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On describing word order

Randy LaPolla and Dory Poa

1. Introduction

One aspect that is always discussed in language descriptions, no matter how short they may be, is word order. Beginning with Greenberg 1963, it has been common to talk about word order using expressions such as “X is an SOV language”, where “S” represents “subject”, “O” represents “object”, and “V” represents “verb”. Statements such as this are based on an assumption of comparability, an assumption that all languages manifest the categories represented by “S”, “O”, and “V” (among others), and that word order in all languages can be described (and compared) using these categories. Hawkins (1983:11) makes the assumption of comparability explicit: ‘We are going to assume that the categories of subject, object, verb, adjective, genitive, noun, adposition, etc. whose basic ordering we are going to study, are comparable across languages’. Hawkins assumes (following Greenberg) that ‘semantic criteria will suffice to make the cross-linguistic equation’ (ibid.). That is, the assumption is either that there are cross-linguistic grammatical categories instantiated in all languages that can be identified using semantic criteria (basically translation equivalents), and that there are universal principles based on these cross-linguistic grammatical categories underlying the organization of the clause in all languages, or that grammatical categories can be ignored in describing word order, as semantic categories will suffice (here assuming that “S” and “O” represent semantic categories equivalent to “S + A” and “P” respectively), and again, that the same principles, based on these semantic categories, underlie word order in all languages.² These assumptions have affected much of the work done on word order typology,³ syntax, and grammatical description in the last forty years, even though a number of scholars have talked about problems with the comparability assumption (e.g. Schachter 1977; Dixon 1980; Blansitt 1984, Nichols 1984, 1986; Foley and Van Valin 1984; Van Valin 1985, 1986; Lehmann 1986; Dryer

1986, 1988a, 1992, 1997; LaPolla 1993, 2002, 2003). Even the discovery of the famous “non-configurational” languages (e.g. Walbiri [Hale 1981, 1983] and Dyirbal [Dixon 1972]) and ergative syntax (Dixon 1972, 1979, 1994) did not shake the foundations of these assumptions.

In this paper we would like to argue that there are no universal categories of grammatical relations instantiated in all languages, and the principles that determine word order are not the same for all languages, and so we should not assume comparability across languages based on semantics. We should also not ignore the grammatical categories that have grammaticalized in a language and the possible role they play in determining word order (as grammaticalized categories) in that language. Each language is a unique set of language-specific conventions, and so each language should be described in its own terms (LaPolla 2003). That is, when describing a language, we should not assume that there are universal categories of grammatical relations, and that word order in all languages can be explained using them, for example making statements such as “X is an SOV language”: we should describe for each language the principles that determine the word order patterns found in that language.⁴ Following we will take English, Chinese, and Tagalog as examples of languages where the organization of the clause follows different principles.⁵

2. The grammatical organization of the clause in English

To explain the principles that determine word order in English, we will need to talk about Finite and Subject.⁶ The Finite element expresses the tense and often modality. The Subject specifies the entity about which the proposition is making an arguable statement. There is a grammaticalized subject-predicate relation which is distinct from, and much tighter than, a topic-comment relation.⁷ Non-Subject arguments can precede the Subject (appearing as Theme), but no arguments can appear between the Subject and the predicate: unless it appears as Theme, the direct object must follow the verb, and is defined partly by its postverbal position. Subject and Finite both appear obligatorily in preverbal position, and can be identified by adding a tag question to the end of the clause (where the finite has reversed polarity):

(1) *You did lock the door. didn't you?*

(2) *Those guys wouldn't come back. would they?*

Relationship of Subject and Finite to clause type:

In English, the appearance/non-appearance and the order of Subject and Finite mark the mood of the clause. If there is no finite in the clause, then the mood is imperative:

Table 1. No finite = imperative

	(No) Subject	No Finite	
(3)			<i>See him later today.</i>
(4)	<i>You</i>		<i>come tomorrow.</i>
(5)			<i>Stop by some time!</i>

If the Subject and Finite are both present in the clause or are easily recovered from the co-text, then the clause is in the indicative mood, and the order of Subject and Finite determines the grammatical form of the clause as (indicative-)declarative or (indicative-)interrogative:

Table 2. Subject before Finite = declarative

	Subject	Finite	
(6)	<i>I</i>	<i>will</i>	<i>see him later today.</i>
(7)	<i>You</i>	<i>can</i>	<i>come tomorrow.</i>
(8)	<i>The chairman</i>	<i>is</i>	<i>busy today.</i>

Table 3. Finite before Subject = yes/no interrogative

	Subject	Finite	
(6')	<i>Will</i>	<i>I</i>	<i>see him later today.</i>
(7')	<i>Can</i>	<i>you</i>	<i>come tomorrow.</i>
(8')	<i>Is</i>	<i>the chairman</i>	<i>busy today.</i>

In a WH-interrogative, the WH-word appears as Theme obligatorily, marking not only that the clause is interrogative, but also what type of information is being asked for. If the WH- element is the Subject, then the order of Subject and Finite is Subject before Finite, in order to keep the WH- element as the Theme, but otherwise the order is Finite before Subject:

Table 4. WH-interrogative with WH-element as Subject

	WH-Subject	Finite	
(6'')	<i>Who</i>	<i>will</i>	<i>see him later today.</i>
(7'')	<i>Who</i>	<i>can</i>	<i>come tomorrow.</i>
(8'')	<i>Who</i>	<i>is</i>	<i>busy today.</i>

Table 5. WH-interrogative with WH-element as other than Subject

		Finite	Subject	
(9)	<i>What</i>	<i>will</i>	<i>he</i>	<i>bring to the party</i>
(10)	<i>Where</i>	<i>has</i>	<i>my doggie</i>	<i>gone?</i>
(11)	<i>When</i>	<i>can</i>	<i>I</i>	<i>see him?</i>
(12)	<i>Whose dog</i>	<i>is</i>	<i>he?</i>	
(13)	<i>Who</i>	<i>are</i>	<i>they?</i>	

Word order in English then is used on the one hand to mark certain grammatical relations, and also to mark the mood of the clause.⁸ Although there are certain elements that are obligatorily thematic, English is not a “fixed” word order language: the word order is used for the grammatical purposes just mentioned, and so a difference in word order means a difference in the interpretation of grammatical relations or mood. The term “subject” is a useful one for English because English has grammaticalized the same sort of pivot⁹ in a large number of constructions in the language; one of these constructions is the clause itself. For this language, then, it may seem to make sense to talk of SVO word order, as there is a grammatical relation of Subject, and it is mainly defined by preverbal position in the clause, and there is also a grammatical relation of direct object, and this is mainly defined by postverbal position in the clause (conversely we could say that the grammatical relations determine the word order), but the concepts of “subject” and “direct object” have no cross-linguistic validity. Even if we were to use these terms to define some grammatical category in all languages, the definitions would all be language-specific, and so simply using the term “subject” would not tell you what the author meant by the use of the term, what the nature of the category is, or to what extent those categories determine the word order. For example, we might say that Dyirbal (Dixon 1972) has a Subject, as there are a number of constructions that share the same sort of pivot, but that pivot is an [S,P] pivot, not an [S,A] pivot as in English, and the pivot is

not defined by and does not determine word order. Using semantic equivalence to talk about Dyirbal word order would cause us to miss the pivots of that language and to be misled into thinking not only that there are [A,S] pivots in the language, but also that these imagined pivots determine the word order. (An inherently definitional relationship between word order and grammatical relations is evoked once we start using the categories “S” and “O” in talking about word order.) Even if a language has a set of [A,S] pivots, the set may not be the same as in other languages with [A,S] pivots. For example, Italian has an [A,S] pivot for some of the same constructions as English, but not for cross-clause co-reference in coordinate clauses (e.g. *John hit Bill and cried*). Therefore even for English the “SVO” type of characterization should be avoided.¹⁰ What we should do when describing a language is list the particular pivots found (if any) in the language (they may not all be of one type – Dixon (2000) shows that Jarawara, an Amazonian language, has two pivot possibilities, neither derived from the other, and Van Valin (1981) shows that Jacalteco, a Central American language, has a mixed set of pivots), and what constructions manifest them, for example in English to say there is an [A,S] pivot for the basic clause structure, for cross-clause co-reference in coordination, and for “raising”, but not for relative clauses. Independent of the statement of pivots, we need to talk about the principles that determine word order in the clause. In the case of English, the order of phrases (not words) in the clause is to a large extent determined by this pivot, with the pivot preceding the verb, while non-pivot arguments follow the verb.

2. The grammatical organization of the clause in Chinese

Herbert A. Giles, in the preface to his dictionary of Chinese (1892:x), used expressions such as ‘that elusive mysterious quiddity’ when referring to the organizational principles of Chinese discourse. He said “... Chinese is essentially *supra grammaticam*”. In fact the organization of Chinese discourse is not so ‘elusive’ or ‘mysterious’, it is simply different from the Indo-European languages in that Chinese has not grammaticalized the same types of mechanisms (such as use of word order, case marking, verb agreement, tense marking, cross-clause co-reference pivots) for obligatorily constraining the identification of referents, the particular semantic relation of a referent to the action it is involved in, the identification of the temporal location of the event mentioned relative to the speech act time, and certain

other functional domains. That is, the hearer must rely on relatively unconstrained inference in determining the speaker's communicative intention. This is what Wilhelm von Humboldt meant by saying that Chinese 'consigns all *grammatical form* of the language to the *work of the mind*' (1863[1988]: 230; italics in original).

A number of Chinese scholars have understood the difference in the organizational structure of the Chinese clause. Y. R. Chao (1968:69–70) saw clearly that the principles involved in the structure of the clause in Chinese were not the same as in English. Although he used the terms "subject" and "predicate", they were defined in Chinese-specific terms as simply topic and comment, with no necessary association of subject with actor or any other semantic role. Because of this, he argued that "A corollary to the topic-comment nature of predication is that the direction of action in an action verb in the predicate need not go outward from subject to object. Even in an N-V-N' sequence, such as [gǒu yǎo rén (dog bite man)], it is not always certain that the action goes outward from N to N'." (p. 70). Chao gave the following examples of the looseness of topic-comment logical structure relative to subject-predicate (1968:71; recast in *pinyin* and with my glosses):¹¹

(14) *tā shì ge rìběn nyǔrén.*

3sg COPULA CL Japan woman

'His servant is a Japanese woman.'

(15) *tā shì yī-ge měiguó zhàngfu.*

3sg COPULA one-CL America husband

'She is (a case of being married to) an American husband.'

(16) *nǐ (de xiézi) yě pò-le*

2sg (ASSOC shoe) also broken-CSM

'You(r shoes) are also worn through.'

(17) *wǒ (de qiānbǐ) bǐ nǐ (de) jiǎn.*

1sg (ASSOC pencil) COMPAR 2sg (ASSOC) pointy

'I am (my pencil is) sharper than you(rs).'

Chao (1955, 1959) argued that word order is not determined by, and does not affect the interpretation of actor vs. non-actor; he saw the clause as analogous to a function in logic: the argument is an argument of the function, and the truth value is unaffected by its position in the clause (1959:254). He said there are no exceptions to topic-comment order in Chinese, though there are some clauses that only have comments (e.g. *Xià yǔ le* (fall rain CSM) 'It's raining').

Like Chao, Lü Shuxiang, another eminent Chinese syntactician, defined "subject" as "topic", whatever comes first in the sentence, which can have any semantic role (1979: 72–73). He argued that since "subject" and "object" can both be filled by any semantic role, and are to a certain extent interchangeable, then we can say that subject is simply one of the arguments of the verb that happens to be in topic position. One of the examples of what he meant by "interchangeable" is [chuānghu yǐjīng hú-le zhǐ (window already paste-CSM paper)] 'The window has already been pasted with paper' vs. [zhǐ yǐjīng hú-le chuānghu (paper already paste-CSM window)] 'The paper has already been pasted on the window'. Lü gave the analogy of a committee where each member has his or her own duties, but each member can also take turns being chairperson of the committee. Some members will get to be chairman more than others, and some may never get to be chairman, but each has the possibility of filling both roles.

Li and Thompson (1978: 687) recognized that 'word order in Chinese serves primarily to signal semantic and pragmatic factors rather than grammatical relations such as subject, direct object, indirect object' (see also Li and Thompson 1975, 1981: 19), but their idea of Chinese as "topic-prominent" (Li and Thompson 1976) was not as radical a departure from the English-based conception of clause structure as Chao's.

It is not possible to define "subject" and "object" in terms of word order in Chinese, or to say that word order is determined by "subject" and "object".¹² For example, in (18)–(20), the same word order has multiple interpretations. In (18) and (19) we have what is often be described as "SVO" word order, but the interpretations possible show that such a characterization is misleading, as the interpretation is not necessarily AVP.

(18) *Zhāngsān xiǎng-sǐ wǒ le.* (adapted from Pan 1998)

PN think-die 1sg CSM

a. 'Zhangsan missed me so much that he nearly died.'

b. 'I missed Zhangsan so much that I nearly died.'

(19) *Méi-yǒu rén kěyǐ wèn wèntí.* (attested example)

NEG-exist person can ask question

a. '(There is) No one (who) can ask questions.'

b. 'There is no one to ask questions of.'

In (20) we have a very common pattern where two noun phrases appear before the verb, but no constraint on the interpretation of the semantic roles of the two referents is imposed on the clause by the syntax, as it would be in English.

(20) *Zhè-ge rén shéi dōu bù rènshì.* (Chao 1968:325)

this-CL person who all NEG know

a. 'This person doesn't know anyone.'

b. 'No one knows this person.'

In (21) are more examples of the "interchangeable" nature of many clauses in Chinese discussed by Lü (1979).¹³ The difference in interpretation in Chinese with the different word orders is not one of actor vs. patient, but in terms of what is the topic and what is not the topic.

(21) a. *shuǐ jiāo huā* a'. *huā jiāo shuǐ*
water(n.) water(v.) flower flower water(v.) water(n.)

'The water waters the flowers'

'The flowers are watered
by the water'

b. *lǎotóuzi shài tàiyáng* b'. *tàiyáng shài lǎotóuzi*
old.man sun(v.) sun(n.) sun(n.) sun(v.) old man

'The old man basks in the sun'

'The sun shines on the old
man'

In English, the interaction of Theme-Rheme structure and Subject-Finite structure explain much about word order (see for example the sentence *Who are they?* in (13)). Another factor involved in the organization of the clause is information structure (as discussed in Lambrecht 1994).¹⁴ This is the distribution of the topical and focal elements of the clause. Essentially, topical elements are elements within the pragmatic presupposition, what we are talking about, as topics, or parts of the total message we can take for granted (as they were mentioned before, commonly known, or can be inferred from context). The focal element is the part that we cannot take for granted, and so must be supplied by the speaker. The combination of these two elements is what makes a clause a piece of new information. This is independent of the activation status of referents as identifiable or not in the mind of the addressee. In English, information structure is marked more often by a change in intonation, as word order is marking grammatical relations and mood. In Chinese, there is no Subject-Finite structure, and there are few elements that are obligatorily thematic; the word order is determined by the following principle of information structure:¹⁵

The principle of word order in Chinese: 'Topical or non-focal NPs occur preverbally and focal or non-topical NPs occur post-verbally.' (LaPolla 1995a: 310)

The structure of the Chinese clause is then quite different from that of the English clause. In English the grammaticalization of the constraints on referent identification we lump together under the names "subject" and 'direct object' have led to there being tight logical relations between those particular referents and the predicate. Other referents which are mentioned can only be added through the modulation of minor processes (prepositions), and so are clearly marked as peripheral. The conception of the clause for speakers of English and similarly structured languages is based on these relations, and has implications outside of language (e.g. the development of Aristotelian logic).¹⁶ In Chinese the conception of the clause is based simply on a function-argument type of loose relationship, with the topic-comment relation being the main determinant of word order, without regard to obligatory explicit marking of the semantic or grammatical relations of the referents involved. The difference between the two conceptions of the clause is particularly clear when we look at

examples such as (22) (from *Rúlín Wàishǐ*, an early 18th century vernacular novel):

- (22) (a) *Yuán cháo mò nián, yě cēng*
 PN dynasty end year also EXP
chū-le yī-ge qiànsǐlǐluò de rén.
 emerge-CSM one-CL honest.and.upright ASSOC person
 ‘At the end of the Yuan dynasty, there appeared an honest and upright person’
- (b.1) *Rén xìng Wáng.* (b.2) *míng Miàn*
 person surnamed PN given.named PN
 ‘(This) person was surnamed Wang, and had the given name Mian.’
- (b.3) *zài Zhūjì-xiàn xiāngcūn jūzhù;*
 LOC PN-county countryside live
 ‘(he) lived in the countryside of Zhuji county’
- (b.4) *qī suí shí sǐ-le fùqīn*
 seven years.old time die-CSM father
 ‘when he was seven his father died’
- (c.1) *tā mǔqīn zuò xiē zhēnzhǐ.*
 3sg mother do some sewing
 ‘his mother did some sewing’
- (c.2) *gōngjǐ tā dào cūn xuétáng-lǐ qù dúshū.*
 supply 3sg ALL village school-in go study
 ‘to give him money to go to the village school to study.’

This is a very typical stretch of Chinese narrative text. The first clause introduces a new referent, then this referent becomes the topic of the following four clauses. A related referent is then the topic of the next two clauses. The structure of all the clauses except the first is “topic-comment”. The first clause is presentative, a “sentence focus” construction (Lambrecht 1994; LaPolla 1995a), and so does not have a topic (the temporal expression locates the event in time, but is not the topic of the predication). The clause in (22b.4) also follows the usual “topic-comment” structure, but many scholars have analyzed this structure as being aberrant because the NP representing the one who died appears *after* the intransitive verb *sǐ* ‘die’. They say it is aberrant because they are assuming a subject-predicate

structure for the clause. Assuming that word order defines subject and object would force us to say that *sǐ* ‘die’ is a transitive verb, *rén* ‘person’ (= Wang Mian) is the subject and actor, and *fùqīn* ‘father’ is the object and patient, clearly an inappropriate analysis. The type of clause in (22b.4) is actually not a special exceptional type of clause; the form of this clause follows naturally from the factors that determine word order in Mandarin: the nature of elements being focal (or at least non-topical) vs. topical (or at least non-focal).

The clause form in (22b.4) involves two parts, a topic and a comment. What seems to make this clause unusual is that the comment takes the form of an event-central presentative clause. Event-central presentative clauses assert the existence (happening) of an event. These clauses do not have a two-part topic-comment structure; they arethetic rather than categorical. An example in Chinese is *Xià yǔ le* (fall rain CSM) ‘It’s raining’. As in this example, if there is an NP in an event-central clause, it must appear in post-verbal position for the clause to have the event-central interpretation. The NP is often non-referential (e.g. *yǔ* ‘rain’ in the example just given), but it may be referential (e.g. *fùqīn* ‘father’ in (22b.4)), even a proper name. What is important is that it not be interpreted as a topic of a categorical statement. That is why the NP has to appear in post-verbal position, to prevent such an interpretation.

An event-central expression can also appear as the comment in a topic-comment structure. In these cases, generally the topic is the possessor of, or is in some way related to, the NP in the event-central expression, as in (22b.4). In (22b.4), *fùqīn* ‘father’ is made non-topical by being placed in postverbal position. This is done so that the dying of the father can be expressed as an event-central statement, which is then asserted of the topic. Were *fùqīn* ‘father’ to appear in preverbal position, as in *Wáng Miàn de fùqīn sǐ-le* (PN ASSOC father die-CSM) ‘Wang Mian’s father died’, the clause would be a categorical statement about the topic ‘Wang Mian’s father’, that he died. That is, though this clause and (22b.4) seem similar, they are in fact saying quite different things.

Two other common word order patterns in Chinese are problematic if we try to apply a subject-predicate analysis, but are easily explainable with an information structure analysis: the double topic construction (Teng 1974) and the split referent construction. In the double topic construction the referents of two independent NPs have some relationship to each other, usually possessor-possessed or whole-part. The possessor or whole is the primary topic, and the possessed or part is a secondary topic:

- (23) a. *Wǒ dùzi è le.* b. *Wǒouteg...g..*
 1sg belly hungry CSM 1sg head hurt
 ‘I’m hungry.’ ‘I have a headache.’
- c. *Nèi xiē píngguo pí yǐjīng xiāo-hǎo-le*
 that few apple skin already peel-COMLETE-CSM
 ‘Those apples (I/you/he) already peeled.’

In this type of double topic construction, the main topic (‘1sg’ in [23a-b]) is semantically the possessor of the secondary topic (‘belly’/‘head’), but it is not grammatically marked as such, as the secondary topic is pragmatically incorporated into the comment about the main topic. Within this comment there is also a topic-comment structure, with a comment about the secondary topic, i.e. the structure is [Topic [Topic Comment]_{comment}]^{17,18}.

In the split referent construction¹⁹ there is the same sort of semantic relationship between the referents of two NPs, and the possessed element or part is incorporated into the comment about the topic, but rather than appearing as a secondary topic, the possessed element or part appears in a non-topic position:

- (24) *Nèi xiē píngguó yǐjīng xiāo-hǎo-le pí.*
 that few apple already peel-COMLETE-CSM skin
 ‘Those apples (I/you/he) already peeled.’

In fact the structure of (24) is the same as that of (22b.4). With an information structure analysis we can see the principles underlying the three constructions and easily explain their structures and occurrence in discourse. This would not be possible with an explanation of word order based on grammatical relations.

Notice that we are not saying that if we did a count of clauses in Chinese texts we would not find that in a large number of clauses, possibly even the majority of clauses, an actor appears before the verb and/or a patient appears after the verb. What we are saying is that to characterize the pattern found as “SVO” (or Chinese as an “SVO” language) would be incorrect, as it is not the case that what is determining the word order pattern is one referent being “S” and one referent being “O” (with their

grammatical statuses determined by their position or their position determined by their grammatical statuses). In fact given the pragmatic principle for determining word order in Chinese, we would expect to find actors more frequently before the verb and patients more frequently after the verb, as cross-linguistically actors are more often topical, while patients are more often focal. It is the pragmatic nature of the actor as topic that results in the NP referring to the actor often appearing in clause-initial position, and the pragmatic nature of the patient as focal that results in the NP referring to the patient often appearing in post-verbal position. That is, the fact that they were actors and patients may have led to them being more topical or more focal, but the fact of being actors or patients in and of itself is not what made them appear in preverbal or postverbal position. When we describe Chinese then, we should say that Chinese clauses are often (though not obligatorily) verb medial, as NPs representing topical and non-focal referents appear before the verb and focal and NPs representing non-topical referents appear after the verb, with the position of any NPs appearing in the clause (none are obligatory) before or after the verb being based on their nature as topical or as part of the focus respectively.

3. The grammatical organization of the clause in Tagalog

Tagalog (Austronesian; the Philippines) has grammaticalized a type of pivot in many constructions, but word order in the clause is not determined by (and does not determine) grammatical relations. The ability to appear as pivot is also not restricted to one or two types of argument, as it is in many languages; even semantically peripheral arguments can appear as pivots. The argument that is the topic (what the clause is a statement about) appears as the pivot. In the examples in (25) the pivot argument is in bold:

- (25) a. (actor pivot)
Kumain ng kanin si Maria sa mesa.
 eating-AP GEN rice SPEC Maria LOC table
 ‘**Maria** ate rice at the table.’

b. (undergoer pivot)

Kinain ni Maria ang kanin sa mesa.
 eating-UP GEN Maria SPEC rice LOC table

‘The rice was eaten by Maria at the table.’

c. (locative pivot)

Kinainan ni Maria ng kanin ang mesa.
 eating-LP GEN Maria GEN rice SPEC table

‘The table was used as an eating place by Maria.’

d. (instrumental pivot)

Pinangkain ng kanin ni Maria ang kamay.
 eating-IP GEN rice GEN Maria SPEC hand(s)

‘Hands were used for eating by Maria.’

Unmarked word order is generally predicate initial. The predicate can be any form class.²⁰ The order of the arguments that appear in the clause, both semantically required arguments and peripheral arguments, is determined by the form the argument takes (pronoun or noun) and whether the argument is within the focus or not. This is expressed in the word order by being before or after the pivot argument respectively. The “heaviness” (length and complexity) of an argument can also affect its position, with heavy *ng*-marked arguments occurring after a “light” *ang*-marked argument. The examples just given appear with a particular order, but many other orders would be possible. For example, (25a) could also have the following orders (among others), with no difference in the interpretation of grammatical relations:

- (26) a. *Sa mesa kumain ng kanin si Maria.*
 b. *Kumain sa mesa ng kanin si Maria.*
 c. *Kumain si Maria ng kanin sa mesa.*
 d. *Kumain sa mesa si Maria ng kanin.*

In the examples in (25) we have actor pivot, undergoer pivot, locative pivot, and instrumental pivot clauses, respectively, all based around the root *kain* ‘eating’. The affixes that the root acting as predicate takes and the

article before the pivot argument both point to a particular argument as being the pivot. The affixes on the root inform us of the semantic role of the pivot. In these examples the infix *-um-* occurs in the actor pivot clause and *-in-* occurs in the (realis perfective) undergoer pivot clause. The latter infix also occurs in the (realis perfective) locative and instrumental pivot clauses, together with the *-(h)an* suffix in the locative clause and the instrumental adjective-forming *pang-* prefix in the instrumental clause. At the same time, the pivot argument is marked with the article *si*, where it is a singular proper name, or *ang*, where it is a common noun. The non-pivot core arguments take the article *ni* if they are singular proper names or *ng* [nən] if they are common nouns. The non-pivot semantically locative and oblique arguments take prepositions that mark their semantic roles. There is no marking of semantic role for actor and undergoer, only marking of their status as topical (the pivot) or not. In these constructions there is foregrounding of a particular argument as topic, but there is no backgrounding of any other argument in the sense of changing an argument’s status as a core argument or its ability to appear overtly in the clause. The passive English translations given for these clauses then are somewhat misleading, as the non-pivot actor is still very important to the clause. If we look at, for example, (25c), this might become clear. This sentence might be used in a situation such as the following:²¹

- (27) Q: *Bakit ma-dumi ang mesa?*
 why STAT-dirtiness SPEC table
 ‘Why is the table dirty?’

- A: *Kasi, kinainan ni Maria ng kanin*
 because eating-LP GEN Maria GEN rice
 (*ang mesa*).
 SPEC table
 ‘Because the table was used as an eating place by Maria.’

To achieve the same sense of importance in the clause, in English we would be more likely to say *Because MARIA ate there*, with focal stress on Maria, rather than use a passive construction. In the Tagalog as well, *ni Maria* is within the focus of the assertion, not a backgrounded or incidental constituent.²²

Another important reason we would say the passive translations are inappropriate is that there is no derivational relationship or markedness difference between the actor focus and the other focus constructions. All are derived; there is no “basic” form, they are simply different ways of profiling an event.²³

It is also possible to have a benefactive pivot in a Tagalog clause. Example (28a) is an actor pivot clause with an oblique benefactive argument marked by the benefactive preposition *para kay*, while (28b) has the benefactive argument as the pivot.

- (28) a. *Nagluto si Maria ng kanin para kay Juan.*
 cooked-AP SPEC Maria GEN rice BEN Juan
 ‘**Maria** cooked rice for Juan.’
- b. *Pinagluto ni Maria ng kanin si Juan.*
 cooked-BP GEN Maria GEN rice SPEC Juan
 ‘**Juan** was cooked rice by Maria.’

The pivot can also appear in sentence-initial position before the verb when the predicate is marked by *ay*. This form emphasizes the topical nature of the pivot argument.

- (29) a. *Si Maria ay kumain ng kanin sa mesa.*
 SPEC Maria PM eating-AP GEN rice LOC table
 ‘**Maria** ate rice at the table.’
- b. *Si Juan ay pinagluto ni Maria ng kanin.*
 SPEC Juan PM cooked-BF GEN Maria GEN rice
 ‘**Juan** was cooked rice by Maria.’

One of the controversies surrounding the system of pivot alternations in Tagalog is the nature of the pivot. While it is the target of several syntactic processes, such as relativization, and the choice of pivot is influenced by discourse factors such as identifiability, referentiality, and topicalness, it does not always control cross-clause coreference and imperatives. The first two examples in (30) differ in terms of which argument is the pivot, yet

unless there is some context that makes it very clear that in (30a) it is Juan that went out, cross-clause coreference is controlled by the actor in both clauses.

- (30) a. *Binigyan ng pera ni Maria si Juan at lumabas.*
 gift-BF GEN money GEN Maria SPEC Juan and
 go.out
 ‘**Juan** was given money by Maria and (she) went out.’
- b. *Nagbigay ng pera kay Juan si Maria at lumabas.*
 gift-AF GEN money DAT Juan SPEC Maria and
 go.out
 ‘**Maria** gave money to Juan and (she) went out.’

Only with the pivot in initial position, and marked by the predicate marker, as in (30c), which is a marked construction, will a non-actor pivot definitely control cross-clause coreference:

- c. *Si Juan ay binigyan ng pera ni Maria at lumabas.*
 SPEC Juan PM gift-BP GEN money GEN Maria
 and go.out
 ‘**Juan** was given money by Maria and (he) went out.’

Another problem is related to the fact that all of the pivot-marked forms are derived: as there is no ‘basic’ form, what are we to say is the alignment of the pivot? Clearly the pivot in Tagalog cannot be equated with “subject” in English or “S” in the sense of word order typology, and even if we were to ignore the pivot and assume that “S” is equivalent to actor, as word order is pragmatically controlled, there is no sense we could say Tagalog is VSO or VOS.²⁴

To properly describe word order in Tagalog, then, we should say that generally (though not obligatorily) the clause is predicate-initial, and the position of an NP is determined by its nature as pronominal or lexical

(pronominal forms being second-position clitics), and by the pragmatic status of the referent of the NP. If the referent of the NP is not part of the pragmatic presupposition, the NP will generally form a constituent with the predicate, and so generally (though not obligatorily) will follow the predicate but precede the pivot NP. If the referent is part of the pragmatic presupposition, then if it is the topic it will be represented as the pivot NP (assuming a lexical NP appears in the clause – this is not obligatory), and if it is not the topic, it will appear after the pivot NP.

Conclusions

We have seen that the principles that determine word order for each language discussed are unique to those languages, even if there are some aspects that might be similar across languages.²⁵ Differences among the uses of word order in different languages are also not discrete; there is immense variation. For example, English and Italian both might be said to have grammaticalized subject as a grammatical category, if we assume subject is a cross-linguistic category, and both languages have been described as “SVO” languages, but the degree to which grammatical relations determines word order is different. If one of us wants to tell the other the news that Randy’s brother Johnny called, we would say in English *JOHNNY called*, with stress on *Johnny*, to show the eventive nature of the utterance. In Italian, while word order is not as pragmatically determined as in Chinese, the word order of this utterance would be different from that of English, and more like Chinese (to get the eventive interpretation): *Ha telefonato Gianni*.

It is then problematic to assume that word order in all languages can be described using concepts such as “SOV” or “SVO”, etc. that assume universal principles for the determination of word order. If we make the assumption of cross-linguistic comparability, we miss important facts about the principles that are involved in the structures of the languages and about the differences among languages, and are led to forced analyses which cannot explain the patterns found (such as trying to force example (22.b4) into a subject-object analysis). We need to describe the principles that determine word order in each language we describe. We are not saying comparison can’t be done. What we are arguing for is for a more rigorous way of describing languages and of doing typological comparison. We can make much more detailed and careful statements about what principles are

determining word order in each language, and we can compare the languages using those more detailed descriptions, such as talking about what pivots have developed and how they influence constituent order, or in what ways information structure influences word order.²⁶

Notes

1. As R. M. W. Dixon has frequently pointed out (personal communication), the term “word order” is something of a misnomer, as what is usually talked about under this heading is the order of constituent phrases, not individual words.
2. Dryer (in comments on a draft of this paper) takes something of a middle path, arguing that ‘there is a sharp distinction between what notions are relevant to classifying languages typologically and what notions are relevant to describing individual languages’, that is, that description of individual languages should be done using language-specific categories, but typological classification of languages can be done using just the semantically-defined notions.
3. LaPolla (2002) discusses problems with the universals that have been developed based on this methodology and the explanations for them.
4. The assumption of a clause with two full NPs as the basic clause type is problematic as well, as this type of clause has been shown to be relatively rare and marked in natural discourse. For example, Lambrecht (1987) argues that SVO word order in French is actually a minor and marked word order (see also Du Bois 1985, 1987; Lambrecht 1994; Hopper 1986; Jacobsen 1993). Due to this fact, and others, Dryer (1997b) argues that instead of using the six-way typology of SOV, SVO, VSO, etc., we should use two separate two-way typologies, OV vs. VO and SV vs. VS.
5. The category of verb is also not a universal category; word classes are defined purely in language-specific morphosyntactic terms, but due to space limitations the discussion here will be limited to grammatical relations and the organizational principles of the clause. See Himmelmann (forthcoming) for an example of a language that does not have a category equivalent to English verbs.
6. Although the terms “Finite” and “Subject” are often used as if they are cross-linguistic categories in the linguistics literature, we are here using them as technical terms, and are defined as purely English-specific phenomena. The analysis and the terms are from Halliday (1994).
7. Put very briefly, the Theme is the starting point of the message, relative to which the rest of the message is interpreted, and contrasts with the Rheme, the rest of the clause. In English there are certain elements, such as interrogative

- pronouns, certain subordinators, and conjunctions, that are obligatorily thematic, and this influences interpretation. Languages differ in terms of what, if anything, is obligatorily thematic. This is another important, yet unexplored, aspect of word order typology.
8. This is at least partly why English requires an overt Subject in each clause. Simply saying a language is or is not a “pro-drop” language also does not tell us anything, as we would want to know in which contexts pronouns are not used or are not obligatory, and why pronouns are or are not obligatory in certain contexts.
 9. Briefly, a pivot is a noun phrase that is singled out for special treatment in a construction; it involves a restricted neutralization of semantic roles for the purposes of constraining the identification of referents. Pivots are construction-specific, neutralizing A and S or P and S (Dixon 1972, 1979; we use “P” here instead of “O” for the semantic role, as “O” is being used for the grammatical relation). A language may or may not show evidence of pivots, and may grammaticalize different kinds of pivots in different constructions. (See Van Valin and LaPolla 1997, Ch. 6).
 10. Dryer 1997 is an excellent criticism of the idea of grammatical relations as a cross-linguistic phenomenon. Dryer argues we should treat grammatical relations the same as other language-specific categories, such as the word and individual phonemes. That is, we would not just say ‘There are words in language X’, but would give the language-specific definitions for the different types of words found in the language. He mentions word order as another language-specific phenomenon, but does not give detailed arguments. Croft (2001), to some extent following Dryer, also argues against universal notions of grammatical relations (and many other types of structure), but again does not discuss the question of word order universals.
 11. Abbreviations used: ALL allative, AP actor pivot, ASSOC associative, BP benefactive pivot, CL classifier, COMPAR comparative, CSM change of state marker, EXP experiential, IP instrumental pivot, LP locative pivot, NEG negative, PM predicate marker, PN proper name, STAT stative, SPEC specific article, UP undergoer pivot.
 12. Textbooks on typology, e.g. Whaley 1997, often cite Chinese as an example of a language that marks grammatical relations using word order, but this is incorrect.
 13. The two NPs in (18) could also be “interchanged” with no change in the two possible meanings.
 14. See also Lambrecht 1987; Herring 1989, 1990; LaPolla 1995a; Van Valin and LaPolla 1997, Ch. 5 on the relationship between information structure and word order.
 15. Very often in discussions of Chinese two different types of information relevant to referents, identifiability and topical/focal nature, are confused, and so it is assumed that word order marks “definiteness” in Chinese. See LaPolla 1995a for arguments why this is not the case.
 16. Mei Tsu-lin (1961:153) argued against the traditional doctrine that saw the subject-predicate distinction in grammar as parallel to the particular-universal distinction in logic, as he said it was a reflex of an Indo-European bias, and could not be valid, as ‘Chinese ... does not admit a distinction into subject and predicate’ (in the Aristotelian sense).
 17. The famous *bǎ* construction also has a structure like this. The particle *bǎ*, which marks the major topic-comment division in clauses where it is used, developed to disambiguate non-agentive non-focal elements appearing in preverbal position as secondary topics (see Chao 1968:74–75).
 18. In Chinese we often find verb-final clauses with two NPs before the verb, but the verb-final structure that results does not have the same pragmatic structure as unmarked focus structure in verb-final languages, such as many of the Tibeto-Burman languages, as both NPs are non-focal. In the Tibeto-Burman languages that do not use word order to mark semantic or grammatical relations, the unmarked focus position is immediately before the verb, and so most often a NP-NP-V structure will be simple topic-comment, with the second NP being within the focus and not a secondary topic. Incidentally, it is because these languages do not use word order to mark semantic and grammatical relations that we often find the development of agentive and/or anti-agentive marking (LaPolla 1992, 1994, 1995b).
 19. In the past, this construction was often (inappropriately) called the “retained object” construction.
 20. Lazard (1999) uses the term “omniprédicative” for languages like Tagalog; Himmelmann (forthcoming) while establishing two morpho-lexical form classes, argues that there are no form class distinctions relevant to syntactic position.
 21. In Tagalog there are two sets of pronouns, one which is similar in distribution to the *ang*-marked form of the noun, appearing as pivot and for specific referents, and one which has the same distribution as the *ng*-marked forms, appearing as non-pivot and genitive pronoun. The pivot pronouns are called “*ang* pronouns”, as they take the place of the argument that would otherwise take the *ang* article if it was a common noun. The pronouns are second-position clitics, and so can appear between elements of the predicate (effectively creating a discontinuous constituent). It is also possible for an understood topic to not appear at all in the clause. In the answer in (27), most probably ‘the table’ would be referred to with a zero pronoun or possibly an *ang* pronoun.
 22. This is not to say a focal NP must not be the *ang* argument. In a cleft construction, the usual form for answering question-word questions, the predicate NP takes the *ang* article, or its equivalent for personal names, *si*.

E.g., in answer to the question ‘Who cooked the rice?’ the answer could be as in (i).

- (i) *Si Maria ang nagluto ng kanin.*
 SPEC Maria SPEC cooked-AP GEN rice
 ‘The one who cooked the rice was Maria.’

In this construction the verb is nominalized by the *ang* article, so the whole construction is an equational clause made up of two NPs (there is no copula in Tagalog).

23. Himmelmann (2002) uses the term “valency-neutral alternatives” or “symmetrical voice system” for this type of system.
24. Given that the same marking (*ng*) is used for intra noun phrase relations and intra-clausal relations, it is possible to take the position, as Himmelmann (1991) and Lazard (1999) have done, that all clauses in Tagalog are equative clauses. If this were proven to be the case, it would be an even more radical departure from the conception of all clauses as being describable as “SOV”, etc.
25. We might have also discussed Riau Indonesian, which Gil (1994) argues has a radically underspecified clause structure.
26. See Van Valin and LaPolla 1997, Chapter 5, for some discussion of differences in constituent order due to differences of information structure.

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