toward independence is possible: to separate the word altogether as a semantic entity, leaving a set of grammatical attributes which speakers are more or less free to attach at will.

Thus, to use the example of Mass, we will not say that the word *caramel* 'is a' Mass Noun or 'has' the feature [+ Mass] but that the speaker, when he produces the sentence *Some caramel would make a nice center for this candy* 'views' caramel as Mass; or he may view it as Count and produce a sentence like *Give me a caramel.* The choice is free. With features one who goes to the lexical bank for an item must withdraw all its features along with it; with attributes the two are selected independently.

The change in orientation affects both grammar and lexicon. In the grammar there will be less hue and cry about grammaticality. 'Violations' of at least some grammatical rules become a pseudo-problem. Either a speaker gives a certain attribute to a word, in which case he intends it to be there, or the word will not receive the attribute at all (except as a slip of the tongue). The notion of violations, in so far as it applies to features, presupposes classes with fixed properties which can, being fixed, be mismatched. If they are not fixed they will not be mismatched except by accident, and accidents are trivial. Thus to say *a sugar* is not a violation of the rule that Mass Nouns are not used with the indefinite article. The speaker has simply chosen not to attribute Mass to *sugar*.

In the lexicon the change is not so much in physical appearance as in conception. It will still contain both semantic and grammatical information but the semantic will determine the word as a separate entry while the grammatical will be shown as a set of probabilities. The word *despise* will still be marked as a Verb but the label will not mean that it 'is a' Verb but that it receives that attribute virtually 100% of the time. The word *sugar* will still be marked Mass, but again this will mean—though

with considerably less than 100 % probability—that it receives that attribute. Along with attributes may go some indication of what the probabilities are: 'Mass 89,' for example. The extent to which a given word 'is' something becomes a statistical question and of secondary interest. The interesting questions will be the semantic spectrum of the word and what happens in the grammar if it receives a given attribute or attributes.

Detachable attributes are consonant with the emphasis that generative grammar places on creativity. If attributes can be 'chosen in the base', the poet who attributes Humanness to trees and stones is not making ungrammatical sentences but merely defying a statistic. This is less serious than being compelled, as he is with categories and features, to pick a Noun pre-labeled minus-Human and commit the sin of using it with a + [+ Human __] Verb.

Is the change in viewpoint plausible? I believe that a case can be made for it with at least some of the currently recognized categories or features and certain others as well. An attribute represents a way of conceptually manipulating the entities of experience: grouping them, dividing them, singling them out, reifying them, passing them through time, enhancing them, animating them, etc. I shall use as my main illustrations the attributes Mass-Count, Divisible-Indivisible, and Plural-Singular. The second of these, Divisible-Indivisible, is intended to show that there are attributes still waiting to be identified. To spare the reader the nuisance of making mental translations, I shall use names for both members of each pair rather than refer to +Count, for example, as —Mass.

1. Mass. Viewing Mass-Count as attributes would be more convincing if instances could be found that were neither Mass nor Count, Where a trait or its opposite is always present it seems more logical to regard it as an integral part rather than as something added. Certainly the great majority of Nouns fall to one or the other side of the Mass-Count dichotomy, and yet there are a few which appear to be neither one. A good example is *weather*. By itself it resists the tests that usually identify Mass and Count: *a weather, *one weather, *several weathers*, etc. suggest that Count does not apply; *much weather, *mere weather, *a lot of weather*, etc. seem to rule out Mass. On the other hand, when *weather* is modified it may be viewed as Mass: *I hope we're going to have some good weather*. This agrees with our intuition about the meaning of the word and the meanings of Mass and Count. *Weather* when unmodified is always simply present. It does not progress, like time, and hence cannot be segmented temporally; it does not extend, like space, and cannot be segmented spatially. But *good weather, bad weather, stormy weather, today's weather*, etc. are not merely present but extant. They can be compared, divided up, and measured.

A word that is similarly neutral with regard to Mass and Count is *soldiery*; it is not Count in its usual sense and it becomes Mass only when modified: *too much third-rate soldiery*. Similarly *wedlock* is unlikely to be viewed as either Mass or Count, resembling *marriage* in *Marriage is a happy state* but not in *He performed a marriage*. There are probably many more examples which are apt to be overlooked because unlike *weather, soldiery*, and *wedlock* their commoner meanings are extant rather than merely present or conceived. This is true of many if not most deverbal Nouns. The word *decay* in *It fell into decay* is neither Mass nor Count; but *There is so much decay in our corrupt society* names something extant and measurable.[1] On the other hand, the synonymous *decline* may be rendered Count: *It fell into a decline that rapidly worsened*. The Noun *consent* is normally neutral: *a consent, *two consents, *more consent*; but *An unwilling consent is worse than none*—when modified. More typical is a deverbal Noun such as

loss which is generally transferred to what is lost rather than the act of losing, opening the door to Mass or Count: *There was a lot more loss than there was gain; a greater loss.*

Though really good examples are scarce, they do suggest that a Noun can have a meaning dissociated from both Mass and Count, and that Mass and Count are semantically valid attributes, ways of looking at an entity, which the speaker chooses and applies. His choice will be strongly influenced, but not completely controlled, by the nature of the entity. The word *machinery* is probably viewed 99% of the time as Mass, but the sentence spoken by an educationist, *We have a machinery for dealing with that class of student*, is perfectly normal.

2. Divisibility. The dichotomy of Divisibility-Indivisibility is important in expressions of totality and partiality. It cuts across that of Mass-Count—they are independent variables. The word *all*, though regularly (perhaps without restriction) usable with Mass and Plural, also occurs sometimes with Singular Count and Proper: *All that shipment was destroyed, He stayed all night, All that morning it rained, All West 45th Street was aflame, All England fell prey to the plague, All that area is to become a parking lot, He walked all the way with me, All of one side was paralyzed.* Conversely, of course, with *some of* and *any of*: *Some of the country was upset by it, He walked some of the way with me, Was any of the shipment destroyed?* On the other hand, while *all that day* is normal, ?*all that hour* is marginal and **all that minute* is unacceptable.

Where *all* and *some of* are the best test of the Divisible side, *whole* and *part of* apply to the Indivisible side: both *that whole hour* and *that whole minute* are acceptable. Other examples: **All the machine broke down, The whole machine broke down; *Some of the machine was out of order, Part of the machine was out of order; *All my arm was broken, My whole arm was broken; *Some of my arm was broken, Part of my arm was broken.*

Semantically, the labels Divisible and Indivisible are to be interpreted as 'normally divisible' and 'normally indivisible'. With measurements there is a gray area where one hesitates to think of the unit as further divisible; in measuring time, *hour* is about at that point. While *All that barrelful of good beer was wasted* is normal, ?*All that bucketful of water was spilled* is doubtful and **all that teaspoonful* is unacceptable (except in an Alice in Wonderland context). But *He swallowed the whole teaspoonful* is all right.

With things other than measurements, Divisibility depends on cohesiveness. Contrast amorphous *heap* with delimited *deck: He gathered up all that scattered heap of cards, *He gathered up all that scattered deck of cards.* Something formless, extended, and homogeneous can readily be carved up: *all the way, some of the ocean, all his life.* Something viewed as having definite form, limits, or articulation is not normally Divisible: *the whole corpse, *all the corpse; part of the army, *some of the army; part of the wastebasket, *some of the wastebasket.* Or, if we choose, imposing limits and viewing as normally Indivisible: *the whole way, the whole ocean, his whole life, part of the way,* etc. But if amorphous, hence normally Divisible: *all the sugar, *the whole sugar, all the men, *the whole men*— unless a counter is added, again setting definite limits, whence *The whole ten pages were ruined, The whole box of sugar was soaked.* Both size and cohesiveness are factors in Divisibility: *all that dollar's worth of gumdrops, *all that nickel's worth of gumdrops; The whole ship was inundated, *All the ship was inundated* (but *All the ship was agog,* referring to the—Divisible—complement of passengers).

The attribute Plural normally entails Divisibility just as Human entails Animate. We note this especially in a number of Nouns that may have the attribute Plural but

lack the plural morpheme: *all my family, all the committee, all of the troupe, all the company* etc. contain notional Plurals which in some dialects are formal Plurals as well: *Have the company left yet?, Are the committee (jury) in session?, How about your family—were they with you?* Contrast *Were any of your family there?* with **Were any of the army there?* using partitive *of* (though *Were any from the army there?*, using non-partitive *from*, is normal). Other evidence of Plurality: *The troupe went there as a group, *The troop went there as a group; The rabble went there together, *The regiment went there together; The committee split up to perform their* (or *its) separate tasks, *The platoon split up to perform their separate tasks.*[2]

Our examples show that many entities can be viewed both ways, just as with Mass-Count: *all day, the whole day; all that barrelful, that whole barrelful; All twelve were rejected, The whole twelve were rejected.* And again as with Mass-Count there are entities that will not be viewed either way, notably Nouns with the attribute of Human: *The whole machine was out of order,* but not **The whole man was sick.* On the other hand, viewing the entity as a normally Indivisible assemblage of qualities, *We must educate the whole child.* Divisibility-Indivisibility is a pair of contrasting attributes with a meaning of their own, applicable at the will of the speaker but conditioned by how he conceives the nature of entities.

3. Plurality. It is generally thought that the dichotomy of Plural-Singular depends on that of Mass-Count: Mass Nouns must be Singular, Count Nouns may be, but only Count Nouns can be Plural. There is no denying that this is generally true, but the two pairs of attributes can vary independently. We are not only free to regard Singular Nouns as either Mass or Count *(There is simply too much book here to read; I'm going to read one book)* but can do the same with Plural Nouns. A Plural may be viewed as made up of individual, Countable parts or as an undifferentiated Mass. The counters that express the distinction are mostly the same ones that are used with the Singular: *He has some money* and *He has some dimes* would be marked, if the same notation were used for attributes as for features, as [+Singular +Mass] for the first, [+Plural +Mass] for the second. Here is where the difference between a feature or categorial analysis and an analysis by attributes differ most sharply: having decided that *dime* 'is' a Count Noun or 'has' the feature [+Count] or [—Mass], the former are unable to express the semantic status of *some dimes.* With attributes the difficulty vanishes, for there is no frozen connection to be got rid of. The contrast between *some dimes* and *several dimes* parallels that between *some money* and *a dime.*

With counters that diminish, the possibility of viewing as Mass goes down; the smaller the collection, the harder it is to conceive of it as a heap and not as a precise sum. So, while *I'm glad he still had some friends left* and *I'm sorry he had so little money left* are normal, **I'm sorry he had so little friends left* is not. But as with Mass-Count and Divisible-Indivisible, the nature of the entity makes a difference too. Friends are apt to be individualized. Some plurals, such as *brains* and *spirits,* are normally Mass: *That guy has so little brains he's practically an idiot, The drink had so little spirits that there was no kick at all.* But other plurals are possible too if the speaker is indifferent to individuality: *You'll find that that recipe contains very little dried milk solids. Very few dried milk solids* would probably refer to chemically distinct solids. With *pains* we have a choice: *You'll have to take a little (a few) pains if you want to accomplish something.*

Other counters that carry the distinction are *much-many* and especially the comparative *less-fewer: Don't eat too much Rice Krispies (oats, cornflakes); Do you get much suds from this soap?; How much royalties do you get from your book?* (some

speakers prefer *How much in the way of royalties*); *You pay to use these toll roads and you get less facilities than on a state highway*; *We'll have less taxes* (*less dues*) *to pay*; *It's safer because less fumes are emitted.* Upward comparison, like larger quantities, favors Mass, and there is only the one comparative, *more* (which, however, can be made Count by adding a numeral: *I have more, I have ten more*); but downward comparison, like smaller quantities, retains the possibility of individualization though many speakers do not themselves use the distinction *less-fewer: I have fewer sisters than you.* Erades cites the contrast (I modify his examples slightly) between *He has less business affairs* and *He has fewer love affairs.*[3]

These examples make it clear that the occasional practise of referring to Mass-Count as 'lexical number' is in error and that the two pairs of attributes should not be confused. As Erades says, 'It is important... to emphasize..."intended to be taken" and "thought of", for there are ideas that can be looked upon from a quantitative as well as a numerical point of view.' In other words, attributes rather than categories or features.

It would be as easy to advocate the feasibility of attributes with Animate or Human, but perhaps harder (certainly harder given our habits of thought) to do so with Noun or Verb—this would call for recognizing a single lexical entry such as *run*, to which the attribute Verb would apply in *I run* and the attribute Noun in *two runs*. Given the readiness with which 'conversion' takes place between Nouns and Verbs this seems reasonable at least for English, though the advantages of detaching these and the other classical parts of speech are not so clear. Nevertheless it seems that the notion of 'inherent' needs a general reevaluation in the light of the speaker's freedom to conceptualize the meaning of a single lexical entry in a variety of ways.

NOTES

[1] I surmise that *It fell into complete decay* is based on *It fell completely into decay.* See Bolinger, 'Adjectives in English: Attribution and Predication', *Lingua* 18. 5 (Amsterdam, 1967).
[2] In the main, the attribute that I call Divisible corresponds to the feature recognized by Southworth as N_{group}. See Franklin C. Southworth, 'A Model of Semantic Structure', *Language* 43.347 (Baltimore, 1967).
[3] P. A. Erades, 'Points of Modern English Syntax', *English Studies* 35 Nos. 3 and 4, § 74 (Amsterdam, 1954).

RESUMÉ

Kategorie, vlastnosti, atributy.

   Ztrnulému přístupu k charakterizaci podstatných jmen je možno se vyhnout tím, že u podstatných jmen neuvažujeme o tom, že „patří" do určité třídy (jako životná, látková, množná atd.) nebo že mají znaky těchto tříd jako své inherentní vlastnosti. Třídy však považujeme za nezávisle existující atributy, kterých mluvčí užívá podle libosti.