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Drift versus Diachronic Universals
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This paper will re-examine and contrast the concepts of Drift and Diachronic Universals as predictive mechanisms for language change. I will demonstrate that instances of historical change previously characterized as drift can more insightfully be analyzed as applications of diachronic universals, or as resulting from rule changes which also have broader or parallel effects elsewhere in the grammar.

The concept of drift was introduced by Sapir to describe general trends of historical development in modern European languages, in particular English. Although he discusses a variety of specific changes, he is primarily concerned with three major drifts: the leveling of subject and object cases; the development of fixed word order; and the drift toward the invariable word. According to Sapir, language changes are random phenomena "like the waves of the sea, moving backward and forward in purposeless flux." Linguistic drift operates like a selection process, defining the direction of the historical trend. The drift of a language is constituted "by the unconscious selection on the part of its speakers of those individual variations that are cumulative in some special direction." The drift is unconscious, in that it cannot be discovered from the examination of a synchronic grammar, and it is retrospective rather than predictive in that it is recoverable only by looking at changes in the syntax or phonology over a period of time.

Drift, as Sapir conceived of it, makes no universal claims. It is a language-specific phenomenon, since it is the result of selections made by its speakers at a given point in time. Several related languages might in principle participate in the same drift, but the history of Indo-European languages reveals several conflicting drifts. In inflection, the range is from highly synthetic (Lithuanian, Tocharian) to highly analytic (Italian, Modern Persian). All three major word order types are represented: SVO, the most common type in European languages with the exception of Celtic; SOV (Indic, Iranian); VSO (Celtic).

Although Sapir gives examples of drift, he never defines it or describes in detail how it operates. Drift can perhaps be considered as a succession of changes, perhaps gradually affecting, for example, a sequence of morphological categories. Changes establish channels for the occurrence of other changes, and diachronic processes become habitual. A speaker can perhaps sense that case marking is on the way out; then, for no phonological reason, additional distinctions are given up. This is imprecise and is not predictive, since Sapir himself warns that the direction of drift can shift unpredictably.

Robin Lakoff described drift as a metacondition on the way the grammar as a whole can change. For example, "if there is a choice between a rule and a lexical item to produce a surface structure containing independent segments, as opposed to one containing morphologically bound forms, pick the former". This metacondition is as difficult to characterize as Sapir's drift. It is not part of the

synchronic rules, nor can it be identified or learned by the speaker. Lakoff proposes that it may act as a linguistic pendulum.

Vennemann proposes two purportedly new explanations of drift. One is the word order change XV or VX, according to his principles of natural serialization. These are merely a restatement of Greenberg's "Some Universals of Grammar", according to which Vennemann correlates the loss of subject/object case marking with the word order change which took place in most European languages. He fails, however, to motivate the word order change itself, beyond proposing an intermediate stage TVX, in which the topic material precedes the verb. Another objection to his strategies is that they account for only one direction of change (reduction of a morphological system by phonological change, followed by a word order change XV to VX), when clearly others are possible: a language can renew its morphological system without changing its word order (Ossetic); a language need not require rigid word order, even if subject and object are not explicitly distinguished (Isthmus Zapotec); a language can change its word order without obliterating its morphological system (Uralic).

Drift can then be observed to have the following limitations. It is a description of events, not a prediction of them. It provides a direction of change, but no motivation. Thus it is teleological but not predictive. It is necessarily language specific, so there are no universal applications. The weakness of the concept of drift is indicated by the fact that no specific drift can be disproved by counterexamples. The drift may or may not continue beyond an arbitrary point of time, and may or may not be found in neighboring or genetically related languages.

A diachronic universal may be formulated as an implication of one of the following types: if conditions x and y are satisfied, then change z (or the addition of rule z to the grammar) is either (a) likely to take place or (b) may take place. It is a weak form of universal, because it stipulates conditions, but does not guarantee the change at any given time, or ever. A stronger form of the universal is the resumptive form: if a state q of the language is known to exist, and a state p at an earlier period, then change z must have taken place, and preconditions x and y must have been fulfilled. This form of implication is stronger because it is specifically predictive and hence positively verifiable.

For example, consider the formulation of analogy as a diachronic universal. Analogy is a term which has been used to describe a variety of linguistic processes; in the diachronic context it properly refers to the use of a proportion to explain the motivation or direction for historical change. If one assumes an analogic proportion of the type: $a:b=c:x$, and the forms a and b stand in a certain relationship, then a new form (or pattern) x can be developed from c on the model of the relationship of a and b. Thus if a language has a and b in the above relationship, and if it has c, then the prediction is that it will develop x by the same process z which produced b from a.

The phonological and morphological changes connected with the loss of case markers in the development from Late Latin to early Romance and the concomitant syntactic changes have been the most frequently discussed examples of drift. In particular the loss of final

-m and the changes in the timbre of the resulting final vowels collapses the singular of the first and second declensions; final -s of the nominative plural is preserved in Western Romance (French and Spanish) where it develops into a plural marker. Final -s is lost in Eastern Romance (Italian and Rumanian); in these languages the number distinction is marked by a vowel contrast which roughly approximates the predicted reflexes of the final Latin vowels; the evidence of the consonant stems indicates that the accusative was adapted as the base form.

Prepositions, which already existed in Latin, were extended to specify the grammatical relations, some of which had been designated by case suffixes alone, others by combinations of case markers and prepositions. Two types of explanation have been offered for this course of development. One asserts a drift tying the phonologically-conditioned loss of case affixes to the expansion of the role of prepositions. The second relates change of word order to loss of inflection, claiming that loss of case marking entails a shift of SOV order to SVO.

In respect to the phonological changes and the collapse of the nominal paradigm, Brøndal's principle of compensation can be restated as a diachronic universal to account for the morphological developments. Specifically, the principle states that the unmarked member of a pair preserves more categorial distinctions than the marked one. Therefore, if a distinction is lost in the unmarked member, it will also be lost in the marked; if it is restored (or if a new one is introduced) this will occur, at least initially, in the unmarked member. Thus the loss of case markers in the singular precludes their maintenance in the plural, and the plural case markers may be eradicated by non-phonological means. On the other hand, it can be predicted that the marked member of an opposition is likely to have a form which is more overt and more highly characterized. Thus if a phonological change produces zero in both a marked and an unmarked member of a declensional set, it can be predicted that, if a new highly characterized form is introduced, it will be in the marked member.

Other cross-linguistic predictions which will account for changes that have been attributed to drift include the following: (1) If a language has adpositions (and all languages appear to) their grammatical range will be extended to express the grammatical relations for which the case markers have been lost. Latin ad + the accusative case (whose affix is itself later lost), which is a directional phrase, appropriately becomes the indirect object marker; de + the ablative case, indicating partitivity, or in a Jakobsonian sense quantification, becomes the genitive marker. These changes can be observed in the syntax of Late Latin, and are finalized in Romance. (2) New cases can be derived from adpositions only if the word order in the Noun Phrase is Modifier Noun Postposition. This implication is supported by the fact that most languages with productive case affixes tend to be primarily suffixing, and that if independent lexical items are reduced to affixal status, they will normally be conjoined to the independent word to which they are contiguous; thus it is unlikely that Latin, whose case markers are exclusively suffixes would have developed

new case markers from its prepositions. (3) Many languages have, or had at an earlier stage, a tripartite system of number marking, that is a singular, a plural and a dual. There is a well-known tendency among languages which possess or possessed this system, to reduce it to a two member, singular/plural system. The predictability of this change follows from the markedness of the three terms, by which the dual, being the most highly characterized, is the first to be lost. Thus, implicationally, if a language has a dual it also has a plural, and conversely, if a language has lost its plural, it has also lost its dual. (4) Another application of the same diachronic universal is to the categories of the pronoun and the noun. Since the pronoun is unmarked relative to the noun, the categories of number, gender, and case are preserved longer in the pronoun than in the noun, according to the extension of the principle of compensation. So if these categories are eliminated from the pronoun, they will also be from the noun. (5) Among nominal categories case is less stable than gender or number. There is no indication, however, that the Uralic and Altaic languages, which have maintained and renewed extensive case systems, ever expressed gender as a morphological category. Thus if a language has lost its number and gender marking, it will also have lost its case marking (but not necessarily vice versa). Consider the development from Latin to Western Romance whereby the declensional system developed from one in which case, gender, and number were synthetically indicated to one in which only the singular-plural distinction is expressed by suffixes on the noun. (6) The development of the definite and indefinite articles has been analyzed as part of the "drift toward the invariable word" (Sapir). At best, this is a description of linguistic events, not an explanation of them. Many linguists have commented on the close relationship which is known to hold near universally between the definite article and the demonstrative on the one hand, and between the indefinite article and the numeral one on the other. This developmental relationship exists for example in respect to the

Definite article: Indo-European, Semitic, Bantu

Indefinite article: Indo-European, Altaic, Semitic

There is a general type of development that can be observed in both of these syntactic adaptations. That is, as the demonstrative and numeral develop into definite and indefinite articles, their functional characteristics as demonstrative and numeral are weakened. In Aramaic, as Greenberg has pointed out, the demonstrative gradually develops, first into a definite article, then into a generic article, and finally into the mark of the noun itself as a part of speech. In the Western Romance languages, the demonstrative develops into a definite article which is an independent word also marking the gender of the noun. In Rumanian, the definite article was suffixed, producing a new declensional pattern which distinguished direct and oblique cases.

Rumanian	Masculine		Feminine	
	sg.	pl.	sg.	pl.
Nom./Acc.	domnul	domnii	casa	casele
Oblique	domnului	domnilor	casei	caselor

The development of the indefinite article shows a similar gradual semantic shift away from the scope of the numeral; this development is well documented in the Romance languages, and has also been described by Givón (1976) for Modern Hebrew. In Turkish the same form serves as indefinite and numeral. (Probably originally a numeral, as other Altaic evidence indicates, for example the common Altaic postposition bilán "together with" whose stem has been etymologized by Raasonen as a nominal derived from the numeral one.) Turkish differentiates the indefinite and numeral constructions by word order:

bir iyi adam 'one good man' versus iyi bir adam 'a good man'. Because of the near universality of these two developments, they are perhaps better to be described by an implicational universal than as part of the "drift toward the invariable word". Such a universal might be stated: if a language has developed a definite or indefinite article, its likely source will be the demonstrative or numeral one, respectively. (7) As a final foray into comparative methodology, consider a problem of historical phonology: the loss of final consonants and the development of tone in Sino-Tibetan. The loss of final consonants and the concomitant development of tone in Sino-Tibetan has been considered by some to be a drift in these languages. The former existence of these lost final consonants may be deduced from the rimes in the Shi-Ching and by comparison with related languages such as Tibetan. Various scholars such as Karlgren, Li, and Pulleyblank, in their analyses of the origins of tone have proposed various final consonants whose loss precipitated specific tones. For example, Karlgren has proposed that the loss of final -b/-d/-g has given rise to the Ancient Chinese departing tone. (Greenberg has proposed a similar origin of tone in West African languages, namely that a voiced consonant produces a low tone through the intermediate stage of voiced aspirate or breathy voice.) Note, however, that the feature of tone was not developed in Yenisei-Ostyak, a Sino-Tibetan language spoken in Northern Siberia. This might lead us to conclude that the development of tone in Sino-Tibetan was not a language-specific family drift at all, but rather an areal feature of East and Southeast Asia, possibly originating in the Miao languages. The type of diachronic universal one would like to postulate to explain these developments would be the following: if a consonant, or loss thereof, produces tones, then a voiced consonant would tend to produce a lower tone and a voiceless consonant a higher tone. The well-known splitting of the four Ancient Chinese tones into upper and lower registers depending on the voicing of the word-initial consonant may be taken as further evidence for this tentative universal.

Conclusions. These examples suggest that it is unnecessary, and in fact counter-productive, to predict (or explain) language change using statements which are language specific, or limited to specified, genetically-related language families. It is such statements which (with some tightening of variant terminology) we refer to as invoking drift to describe language change. Prior research has focused on affirmative drift statements -- that is, statements which select particular types of rule changes (or ultimate impacts of rule changes on the structure of the language) as being particularly likely to occur in stipulated language-specific contexts. It is interesting that most or

almost all past effort aimed at formulating such drift statements has been focused on Indo-European historical phenomena.

Examination of the same primary body of data gave rise, in other hands, to a conceptual apparatus and body of theoretical insights which, via Jakobson and others, have passed into more modern and integrated theories of linguistic process. At the same time, broadening historical studies have achieved wider validation of findings first encountered in the Indo-European context. These include the concept of markedness and its implications, the principle of compensation, and the so-called 'laws of analogy.' Greenberg's elucidation of synchronic and diachronic universals provides a general model for the evaluation of such statements, and the development of new ones.

A diachronic universal can be viewed as a statement of the relative likelihood of particular rule changes. These statements admit contexts which refer to the synchronic state of the grammar, or its antecedent diachrony. However, unlike statements of drift, they do not admit language or language-family restrictions in their contexts. A diachronic, like a synchronic, universal is useful if its predictions are valid with better than chance frequency. Diachronic universals are explicitly selective and relative: they are not limited to prescription of particular changes that are predicted to occur, but embrace contrasts between relatively probable versus improbable changes.

The utility of the concept of the diachronic universal is already well established. The burden of this paper has been to demonstrate that, using such universals, we can formulate statements which address the same historical phenomena that have been previously treated by the positing of 'drifts', achieving explanations which are more general, insightful and economical than those arrived at by reference to 'drift'. When this is done, the focus shifts to the question of whether there are, in fact, any instances in which 'drift' provides the best available explanation of historical developments. If not, the notion might well be abandoned. In any case, it would appear that effort can most productively be directed at this stage to further refinement and systematization of diachronic universal findings, particularly those which embody or derive from antecedent assertions of 'principles' of language change.

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