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ABSTRACT

Six papers dealing with crosslinguistic generalizations are summarized and discussed here. Two of them were about question structure: "Language Universals and Sociocultural Implications in Deviant Usage: Personal Questions in Swedish" by C. Paulston and "Valley Zapotec: Identical Rule for Both wh Question Movement and Relative Clause Constituent Movement" by H. Rosenbaum. W. Lehmann's "On a Structural Principle of Language and Its Implications" and J. Ross's "Primacy" dealt with subjects and objects. "Remarks on Possessives" by R. Underhill concerned possessive constructions in Turkish, English and Thai. C. Kessler described a study of English-Italian bilingual children in her paper "Contrasts in the Acquisition of Syntax in Bilingual Children." (Author/PMP)

Report on the 1971 Winter Meeting of the Linguistic Society of America from the Point of View of Language Universals and Typology

Edith Moravcsik

There were six papers presented at the 1971 LSA Winter Meeting in Saint Louis which concerned themselves with crosslinguistic generalizations. Two of them were about question structure, given by Christina Paulson from the University of Pittsburgh and by Harvey Rosenbaum from the University of Texas, two dealt with subjects and objects, by Winfred Lehmann from the University of Texas and by John Ross from Harvard University, one was about possessive constructions, by Robert Underhill of Harvard University, and one was about language acquisition, by Carolyn Kessler from St. Mary-of-the-Woods College. We will summarize these papers and discuss some of what they claim.

Crosslinguistically recurrent properties of question structure that were discussed by the Rosenbaum and the Paulston papers are the similarity of wh questions to relative clauses and reference to the hearer in a special type of wh question. The particular resemblance between relative clauses and wh questions discussed in the Rosenbaum paper, entitled Yalley Zapotec: identical rule for both wh question movement and relative clause constituent movement[1] is this: in ZAPOTEC, neither relative clauses nor wh questions must contain the so-called "definite future tense". In other languages, many other shared properties have been observed related not only to verb conjugation but also to word order and the shape of question words, question particles and conjunctions.[2] Since the formation of both wh questions and relative clauses involves a movement rule which is unbounded, since both

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[1] To be published in Festschrift for A.A. Hill and Bach-Peters' NSF report on research conducted under NSF Grant 2468, under the title Constraints in Zapotec questions and relative clauses. The present summary is based on this expanded and revised written version.

[2] See Farwell 1972, in the present issue.

of these rules have to mention in their structural indices the verb of the clause into which the constituents will be moved, and since a change of Rosenbaum's informant's judgement over a period of two months took place concurrently in both of these clause types, he suggests that perhaps the same rule is operative in the formation of both of these sentence types in ZAPOTEC and, perhaps, in other languages as well.

Paulston in her paper entitled Language universals and socio-cultural implications in deviant usage: personal questions in Swedish investigated properties of questions of a certain type in SWEDISH. Against this background, she focuses on an interesting theoretical problem: how to deal with exceptions to generalizations; in particular, to universal laws. The summary of the paper is this. Eleven ways of expressing 'What do you want?' in SWEDISH are presented and analysed, and it is found that only two of these contain reference to the addressee. This is said to be in conflict with a language universal. The explanation of this deviant usage is seen in factors related to societal change. Sweden is now in a stage of development from a "still highly stratified community in terms of social class and the Social-Democratic ideology of equality". According to official policy, of the two available second person pronominal forms whose use once expressed social unequalities, now only the more intimate du is to be used. People, however, still feel uneasy about the informality of this address form and rather avoid referring to the hearer altogether. This way of accounting for the lack of second person forms in this question type is then generalized: Paulston suggests that "if a language possesses... (a) universal language feature but under specific conditions systematically avoids this feature with circumscriptions, then this particular language usage contains clues to the socio-economic conditions in that social structure."

The lucidity of the argument leaves something to be desired. It is not clear to me what is the particular language universal with which

the avoidance of reference to the addressee is in conflict. Paulston quotes Hockett's universal: "Among the deictic elements of every human language is one that denotes the speaker and one that denotes the addressee."; but the avoidance of you-forms in certain questions does not conflict with this statement. She also mentions that there is a universal tendency with respect to questions which ask about "the addressee's opinion, want, feeling, or experience" to formally denote the addressee. To this, the SWEDISH case does appear to provide a counterexample, but the tendency itself would have to be more carefully defined and its validity documented. But the notion "universal" is not really relevant to the sound methodological point Paulston makes. What her data actually show is that deviance from a rule of "grammar-book grammar" (whether it happens to be a universal rule or not), or change from one norm to diverse usage can be explained in terms of societal factors; or, more generally, that observing the lack of manifestation of some generalization, one may find the explanation in the influence of some other law of greater force which takes precedence. The application of this general principle in accounting for exceptions to universals has been recognized and made use of by linguists such as Alan Bell (Bell 1970) and Charles Ferguson (Ferguson 1971).

Next, we will turn to the two papers which discussed subjects and objects. Lehmann's paper entitled On a structural principle of language and its implications argued for the typological significance of the Object over the Subject and Ross's paper entitled Primacy illustrated the grammatical primacy of the Subject as opposed to the Object.

Lehmann sets out to find an explanation for a correlation between a syntactic and a morphological fact which he had observed in the languages of the world. The observation is this: many languages whose basic surface order includes OV are agglutinative whereas consistent VO languages are inflectional. The explanation he proposes is the

following. He assumes a general principle which states: "Modifiers are placed on the opposite side of a basic syntactic element from its primary concomitant." If markers of categories such as negation, causation, or reflexive action are interpreted as modifiers to the Verb, then, according to this principle, they have their place assigned on the side of the Verb where the Object, the Verb's "primary concomitant", is not. In particular, in OV languages the predicted pattern is O-V-Marker and in VO languages, Marker-V-O. Postverbal markers Lehmann suggests then give rise to agglutinative morphology and preverbal ones to inflection. The paper provides rich documentation of how negation, causation, reflexivity, reciprocity, interrogation, and moods such as the optative, desiderative and potential are agglutinatively marked in OV languages such as JAPANESE, TURKISH, QUECHUA and SANKETI [illegible] and in VO languages such as CLASSICAL HEBREW and SQUAMISH. Implications of the proposal especially with respect to INDOEUROPEAN are discussed and additional typological properties, mostly from the realm of phonology are pointed out of the basic language types. Passing by the various queries and problems that arise in the reader's

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[illegible] foremost of these is this: why should preverbal marking [illegible] inflection and postverbal one in agglutination? One would rather expect the former to give rise to prefixing and the latter, to suffixing. That inflection and suffixation are in fact correlated with basic order types is suggested by three of Greenberg's universals (number 3, 4, and 27 in Greenberg 1963). According to these, exclusively suffixing languages are postpositional and exclusively prefixing ones are prepositional; and the properties "prepositional" and "postpositional" are correlated with VSO and SOV orders, respectively. An explanation to suffixing versus prefixing was proposed by Given '971. Although he includes in his study a much wider range of markers than Lehmann does -- in addition to modality-markers, also agreement-markers and derivational affixes -- his theory is similar to Lehmann's in that he, too, explains morphological order in terms of prior syntactic order. He derives, for instance, BANTU modality prefixes and verb-deriving suffixes from main verbs which precede or follow, respectively, their complement. An explanation of why preverbal marking should correlate with inflection rather than prefixation itself may lie in the generally unfavored and unstable character of prefixes. Greenberg has pointed out (1957) that prefixes are comparatively infrequent and they usually [illegible] to some other kind of marking and that this fact can be explained in terms of general psychological laws.

studying the substantial amount of data included in the paper and the many ideas and suggestions presented, let us rather explore the general implications of Lehmann's basic claim: that there are only two basic types of languages, those characterized by OV and those characterized by VO order.

How does this two-fold division relate to the full range of logically possible orderings and to the orders actually found in languages? Logically, there are 6 possible orders for the three basic constituents: SVO, SOV, OVS, OSV, VSO, and VOS. Greenberg found (1963, 76) that 3 of these are extremely rare.[4] These are the ones in which the Object precedes the Subject (compare universal no.1 in Greenberg 1963). What one actually finds for basic declarative orders in the languages of the world are only these three: VSO, SVO, and SOV. When Lehmann claims that there are only 2 typologically significant orders: OV and VO, and lumps together VSO and SVO, both being VO, as against SOV.

Apart from Greenberg's three-fold[5] and Lehmann's two-fold order typologies, there has been one more recent proposal as to how languages of the world are to be divided with respect to prevailing word order. In 1970, McCawley proposed that there may be only two basic types of languages: V-initial and V-final; and that the order where the V is sentence-medial -- i.e. SVO -- is to be derived from the V-initial order -- i.e. from VSO (McCawley 1970, 298).

How does this proposal differ from Greenberg's and Lehmann's? All three classifications differentiate between SOV languages and the rest. McCawley and Lehmann both differ from Greenberg in that they

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[4] Ross (1970, 842) thinks TAGALOG may be VOS, ALGONQUIAN, OVS and ALEUT, OSV.

[5] Greenberg's classification is three-fold in the sense that he starts out with the three prevailing word orders as corresponding to three possible types. There are a number of indications in the paper, however, which show that he is aware of the closeness of the VSO and SVO types as against SOV languages.

propose to completely erase the basic class boundary between VSO and SOV languages. McCawley furthermore differs from Lehmann in that Lehmann's VO type includes VSO and SVO as two "equal" members, whereas McCawley assigns, of the two, primacy to VSO and a derived status to SVO. The following chart summarizes this:

LOGICAL POSSIBILITIES:	VSO	SVO	SOV	VOS	OVS	OSV
ACTUALLY OCCURRING BASIC DECLARATIVE SURFACE ORDERS:	VSO	SVO	SOV			
GREENBERG'S CLASSIFICATION:	VSO	SVO	SOV			
MCCAWLEY'S CLASSIFICATION:	VSO		SOV			
LEHMANN'S CLASSIFICATION:	VO		OV			

How can we evaluate the three proposed classifications? They have implications that are subject to testing in two respects. First, they make different predictions about how particular languages should differ from or resemble each other in their particular characteristics. Second, they assign different degrees of importance to the main constituents of the sentence. We will now explore to some extent both kinds of implications

First, we will take a look at the actual languages that hide behind these order labels and see how these classifications stand up in the light of actual language characteristics. In particular, we will consider three things: 1) frequency of order types in the languages of the world, 2) order alternation within a language, 3) correlation between basic order type and other properties of a language.

As far as frequency of order types is concerned, Greenberg reports that the SVO type (e.g. ENGLISH, FRENCH, FINNISH, or THAI) is the most frequent; the SOV type (TURKISH, JAPANESE, BASQUE etc.) is about as common; and the VSO type (ARABIC, HEBREW, ZAPOTEC) is a definite minority (1963, 77).

In terms of this observation, VSO and SVO languages are polar opposites in frequency. This makes one dissatisfied with the Lehmann framework where these two types come out as "equal" manifestations of the VO type. In McCawley's framework VSO is basic and SVO derived: this perhaps can be taken to correspond t e instability of the VSO type which would then account for its lack of frequency as a basic surface order type as opposed to SVO which it "becomes".

Two of Greenberg's generalizations mention order alternations within a language. Universal 6 states that "all languages with dominant VSO order have SVO as an alternative or as the only alternative basic order". This observation is again captured by the McCawley framework which posits a transformation which is constrained so as to convert VSO into SVO but not SOV into SVO, or VSO into SOV or SOV into anything. In universal 7, Greenberg notes that adverbial modifiers precede the Verb in languages where the only basic surface order is SOV; or if there is one alternative order only: OSV. This observation does not bear on the relationship between VSO and SVO languages, but it can be taken to be evidence for the significance of the OV order, since it shows that in order for a regularity -- one about adverbial ordering here -- to hold for an OV language, the only alternative order which the language is permitted to have is one which preserves the OV order. On the other hand, it can also be taken as evidence for the significance of the sentence-finality of the Verb, since the alternative order that is allowed, OSV, also preserves the verb-final property of the main order, SOV. In fact, it is more in support of McCawley's classification: if the preservation of OV order were crucial, an OVS alternative order should also be permissible, whereas the requirement that the Verb should remain sentence-final in the alternative order uniquely determines OSV.

Let us now turn to other characteristics of these languages and see which of the three classifications are most in line with the similarities

and differences observed with respect to these properties.[6] What is really being claimed? In Greenberg's classification, HEBREW, ARABIC, and ZAPOTEC, being VSO languages, are a separate class from ENGLISH, FRENCH, FINNISH, and THAI, these being SVO languages, and both are separate from JAPANESE, HINDI, and BASQUE, the SOV group. Lehmann would claim that there is no fundamental typological distinction between ARABIC - HEBREW - ZAPOTEC, on the one hand, and ENGLISH - FRENCH - FINNISH - THAI, on the other. The implication of McCawley's claim would perhaps be that ENGLISH, FRENCH, FINNISH, THAI are less "basic" a type than ARABIC, HEBREW, and ZAPOTEC.

There are several observations in the Greenberg paper which are relevant to evaluating these claims. First of all, he noted that considering the property of "having prepositions" and "having postpositions", and the other property of the order of the qualifying adjective with respect to the head, one finds that different SVO languages do not behave the same with respect to these two properties, and that, whereas most VSO languages have prepositions and the adjective follows the noun, and most SOV languages have postpositions and the adjective precedes the noun, SVO languages are more similar to the VSO group in that more often have prepositions and the adjective following than postpositions and the adjective preceding (Greenberg 1963, 77). This reflects a relationship between VSO and SVO languages as opposed to SOV-s as both Lehmann and McCawley claimed; and it also argues for SVO languages being less "basic" which is what is McCawley's additional claim.

The same point: that the major typological difference is between VSO and SOV languages, is borne out by a number of Greenberg's

[6] Lehmann himself makes some hints at some properties that OV languages, but, presumably, not VO languages have (e.g. vowel harmony and pitch accent), but the facts do not appear to me to be sufficiently clear and sufficiently documented.

proposed universals. Besides universals 2 and 3 which state the above-mentioned correlation between VSO order and prepositions and SOV and postpositions, there are two more of interest. Universal 16 correlates VSO order with the inflected auxiliary preceding the Verb and SOV order with the inflected auxiliary following the Verb. Universal 12 states that VSO languages put interrogative markers and phrases first in wh questions, where for SOV languages there is no such invariant rule.

Greenberg in fact states no typological generalization which would single out SVO languages as opposed to the others. The only suggestion of this kind that I know of has been made by Schwartz (1972; in the present issue). He claims there are two characteristics which set apart SVO languages from the other two types: one is that there is no SVO language which would at the same time also have a pure ergative system whereas ergative languages occur in both of the other types; and he says that SVO languages but not the other two types have a constituent binding between the Verb and the Object, i.e. a VP constituent.

Additional evidence for the relationship between SVO and VSO languages and to the basicness of VSO order is given in McCawley 1970. McCawley here claims that ENGLISH is "really" a VSO language. He presents seven cases in which a grammatical account of ENGLISH could be improved if rules would work on a VSO rather than SVO order. These rules are: the passive transformation, there-insertion, subject raising, negative-raising, predicate-raising, the mechanism to account for the fact that when only and even apply to the whole sentence, they immediately precede the verb, and the mechanism that accounts for the fact that in ENGLISH conjunctions go with the constituent that they immediately precede. More arguments in favor of the same point are said to be given by M. Muraki (in his Ph.D. thesis written at the University of Texas in 1970 and entitled Presuppositions, pseudoclefting, and thematization; referred to in Bach 1971). One more reason why ENGLISH and perhaps also some other SVO languages should be looked upon as

VSO languages is given by Bach in his recent paper on questions (Bach 1971). The argument is this. If the movement of the question word in the formation of wh questions happens by attraction to the governing verb, then in SVO languages such as ENGLISH one would expect the rule to operate when the embedded question is an object clause -- e.g. I asked where he was working. -- but not when it is a subject clause: instead of Where he was working was obvious, we would expect *He was working where was obvious., since in this case there is no governing verb in the beginning of the sentence to attract the wh word. Since this prediction is not borne out: wh movement does take place in both types of clauses, he suggests that SVO languages should be looked upon as VSO languages, in order to provide a sentence-initial Verb towards which the wh word always moves.

In sum: most but not all of the facts cited by various linguists appear to show that the typological distance between SOV and VSO or SVO languages is larger than between VSO and SVO languages; and that of the two, VSO is more homogeneous and it descriptively, if not historically, underlies the SVO order.

Besides the predictions that we can derive from the three typologies with respect to similarities and differences among the languages of the world, there are also other testable implications of these classifications as we pointed out before; in particular, with respect to the grammatical significance of constituents. Greenberg doesn't indicate explicitly that subjects, objects and verbs would have different degrees of significance in typological statements. McCawley, on the other hand, implies that the Verb in its order to the sentence boundary which is significant. Lehmann's OV - VO typology is based on two contentions. First, Lehmann deprives the Subject of its language-typological significance. He states explicitly: "...subjects are by no means primary elements in sentences. Including them among the primary elements as in an attempt to classify

SVO and VSO languages as major types in the same way as VO and OV languages, has been a source of trouble for typological analysis. ...Typological studies...illustrate.../e/ that the S in SVO formulae is far less significant than are the categories represented by V and O." Second, when he talks about the Object as a "primary concomitant" of the Verb, he must assume a predicate constituent. Let us now take a brief look at facts which bear on these claims: on the relative significance of the Object over the Subject and the existence of a "VP note".

Ross' paper given at the Meeting entitled Primacy, bears on the first point and provides evidence in the opposite direction. Ross in his paper[7] cited a whole array of grammatical rules all showing that if a rule applies to objects, it also applies to subjects; and if a rule is conditioned, lexically, or structurally, for subjects, it must be conditioned for objects as well.

On the other hand, there are at least two points to make in favor of the grammatical "primacy" of the Object over the Subject. One is provided by an observation of Lehmann's. In VO languages, nominal modifiers such as relative clauses, adjectives, and genitival expressions follow nouns, in OV languages they precede them. This ordering regularity can be explained by the same "principle of the opposite side" which was used to explain the ordering of verbal modifiers. Since the primary concomitant of the Object is the Verb, we predict NominalModifier-O-V order in OV languages and V-O-NominalModifier in VO languages. This argument, however, stands or falls with the assumption that nominal modifiers are primarily modifiers of Objects. If we try to apply the principle to the Subject, we still get the right order for SOV languages: NominalModifier-S-O-V (the "primary concomitant" of the Subject being the OV complex), but for SVO languages we would predict the wrong order: *NominalModifier-S-V-O; the right order S-NominalModifier-V-O is

[7] Unlike the other papers surveyed here, I have no written version of Ross' talk.

counter to the "principle of the opposite side". Finally, in VSO languages, in order to predict the desired order V-S-Nominal Modifier-O, we would have to arbitrarily assume that the primary concomitant of the Subject is the Verb rather than the Object. All this shows that the explanation of the typology of the ordering of nominal modifiers with respect to the head requires the mention of the Object but not of the Subject.

Second, we may allude to the area of definiteness. There seem to be many regularities here which pertain to the Object but not to the Subject. Two of these I know of as being well-attested in a number of languages. First, in languages such as HUNGARIAN, AMHARIC, SWAHILI, AKKADIAN, and FIJIAN, the inflection of the main Verb varies depending on whether the Object is definite or indefinite. Second, in some languages the marking of the Object itself varies depending on whether the Object is definite or indefinite, such as in TURKISH, HEBREW, PERSIAN, and MACEDONIAN.

The other grammatical implication of Lehmann's claim is that there must be a predicate constituent, which then determines that the primary concomitant of the Verb is the Object. Assuming that the primary concomitant is more closely bound to the Verb than the non-primary one also gives sense to the "principle of the opposite side": modifiers are on the opposite side from the primary concomitant, presumably in order not to disrupt that close binding. Lehmann implies that there is a "node" over both OV and VO; i.e. he assumes a predicate constituent to be a universal one. There is at least one other theory in which the universality of the predicate constituent on some derivational level is assumed: the Sanders-Tai "immediate dominance" principle. Recently Schwartz (1972; in this issue) has taken up an investigation of the extent of the VP node in language types and he concludes that SVO languages have it only. In ENGLISH itself, there appears to be little evidence for the assumption of a VP node on a non-superficial leve. Instances where the Verb and

the Object form a unit in the operation of a rule -- such as in predicate deletion or so-pronominalization (compare Jacobs and Rosenbaum 1968, 27, 41, and McCawley 1970, 298) -- do not necessitate the assumption of a separate predicate node in the deep structure: the constituency required by these rules naturally yields itself if Sentence in the deep structure is dominated by another S node, with Tense being its sister constituent. If Subject Raising then subsequently applies, Verb and Object will end up as sole constituents of an S node (Lakoff and Ross 1968, McCawley 1970, 295). In sum, we may conclude that both claims that are implicit in Lehmann's classification -- concerning the primacy of the Object and the universality of VP -- are controversial issues and are in need of further research.

In considering how basic the subject-object distinction is in language, pertinent data from language acquisition are of importance as well. Carolyn Kessler's paper Contrasts in the acquisition of syntax in bilingual children presented at the Meeting[8] shows that the distinction between Subject and Indirect Object and the distinction between Direct and Indirect Object are the earliest-learnt ones, at least in the case of ENGLISH-ITALIAN bilingual children. This, however, is not the main finding of the paper. The study is based on comprehension data from twelve bilingual children in the Italo-American community of South Philadelphia, age 6 to 8. Kessler investigated how 16 types of "surface structure" in ITALIAN and in ENGLISH were learned by these children in both languages. She finds that structures that are similar in the two languages -- such as the differentiation between for and to, or the differentiation between direct and indirect object or between subject and indirect object --

[8] The full report of the research presented in the paper is given in The acquisition of Syntax in bilingual children, Washington, D.C. Georgetown University Press, 1972.

are acquired at approximately the same rate and in the same sequence in the two languages, whereas structures that are acquired at varying rates are different in the two languages.[9] Examples of the latter type of constructions would be pronominalization of the object which is more complex in ITALIAN since it involves a change in word order as well, or reflexivization which appears simpler in ITALIAN, since to himself-herself-itself there is one form si corresponding. She then generalizes from her observations by suggesting that there may be a general law-like relation between two factors: the sequence and rate of acquisition of linguistic structures in two languages learned by the same person and the degree of their similarity in those languages: from one of these predictions could be made to the other. In accounting for the sequencing of language-specific structures, she resorts to the idea of linguistic complexity.[10]

Robert Underhill in his paper entitled Remarks on possessives notes that in many languages there is a formal similarity between ordinary possessive constructions and gerundive nominalizations. This is the case, for instance, in MAORI, THAI, TURKISH, and ENGLISH; compare John's hat with John's coming. He suggests a formal account to explain this similarity by positing a nominalization rule which creates a derived structure identical with that of ordinary possessives. A subsequent possessive-marking transformation then inserts a formal marker for possessive constructions. In the course of a detailed discussion concerning TURKISH, ENGLISH and THAI, he makes an observation which he thinks may be universally valid: that a possessed noun may have only one possessor.

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[9] This is not a longitudinal study. she takes the number of errors made in a one-time comprehension test to be indicative of the rate and sequence of acquisition of a particular construction.

[10] For linguistic complexity as an explanatory principle in language acquisition, see Ferguson 1964 and Brown and Hanlon 1970.

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