Passive in the world's languages

Edward L. Keenan and Matthew S. Dryer

0. Introduction

In this chapter we shall examine the characteristic properties of a construction widespread in the world's languages, the passive. In section 1 below we discuss defining characteristics of passives, contrasting them with other foregrounding and backgrounding constructions. In section 2 we present the common syntactic and semantic properties of the most widespread types of passives, and in section 3 we consider passives which differ in one or more ways from these. In section 4, we survey a variety of constructions that resemble passive constructions in one way or another. In section 5, we briefly consider differences between languages with regard to the roles passives play in their grammars. Specifically, we show that passives are a more essential part of the grammars of some languages than of others.

1. Passive as a foregrounding and backgrounding operation

Consider the following sentences:

- (1) a. Mary slapped John
 - b. John was slapped
 - c. John was slapped by Mary

Functionally speaking, passives such as (1b) and (1c) may be considered foregrounding constructions compared with the syntactically less marked and pragmatically more neutral active, (1a): they 'topicalize' ('foreground', 'draw our attention to') an element, *John*, which is not normally presented as topical in the active. To this extent passives are similar to what we shall here call *topicalizations*, (2b) below, and left-dislocations, (3b) below, both prominent foregrounding constructions across the world's languages.

- (2) a. I like beans
 - b. Beans I like
- (3) a. Congressmen don't respect the President anymore
 - b. As for the President, congressmen don't respect him anymore

Functionally, the passives differ from these sentences in at least two ways. First, by eliminating the subject of the active, as in (1b), or by relegating it to the status of an oblique NP, as in (1c), they background the active subject in ways in which the topicalizations or left-dislocations do not.

Moreover, the passives seem to be weaker foregrounding constructions than either the topicalizations or the left-dislocations. Thus in (3b) the President is somehow more of a topic than is congressmen, the subject (= unmarked topic) of (3a). But in John was slapped, John seems to be a topic only to the same extent that Mary is in the corresponding active, Mary slapped John. Notice that it is generally quite difficult across languages to topicalize or left-dislocate twice from the same sentence (some exceptions are known). Thus from a dislocated sentence such as As for the President I saw him in Chicago a few days ago we cannot naturally form *In Chicago as for the President I saw him a few days ago. Such examples suggest that it is difficult for a sentence to present more than one marked topic.

It is however fully natural to topicalize from an already passive sentence. Thus from *The President was welcomed with open arms in Chicago* we may naturally form *In Chicago the President was welcomed with open arms*. It appears then that the foregrounding inherent in passives does not compete with that expressed by topicalization or left-dislocation.

Moreover, the fact that we can topicalize or dislocate from a passive sentence is merely one example of a much broader difference in the syntactic nature of passive, compared with topicalization and dislocation. It is quite generally the case that the major syntactic operations in a language, such as nominalizing operations (*I was dismayed at John's being fired*), relative-clause formation (the garden in which John was attacked), and yes-no question formation (Was John attacked in the garden?), operate freely on passives (with some exceptions, such as imperative formation), but these processes do not operate freely, often not at all, on topicalized or dislocated sentences. Thus we cannot say *I was dismayed at as for John his being fired, or *the garden in which as for John Mary attacked him, and so on. Generally then, basic passives tend to be well integrated into the rest of the grammar, whereas topicalizations and dislocations tend to be limited to main clauses, only sometimes being allowed in sentence complements of verbs of thinking and saying.

Furthermore, these basic differences between passives and topicalizations are directly reflected in the observable surface forms of passives. Consider how we can tell if a sentence in a language is passive or not. What is it about passives that makes them observably distinct in surface form from basic actives? For topicalizations and dislocations the informal answer is easy. They present NPs in 'unusual' positions in the sentence, that is, positions in which such NPs would not occur in basic actives. In addition, in some languages, Lisu (Tibeto-Burman) and Japanese for example, these NPs may carry a specific marker of topichood, such as a postposition.

But passives are not in general distinct from actives with regard to the position and case marking of NPs. In particular the foregrounded NP in a passive, namely the derived subject, is usually placed and case marked as are subjects of basic actives. Similarly, 'agent phrases', such as by Mary in John was slapped by Mary, most commonly take the position and case marking (including choice of pre- and postpositions) of some oblique NP in active sentences, most usually an instrumental, locative, or genitive. Thus we cannot recognize a passive in terms of its NPs being marked or positioned in the sentence in ways different from those used in basic actives.

Note in particular that this holds for those languages which place the subject at the end in basic actives (see Keenan 1978 for a more extensive discussion). Thus in Gilbertese (Micronesia) the basic active order is Verb + Object (if present) + Subject + Oblique NP. And in the passive, (4b) below, the derived subject is placed where subjects of intransitive verbs normally occur in actives, and the agent phrase, constructed with a preposition, occurs where obliques normally go (the subscripts indicate agreement on the verb):

- - b. E_j kamate-aki te naeta $_j$ (iroun te moa $_i$) it kill-PASS the snake (by the chicken) 'The snake was killed (by the chicken).'

In fact the only way we know that (4b) above is passive is by the presence of a specifically passive suffix, -aki, on the verb. And this observation turns out to be general across languages.

That is, in general in a language, what is distinctive about the observable form of passives is localized within the predicate or verb phrase (understood broadly enough to cover auxiliary verbs). By contrast, topicalizations and dislocations are not generally marked in the predicate; the VPs in the topicalized and dislocated sentences cited above are identical to the VPs in their untopicalized and undislocated versions. Thus the formation of passives in a language takes place at the level of verb-phrase syntax, whereas topicalization and left-dislocation (as well as right-dislocation: He's out of work again, my father) take place at the level of sentence syntax. Stated in generative terms, to form a passive sentence it is sufficient to generate a passive verb phrase; the rules which combine these VPs with NPs to form sentences are rules needed for the formation of simple actives anyway and are not peculiar to passive. In contrast, the rules needed to form topicalizations or dislocations will derive sentences from sentences, and will crucially refer to properties of the sentence as a whole, since they must specify the position to which the topicalized or dislocated element is moved with respect to the sentence as a whole - i.e. it is moved to the front of the sentence (or to the back in the case of right-dislocations).

Consequently in examining passives in different languages, one should look for ways of forming verb phrases, not ways of modifying sentences to yield other sentences. And it is this point of view which we adopt in section 2 below in representing the language-general properties of passives.

We might conclude this section by emphasizing that the distinction between sentence-level phenomena and predicate-level ones is deeper and more extensive than simply a difference among foregrounding operations. Thus if passive is thought of as a way of deriving sentences from sentences, as was the case in early forms of generative grammar (Chomsky 1957), we would expect that given a sufficiently large sample of languages, any of the ways in which one sentence could be derived from another would be used in the formation of passives in one or another language. But in fact this is very much not the case. Contrast passive with the formation of yes-no questions, clearly on all accounts a sentence- (or clause-) level derivational process. There are basically two major (not exclusive) means of forming such questions: beginning with a declarative, assign the declarative a distinctively interrogative intonation contour; or insert a particle, where the position of the particle is defined with respect to the declarative sentence as a whole, usually at the beginning of the sentence or at the end, more rarely between the subject and the predicate or after the first word or constituent of the sentence. Even such uncommon ways of forming questions as inverting the subject and the predicate or auxiliary verb are essentially sentence-level phenomena, as the smallest linguistic unit which contains the elements mentioned is the sentence. Thus what is distinctive about the observable form of yes-no questions is given by describing properties of the sentence as a whole (intonation contour, position of particle, etc.).

But passives are never formed in such ways. No language forms passive sentences by assigning a characteristic intonation contour to an active, or by inserting a sentence-level particle in an active, or by inverting the subject and the auxiliary of an active. Rather, passives are formed by deriving verb phrases in certain ways, ways to which we now turn.

2. Basic passives

2.0 General properties of basic passives

We shall refer to passives like (1b), John was slapped, as 'basic passives'. What makes them distinct from other passives is (i) no agent phrase (e.g. by Mary) is present, (ii) the main verb in its non-passive form is transitive, and (iii) the main verb expresses an action, taking agent subjects and patient objects. Our justification for calling such passives 'basic' is that they are the most widespread across the world's

languages. More specifically let us note the following generalizations concerning the distribution of passives:

- G-1: Some languages have no passives.
- G-2: If a language has any passives it has ones characterized as basic above; moreover, it may have only basic passives.

In support of G-1 we note that many languages in New Guinea, like Enga (Li and Lang 1979), are cited as having no passives. Similarly Chadic languages are typically passiveless (Hausa being a partial exception here; see Jaggar 1981). Also passiveless are Tamang (Sino-Tibetan; Mazaudon 1976), Isthmus Zapotec (Oto-Manguean; Pickett 1960), and Yidip (Australian; Dixon 1977a).

One might wonder whether these languages have a gap in their expressive power. Can they not express 'John was slapped' without committal as to who the agent was? And of course in general they can, but they will use fully active means to do so. If English had no passive, for example, we might give an approximate semantic equivalent by saying someone slapped John. It appears however that languages without passives have somewhat more grammaticized means for expressing functional equivalents of basic passives. Perhaps the most common means is to use an active sentence with an 'impersonal' third plural subject. By impersonal here we mean simply that the third person element is not understood to refer to any specific group of individuals. Example (5b) below from Kru (John Singler, personal communication) is illustrative:

- (5) a. Tò pō slā ná.
 Toe build house DEF
 'Toe built the house.'
 - b. I pō slā ná.
 3PL build house DEF
 'They built the house.' = 'The house was built.'

The functional equivalent to passive is often used in languages which have fully productive basic passives. Example (6) from Hebrew is illustrative.

(6) Ganvu li et ha-mexonit stole(3PL) to.me DO the-car 'They stole my car.' = 'My car was stolen.'

A second alternative to passives is simply to eliminate the subject of the active; compare the active sentence in (7a) from Supyire (Gur) (from Carlson 1994) with the passive sentence in (7b); the fact that *sikàŋi* 'goat' precedes the perfective marker in (7b) shows that it is the subject.

- (7) a. nàŋa à sikàŋi bò man.DEF PERF goat.DEF kill 'The man killed the goat.'
 - b. sikāŋa a bò goat.DEF PERF kill 'The goat has been killed.'

[Note that the difference between the two forms for 'goat' in (7) is purely phonological: the final /a/ on $sik\bar{a}\eta a$ is due to assimilation to the /a/ of the perfective marker.] This alternative appears to be particularly common in ergative languages, such as Tongan, as in (8).

- (8) a. Na'e tamate'i 'e 'Tevita 'a Koliate killed ERG David ABS Goliath 'David killed Goliath.'
 - b. Na'e tamate'i 'a Koliate killed ABS Goliath 'Goliath was killed.'

It is not clear whether we want to consider such cases as (8b) as 'truncated' actives, with perhaps a 3pl or indefinite pronoun understood or as some kind of morphologically degenerate passive in which the verb is not distinctively marked.

A third and less common alternative to passive is to use a form of the verb which indicates an indefinite or unspecified subject. This is illustrated by the Oneida example in (9) (Iroquoian; Karin Michelson, personal communication) in which the prefix ukw- is unambiguously a pronominal morpheme rather than a passive morpheme.

(9) úhka? ok wa?-ukw-alahsátho-?
PRT PRT FACTUAL-UNSPEC.SUBJ:1.OBJ-kick-PUNC
'Someone kicked me.'

This sentence serves the same function as a passive ('I was kicked'); however, it is not passive, but is active and transitive (like the English gloss 'Someone kicked me'). We discuss such constructions in section 4.2 below.

Consider now the distributional claim made in G-2. As formulated, it entails G-2.1 to G-2.3 below:

- G-2.1 If a language has passives with agent phrases then it has them without agent phrases.
- G-2.2 If a language has passives of stative verbs (e.g. *lack*, *have*, etc.) then it has passives of verbs denoting events.
- G-2.3 If a language has passives of intransitive verbs then it has passives of transitive verbs.
- G-2.1 is not surprising, since agent phrases in passives are typically presented like oblique NPs in actives, and obliques are generally not obligatory. We should note here that Lawler (1977) cites Acehnese (Indonesia; Austronesian) as having a passive construction requiring an agent phrase. Durie (1981), however, argues with additional data that the construction is in fact an unmarked active. Conversely, many languages are cited as permitting only agentless passives; Latvian (see Lazdina 1966, from which (10) below is taken) is one example:
- (10) Es tieku macits (*no mates)
 I am taught by mother
 'I am taught.'

Similarly, contrast the active sentence from Taba (Indonesia; Austronesian; Bowden 1997) in (11a) with the passive sentence in (11b), in which there is no expression of the agent.

- (11) a. i n=bes niwi 3SG 3SG=husk coconut 'She husked the coconut.'
 - b. niwi ta-bhes do coconut NO.AGENT-husk REALIS

'The coconut has been husked.'

The prefix indicating passive in (11b) is in fact more generally an indicator of the absence of an agent; hence the gloss 'no.agent'. With semantically transitive verbs, it serves as a passive marker, signalling that the sole argument of the verb corresponding to the patient in a corresponding active clause. But this prefix can also be used with intransitive verbs to indicate diminished agency on the part of the single argument, as in (12).

(12) ta-tagil yak
NO.AGENT-walk 1SG
'I'm wandering around (with no specific destination in mind).'

And the passive construction in (13) from Kutenai (isolate; western Canada, U.S.) cannot include any reference to the agent.

(13) ła ¢inamnał-ił-ni ?inłak ?a kitłanamis back take-PASSIVE-INDIC chicken.hawk tent 'Chicken Hawk was taken back to the tent.'

In addition, it is also generally the case that agentless passives are preferred even when the language syntactically permits agent phrases. Passive sentences with agent phrases are often accepted by native speakers of various languages (e.g. Turkish) with reluctance, and they are often described as reflecting the influence of English. And text counts for various languages (e.g. English by Svartvik 1966, Dutch by Kirsner 1976, Chamorro by Cooreman 1987, Modern Greek by Roland 1994) show agented passives as much less frequent than agentless ones, even though agented ones are fully grammatical.

Regarding G-2.2, it should be noted that passives are often not formed freely on transitive verbs whose objects are not Patients, not portrayed as being affected. Thus English verbs such as be, become, lack, and have (in its possessive sense, e.g. John has a new car) do not easily passivize (*A new car is had by John). On the other hand, it is not the case, as has sometimes been suggested, that highly stative verbs are universally unpassivizable. In Kinyarwanda (Bantu, from Kimenyi 1980), such highly stative verbs as cost, weigh, and possessive have do passivize:

(14) Ibifuungo bibiri bi-fit-w-e n-îshaâti buttons two they-have-PASS-ASP by-shirt 'Two buttons are had by the shirt.'

As regards G-2.3, we note (and discuss in detail in section 3.1) that many languages with basic passives allow the passive morphology to apply to intransitive verbs as well. For example just as from amare 'to love' in Latin we form amatur 'he is loved', from currere 'to run' we form curritur 'it is run' in the sense 'there is running going on, running is being done'. And G-2.3 guarantees that if passives of the curritur type are present then so are passives of the amatur type. On the other hand, some languages with basic passives, like English, do not permit passives on intransitives. Passives on intransitives are the clearest examples of passives which lack the property of prototypical passives in which the subject corresponds to an object in a corresponding active clause. They do, however, entail the existence of an agent. The reason for defining passive so as to include such passives on intransitives is that they generally employ the same morphology as that used with basic passives and they normally eliminate an argument, the agent.

2.1 The syntactic form of basic passives

In section 1 we noted that what is distinctive about the form of passive sentences is their verb phrase (VP), and passive VPs are naturally expressed in the simplest case as syntactic and morphological modifications of transitive verbs (TVs). More specifically, a passive VP in a language will consist of a strict morphological modification of a TV together with, in some languages, an auxiliary verb specific to the passive construction. This characterization of passives allows us to distinguish two broad types of passives: those which use auxiliaries, which we shall call 'periphrastic passives' and those which don't, which we shall call 'strict morphological passives'. The latter have already been illustrated by many examples cited above. An example of a passive with auxiliary, other than the English case, is the Latin example in (15).

(15) Dareus (ab Alexandro) victus est Darius (by Alexander) conquered is 'Darius was conquered (by Alexander).'

This example shows in addition that Latin in fact possesses passives of both types. As we shall see below, it is quite common for a language to have more than one syntactically and semantically distinct type of passive construction.

2.1.1 Strict morphological passives

The strict morphological (SM) passives illustrated so far are all formed by suffixing, but this of course is not a general property of SM-passives. Example (16b) from Sre (Mon-Khmer; Manley 1972) illustrates a passive formed by prefixing.

- (16) a. Cal pa? mpon wind open door 'The wind opened the door.'
 - b. Mpon gə-pa? mə cal door PASS-open by wind 'The door was opened by the wind.'

Examples of other morphological ways in which passives are formed include infixing (Tagalog), internal vowel change (Hebrew, Arabic), and reduplication (Hanis Coos, western US).

A given language may present several formally distinct SM-passives. Examples (17b-d) below, from Malagasy, are illustrative.

- (17) a. Man + tsangana (= manangana) ny lai aho ACTIVE + put up the tent I 'I am putting up the tent.'
 - b. A-tsanga-ko ny lai PASS-put up-by me the tent 'The tent is put up by me.'
 - c. Voa -tsangana ny lai PASS-put up the tent 'The tent is put up.'
 - d. Tafa-tsangana ny lai PASS-put up the tent 'The tent is put up.'

Formally, the three passives above differ with respect to the choice of passive prefix on the verb. In addition the last two do not easily accept agent phrases, though their

presence is perhaps not strictly ungrammatical. Semantically, the three passives are not fully equivalent, however. (17b) is a neutral passive, forming a paraphrase with the active in (17a). The *voa*- passive in (17c), however, is unequivocally perfective in meaning: the action of putting up the tent is viewed as successfully completed. The meaning of (17d) is somewhat harder to describe, but roughly it suggests that the action of putting up the tent was almost spontaneous; the conscious activity of the Agent is downplayed. We might almost be tempted to translate (17d) as 'the tent put itself up', though of course that could not happen literally. See Randriamasimanana (1986) and Rajaona (1972) for more thorough discussion.

The same types of formal morphological means used in deriving basic passives are often used to derive VPs which are not passives. This is particularly true for verbal morphology commonly associated with reflexives and/or middles. In Spanish, for example, the reflexive construction can be used as a passive, as in (18).

(18) Se encontraron dos nuev-o-s cuadros de Frida Kahlo
REFL find.PAST.3PL two new-MASC-PL paintings.PL by
Frida Kahlo
'Two new paintings by Frida Kahlo were found.'

A similar construction exists in Russian, and here it is also possible to express the agent phrase:

(19) Doma strojat-sja rabočimi houses build-REFL workers.INSTR 'Houses are built by workers.'

There are two further properties of SM-passives which should be noted. First, in some cases, the morphological function is 'degenerate' in that the derived expression does not differ at all from what it is derived from. Such cases of morphological functions are not uncommon. For example, the function which forms past participles in English (kicked from kick, eaten from eat, etc.) is degenerate in certain cases; the past participle of hit is simply hit, not hitted or hitten. One might expect, then, to find passive VPs which are identical to the transitive verbs they are derived from. And some few cases seem to exist, though they are not common and usually of restricted distribution in the languages for which we have data. Thus the verb in (20b) from Swahili (Givón 1972) does not differ from its active transitive counterpart in (20a) (except that it shows subject agreement with an NP in a different noun class):

- (20) a. Maji ya-meenea nchi water it-cover land 'The water covers the land.'
 - b. Nchi i-meenea maji land it-cover water 'The land is covered by water.'

Similar examples are cited for other Bantu languages, e.g. Kinyarwanda (Kimenyi 1980). Kimenyi in particular notes a very large number of constraints both on the formation of such passives as well as on their distribution in various syntactic contexts.

Finally, given that SM-passives are derived VPs, it is always possible that other syntactic or morphological processes which operate on VPs may be sensitive as to whether the VP in question is passive or not. We shall illustrate this possibility here with the case of verb (more exactly verb phrase) agreement with subjects. The main point here is that the existence and form of subject agreement affixes on passive verbs may differ from those on active verbs. In (i-iii) below we give the principal types of such variation known to us:

- (i) The passive verb may fail to agree with its subject, even though actives do show agreement. This is the case in Welsh for the SM-passive (there is also a periphrastic passive). Active verbs agree with pronominal subjects, but passive verbs remain invariant: gwelir di 'You are seen', gwelir fi' 'I am seen', gwelir ef 'he is seen', etc.
- (ii) More commonly than (i) above, passive verbs may simply have different agreement affixes from active verbs. This is the case for example with the SM-passive in Latin. Compare the present indicative actives of amare 'to love' with their present indicative passives in Table 5.1. Clearly the variation in person and number in the passive forms is not identical to that of the actives. It is quite common across languages that agreement forms may vary with the other properties which are marked on the verb. Thus person-number endings on verbs in Romance languages may vary with tense, mood, and aspect. So the variation noted above is to be expected as long as passive is a verbal category, not a sentential one. If passive were merely thought of as an operation which topicalized an NP and perhaps backgrounded another, we might expect markings of passive to show up on NPs, but not on the VPs. And in particular we would have no reason to expect that verbs in such 'topicalized' sentences would show different agreement paradigms from their non-topicalized (active) counterparts.

Table 5.1 Conjugation of Latin amare

	Present indicative active		Present indicative passive	
1	<i>singular</i>	<i>plural</i>	<i>singular</i>	<i>plural</i>
	amo	amamus	amor	amamur
2 3	amas	amatis	amaris	amamini
	amat	amant	amatur	amantur

- (iii) The passive verb may agree with its subject as though it were a direct object of an active verb. This is the case in Maasai (Nilo-Saharan) and Kimbundu (Bantu; Angola). Example (21) below is from Kimbundu:
- (21) a. A-mu-mono they-him-saw 'They saw him.'
 - b. Nzua a-mu-mono kwa meme John they-him-saw by me 'John was seen by me.'

The sentence in (21b) qualifies as a passive to the extent that the patient is in subject position before the verb and the agent is expressed in a prepositional phrase following the verb. But the verb exhibits semantically empty third person plural agreement and object agreement with the patient. (It is tempting to speculate in this latter case that the passive in (21b) derives historically from an object topicalization from an impersonal third plural active of the sort illustrated in (5b) and (6).)

2.1.2 Periphrastic passives

A basic periphrastic passive consists of an auxiliary verb plus a strict morphological function of a transitive verb. These passives fall into natural classes according to the choice of auxiliary verb; the passive auxiliary can be (i) a verb of being or becoming; (ii) a verb of reception; (iii) a verb of motion; or (iv) a verb of experiencing. We elaborate on each of these four types in the following paragraphs.

- (i) The auxiliary verb is a verb of being or becoming. Example (22) below from German and (23) from Persian illustrate the use of 'become' as a passive auxiliary:
- (22) Hans wurde von seinem Vater bestraft Hans became 'by' his father punished 'Hans was punished by his father.'
- (23) a. Ali Ahmed-ra košt Ali Ahmed-obj killed 'Ali killed Ahmed.'
 - b. Ahmed košté šod Ahmed killed become 'Ahmed was killed.'

The use of 'be' as an auxiliary is illustrated by the standard English passive, *John was slapped*, as well as by (15) from Latin and (10) from Latvian. Note that in several of these cases, the verb form with which the auxiliary combines is a 'past participle', a form that in some ways behaves like an adjective: for example it agrees in Latin and Russian with the subject of the passive VP in number and gender but not person, which is the agreement paradigm for adjectives rather than verbs.

It should be noted as well that periphrastic passives of the 'be' sort commonly exhibit a certain ambiguity (or vagueness) as to whether they are interpreted 'dynamically' or purely 'statively'. Thus *The vase was broken* is ambiguous in English as to whether it merely specifies a state of the vase (which might in fact not have been caused by an external agent) or an activity performed upon the vase. German, in contrast, avoids this kind of ambiguity and always permits two different structures for these cases:

- (24) a. Das Haus wird verkauft. the house becomes sold 'The house is being sold.'
 - b. Das Haus ist verkauft. the house is sold 'The house is sold.'

If (24a) obtains you will have a chance to buy the house, whereas if (24b) obtains you are too late. Note that 'get' passives in English (e.g. *The vase got broken, John got fired*, etc.) have only the dynamic interpretation.

- (ii) The passive auxiliary is a verb of reception (e.g. get, receive, or even eat). In such cases it is common that the modification of the transitive verb takes the form of a nominalization, that is, something which occurs independently in the language as a nominal form of some sort. Example (25) below from Welsh and (26) from Tzeltal (Mayan) illustrate this type:
- (25) Cafodd Wyn ei rybuddio gan Ifor get Wyn his warning by Ifor 'Wyn was warned by Ifor.'
- (26)La y-ich' 'utel (yu'un s-tat) Ziak-e te PAST he-receive bawling out his-father) Ziak-(because ART ART 'Ziak got a bawling out (from his father).'

In fact English constructions like John got a licking/tongue lashing/beating from Bill appear to illustrate this sort of passive, though they are highly limited as to which transitive verbs accept them; we cannot say *Bill got a killing/praising, etc. from Harry. English 'get' passives (e.g. John got killed) resembles passives of this sort, but differ in that the thing got does not take the form of a nominalization. Furthermore, the direct source of 'get' passives seems to be the inchoative sense rather than the original sense of 'receive'. Thus, John got killed is parallel to John got sleepy.

- (iii) The passive auxiliary is a verb of motion (e.g. go, come). This type seems less well attested than either (i) or (ii) above, but examples (27) below from Hindi and (28) from Persian are suggestive:
- (27) Murgi mari gayee chicken killed went 'The chicken was killed.'
- (28) a. Ali loget-ra be kar bord Ali word-DO to work take 'Ali used the word.'
 - b. Loget be kar reft word to work went 'The word was used.'
- (iv) The passive auxiliary is a verb of experiencing (e.g. suffer, touch, even 'experience pleasantly'). Example (29) below from Thai and (30) from Vietnamese (diacritics omitted) are illustrative:
- (29) Mary thúuk (John) kóot Mary touch (John) embrace 'Mary was embraced (by John).'
- (30) Quang bi (Bao) ghet Quang suffer (Bao) detest 'Quang is detested (by Bao).'

Passives of this sort are widely attested in languages spoken in Southeast Asia, including Mandarin, although their analysis as passives is in fact not obvious. The languages which exhibit them independently are verb-serializing languages: apparently simplex sentences are commonly constructed with multiple verbs and few if any prepositions. For example, a sentence such as 'John took the train to Boston' might be literally rendered as 'John go ride train arrive Boston'. In addition such languages exhibit virtually no bound morphology. And since passive auxiliaries can quite generally (but not always) occur as main verbs in simple sentences, it is plausible to analyze passive sentences in these languages as special cases of serial-verb constructions. We refer the reader for further discussion of these constructions in Vietnamese to Nguyen (1976), where reasonable evidence is given that the verb of experiencing is functioning as an auxiliary verb.

Accepting these structures as passives, it should be noted that there will commonly be several acceptable choices for passive auxiliaries. Nguyen (1976) cites five such verbs for Vietnamese, among them *duoc*, used when the subject is portrayed as pleasantly affected by the action:

Quang duoc Bao thuong Quang 'enjoy' Bao love 'Quang is loved by Bao.' The use of the auxiliary bi 'suffer' is possible in (31) but ironic.

2.2 The semantics of basic passives

Our discussion of passives in section 1 in terms of their corresponding actives suggests that we might think of passives simply as paraphrases of their corresponding actives. Ultimately, however, such a view is mistaken. For one thing, as already discussed, basic passives lack an agent phrase and thus lack a corresponding active, strictly speaking. For another, as we will see shortly, when the NPs denote things other than individuals, the passives are often not paraphrases of their corresponding actives. On the other hand, if we view passive as an operation on active transitive verb phrases (TVPs), deriving passive VPs, we can, as a first approximation, give the interpretation of passives as follows: The passive of a TVP is true of an individual x if and only if for some individual y, the TVP is true of the pair (y, x). So was slapped holds of John if and only if for some individual y, slap holds of (y, John); that is, if someone slapped John. Notice that this semantic interpretation makes no immediate claim concerning whether passive sentences are paraphrases of their actives. Given that NPs like John and Mary denote individuals, it will claim that Mary slapped John entails John was slapped. But if the NPs in the sentence are not the sort which denote individuals, then no such entailment paradigm regularly holds. Thus No student slapped John will not entail John was slapped. Nor will it be the case that passive sentences in general entail the corresponding existential generalization of the active. Thus Every cake was stolen does not entail that some individual x stole every cake. Different cakes might have been stolen by different individuals.

The main point we want to notice here, however, is that if passives are treated as ways of deriving VPs from TVPs we can give a basically correct semantic interpretation which is in accordance with the following general principle: the semantic interpretation of derived structures depends on (is a function of) the meanings of what they are derived from. On the other hand, if passive were thought of as a way of deriving sentences from sentences, no regular semantic relationship between the derived structure and what it is derived from could be given. Sometimes an agentless passive is entailed by an active and sometimes it isn't, as we have seen above. Moreover the same disparity exists between agented passives and their actives. Thus, while John was kissed by Mary is presumably logically equivalent to (has the same truth conditions as) Mary kissed John, a sentence like Each child was kissed by no politician is clearly not logically equivalent to No politician kissed each child. Thus, treating passives as a VP derivational process correctly allows us to predict that quantified NPs in passives and actives may exhibit different scopes.

We turn now to some further generalizations surrounding the semantics of passives.

G-3: Languages with basic passives commonly have more than one formally distinct passive construction.

Moreover, distinct passives in a language are likely to differ semantically with respect to aspect and/or degree of subject affectedness, some examples of which we now turn to.

2.2.1 Aspectual differences

- G-4: If a language has any passives it has ones which can be used to cover the perfective range of meaning.
- G-5: If a language has two or more basic passives they are likely to differ semantically with respect to the aspect ranges they cover.

From G-4 we may infer that languages like Russian with a specifically imperfective passive will also present a passive construction which covers the perfective range. Thus no language will have only passives which must be interpreted imperfectively.

G-5 has already been amply illustrated. Recall the three basic passives in Malagasy (example (17)), one of which was semantically rather neutral, the second (the voa passive) clearly perfective, and the third (the tafa- passive) indicating something like spontaneous action, little intentional involvement of an agent. Recall as well that in languages like Russian, Latin, and Kinyarwanda with a strict morphological passive and also a 'be' type periphrastic passive, the periphrastic form is commonly interpreted as stative or perfective with respect to the SM-passive which is either non-committal as to aspect or else specifically imperfective. And recall finally the distinction between dynamic passives, which focus attention on the action, as opposed to stative passives which focus attention on the state of the object, perhaps regardless of whether an external agent is responsible. Thus the 'get' passives in English are dynamic and the 'be' passives at least ambiguously stative. A similar distinction among SM-passives is illustrated in (32) below from K'ekchi (Mayan; Ava Berenstein, personal communication):

- (32) a. La?in sh-in-sak?-e? I PAST-1(ABS)-hit-PASS 'I was hit.' (emphasizes action of hitting)
 - b. La?in sak?-b?il-in
 I hit-PASS-1(ABS)
 'I am the one who is hit.' (emphasizes the resultant state)

2.2.2 Degree of subject affectedness

We note the following generalizations:

- G-6: The subject of a passive VP is always understood to be as affected by the action as when it is presented as the object of an active transitive verb.
- G-7: Distinct passives in a language may vary according to degree of affectedness of the subject and whether it is positively or negatively affected, though this variation seems less widely distributed than that of aspect.

Recall in these regards the *bi*-versus *duoc* passives in Vietnamese, (30) and (31), in which the subject of a *bi*-passive is understood to be negatively affected, whereas the subject of a *duoc* passive is understood to be positively affected. In addition Vietnamese may use the passive auxiliary *do* which is semantically neutral as regards subject affectedness, as in (33):

(33) Thuoc X do Y che nam 1973 medicine X PASS Y invent year 1973 'Medicine X was invented by Y in 1973.'

Negative effect passives (often called 'adversative passives') seem to be the norm in much of eastern Asia. Thus the common *bei* passive in Mandarin is often interpreted as negatively affecting the subject; similarly for the standard *-are-* passive in Japanese. And as regards Korean, Lee (1973) cites in addition to the *-ki-* passive, a negative effect passive constructed with *tangha* 'to be subjected to', illustrated in (34), and a positive effect passive constructed with *pat* 'to receive' as in (35):

(34) Phoro-ka henpjeng-eke kutha-tangha-ess-ta POW-SUBJ MP-AG beat-subject.to-PAST-DECLAR 'The prisoner of war was beaten (subjected to a beating) by an MP.' (35) Ki sensayng-in haksayng-til-eke conkjeng-pat-in-ta the teacher-TOP student-PL-AG respect-receive-PRES-DECLAR 'The teacher is respected by students.'

3. Non-basic passives

In section 2 we considered the syntactic and semantic properties of basic passives, which were defined as ones which lacked agent phrases and were formed from transitive verbs denoting events. In this section, we turn to a variety of non-basic passives. We will first consider passives that are non-basic by virtue of including an agent phrase, and then turn to a variety of less common non-basic passives formed from verb phrases that are not simple transitive verbs phrases.

3.1 Passives with agent phrases

We consider passive clauses that include an agent phrase to be non-basic. There are three reasons for considering that agent phrases are not in general an integral part of the passive construction itself: (i) many languages present passives which do not permit agent phrases; (ii) agent phrases occur in non-passive structures; and (iii) when present, agent phrases most commonly take the form of an independently existing oblique NP in actives. We consider (ii) and (iii) in this section.

Let us consider first somewhat more closely what is meant by 'agent phrase'. To say that by Mary is the agent phrase of John was kissed by Mary is to say that Mary functions as the semantic subject but not the syntactic subject of the transitive verb kiss, from which the passive VP is derived. In general, an agent phrase is an NP (with or without adpositions) which functions as the semantic but not syntactic subject of a verb in an expression derived from that verb (or verb phrase). Note that the term 'agent phrase' is potentially misleading in that its semantic role (Agent, Experiencer, etc.) is whatever is required by the verb of which it is the understood subject, and need not be specifically Agent, as in the example Money is needed by the church. Some linguists use the alternative term 'actor' to emphasize this point.

3.1.1 Agent phrases in non-passive constructions

It is important to note first that agent phrases can often occur in structures which are not passives. Consider for example the *-ing* nominals in English in (36):

- (36) a. The university forbids talking by students during exams
 - b. Cheating by students is punishable by expulsion

Clearly students is the semantic (but not syntactic) subject of the intransitive verbs talk and cheat in these examples. By students then is an agent phrase. And since intransitive verbs in English do not passivize, we infer that agent phrases occur independently of the passive construction in English.

A second non-passive construction in which agent phrases appear is the causative (especially the indirect as opposed to direct causative). The examples below, (37a) from Japanese (Howard and Niyekawa-Howard 1976) and (37b) from German, are illustrative:

- (37) a. Zyon ga Biru ni aruk-ase-ta John SUBJ Bill by walk-CAUS-PAST 'John had Bill walk.'
 - b. Seine erste Frau liess sich von ihm scheiden

his first wife let self by him divorced 'His first wife let herself be divorced by him.'

In both cases in (37), the agent phrase is marked by the same adposition that is used for agent phrases in passives, though in causatives generally the choice of case or adposition for the understood subject of the causativized verb may vary as a function of the transitivity of the underlying verb. Nonetheless, the marking of the agent phrase as in passives shows up with more than chance frequency.

3.1.2 The form of agent phrases

Most commonly, agent phrases, whether in passives or other constructions, are presented as (i) instrumentals, (ii) locatives, or (iii) genitives, in active constructions.

- (i) Instrumentals. Example (19) above from Russian illustrates the use of the instrumental case marking on agent phrases, the same case as is used of course for instruments, as in John cut the bread with a knife. Similarly in many Bantu languages the agent phrase is marked with the preposition na which independently marks instruments in actives, as illustrated in (38) below from Kinyarwanda; (14) above illustrates a passive with an agent phrase marked by the same preposition:
- (38) Umugabo araandika ibaruwa n-ikaramu man write letter with-pen 'The man is writing a letter with a pen.'
- (ii) Locatives. The agent phrase marker in English is independently used with locative force: He sat by the window and was seen by Mary. More common, however, is for the agent phrase marker to specifically be the ablative marker (the locative marker meaning 'from'), as in Kayardild (Tangkic; Australia; Evans 1995):
- (39) ngada ra-yii-ju mun-da balarr-ina maku-na 1SG.NOM spear-MODAL.POTEN buttock-NOM white-ABL woman-ABL 'I will be injected in the buttocks by the white woman.'
- (iii) Genitives. The presentation of agent phrases as possessors in Malagasy is illustrated in (40).
- (40) a. ny entan-dRakoto the packages-Rakoto 'the packages of Rakoto'
 - b. Nosasan-dRakoto ny lamba wash.PASS-by.Rakoto the clothes 'The clothes were washed by Rakoto.'

Similarly, both von in German and de in French have possessive uses (ein Freund von mir 'a friend of mine' and un ami de Pierre 'a friend of Pierre') and they are the agent markers in passive clauses (Er wurde von Marie geküsst 'He was by Mary kissed'; Il est aimé de ses parents 'He is loved by his relatives'), though they also have ablative uses (Er fährt von Stuttgart nach Köln 'He goes from Stuttgart to Cologne'; Il vient de Paris 'He comes from Paris').

There is however a minority of cases where agent phrases are not presented as instrumentals, locatives, or genitives:

(iv) The agent phrase has no adposition. Vietnamese (30) and (31) illustrate this case. Note equally example (41) from Haya (Bantu; Duranti and Byarushengo 1977):

(41) Ebitooke bí-ka-cumb-w' ómukâzi bananas they-PAST-cook-PASS woman 'The bananas were cooked by the woman.'

Note that such examples do not obviously violate the claim that agent phrases are presented like active obliques. Crosslinguistically, many non-subjects and non-objects are commonly presented with no adposition. This is especially common for temporals, as in *John saw Mary last week*.

- (v) The agent phrase is incorporated into the passive verb. English illustrates this case for a very limited range of verbs, roughly a subset of those expressing power and authority:
- (42) a. This project is State-controlled/NSF-funded/government-regulated b. *This project is State-enjoyed/NSF-avoided/government-rejected

Such incorporation seems more productive in Quechua; in (43b), the agent apparently forms a close unit with the verb:

- (43) a. Kuru-ø manzana-ta miku-rqa-n bug-SUBJ apple-DO eat-PAST-3 'The bug ate the apple.'
 - b. Kuru miku-sqa-mi manzana-ø ka-rqa-n bug eat-PART-COMMENT apple-SUBJ be-PAST-3 'The apple was bug eaten.'

Finally, we should note that there may be a few cases in which agent phrases are introduced by an adposition which does not occur independently in oblique NPs in active structures. For example the agentive preposition *al yedei* in Hebrew is largely limited to agent phrases in passives (though it is closely related to an active oblique preposition *al yad* 'near'). Similarly, the agent preposition *oleh* in Indonesian appears limited to agent phrases in passives.

3.2 Passives on non-transitive verbs

The notion of passive we have characterized so far seems very dependent on the notions of intransitive and transitive verb. In fact, however, our notion naturally generalizes in ways which are linguistically enlightening, as they suggest the existence of passives different from those already considered, and languages do in fact present such passives. To see the generalization, let us replace the linguistic notion of 'verb phrase' with its logical counterpart, that of a 'one-place predicate phrase', namely something which combines with *one* NP to form a sentence. Similarly, the notion of 'transitive verb phrase' may be replaced by that of a 'two-place predicate phrase', something which combines with *two* NPs to form a sentence. In general an *n*-place predicate phrase will combine with *n* NPs to form a sentence. So the standard ditransitive verbs, *give*, *hand*, etc. might be considered 'three-place predicate phrases'.

In these terms, the standard passive derives a one-place predicate (phrase) from a two-place predicate (phrase) (we henceforth drop the term 'phrase'). Generalizing over the number of NPs a predicate needs to form a sentence then, we may characterize passive as a way of deriving n-place predicates from n+1-place predicates. The case we have treated so far is that for which n is 1. Let us consider now the case for n=0. That is, do we find passives in languages which derive zero-place predicates (sentences) from one-place predicates (VPs)? And the answer obviously is yes. We have in fact already cited the Latin example whereby from the one-place predicate *currit* 'is running', we derive the zero-place predicate *curritur* '(it) is run, running is being done'.

As passives on intransitives in the simplest cases will be lacking any NPs, they will of necessity be subjectless, and as such have usually been called 'impersonal passives' in the literature. While their general properties are less well known than the personal passives, we do have several studies that make remarks on a variety of languages and on which the remarks below are based. These studies are Comrie (1977), Perlmutter (1978), and to a lesser extent Keenan (1976b). For studies of specific languages we cite: Langacker (1976) for Uto-Aztecan languages generally, Kirsner (1976) for Dutch, Timberlake (1976) for North Russian dialects, and Noonan (1994) for Irish.

Based on these studies, which cover many fewer languages than those considered in our discussion of basic passives, we somewhat tentatively suggest the following general properties of impersonal passives (passives of intransitives).

First, such passives exist and seem to have a reasonable distribution across language areas and genetic families. Thus languages such as the following have basic passives and use the same syntactic and morphological means to derive impersonal passives (sentences) from intransitive verb phrases: Dutch, German, Latin, Classical Greek, North Russian dialects, Shona (Bantu), Turkish, and Taramahua (Uto-Aztecan). For example, in German, basic passives are formed from 'become' plus the past participle of the transitive verb, and impersonal passives are formed from 'become' plus the past participle of the underlying intransitive verb, as in (44):

(44) Gestern wurde getanzt yesterday became danced 'Yesterday there was dancing.'

Similarly in the impersonal passive in (45a) below from Turkish we see the same -il-marking passive as in the basic passive illustrated in (45b) (the different form -il in (45b) is simply the result of vowel harmony).

- (45) a. Ankara-ya gid-il-di Ankara-to go-PASS-PAST 'It was gone to Ankara./ There was a trip to Ankara.'
 - b. Pencere Hasan tarafından aç-11-d1 window Hasan by open-PASS-PAST 'The window was opened by Hasan.'

And (46a, b) below from Taramahua clearly illustrate the same bound morphology on the verbs in each case:

- (46) a. Tashi goci-ru not sleep-PASS 'One doesn't sleep.'
 - b. Gao ne ?a-ru horse I(SUBJ) give-PASS 'I was given a horse.'

Second, impersonal passives using the same verbal morphology as basic passives typically take their agent phrases marked in the same way as in basic passives, if they accept agent phrases at all. Example (47) from Dutch is illustrative:

(47) Er wordt (door de jongens) gefloten there became (by the young men) whistled 'There was some whistling by the young men.'

Sometimes, as in Turkish, the passives on intransitives do not accept agent phrases whereas those from transitives do (though only with some awkwardness in Turkish). For most of the languages where we have data however, as in Dutch, Latin, North Russian, and Shona, the impersonals accept agent phrases if the basic passives do.

Third, impersonal passives are not limited to lexical intransitive verbs. In particular, a transitive verb together with its NP object will constitute a VP and may be passivized; in this case, the NP will remain an object after passivization. Observe (48) from North Russian.

(48) U mena bylo telenka zarezano at me was(3SG NEUT) calf(FEM ACC) slaughtered(SG NEUT) 'By me there was slaughtered a calf.'

Similarly, Latin employs impersonal passives with transitive verbs whose object occurs in the dative case, as illustrated in (49).

- (49) a. Boni cives legibus parent good citizens law(DAT PL) obey 'Good citizens obey laws.'
 - b. Legibus (a bonis civibus) paretur law(DAT PL) (by good citizens) is obeyed(3SG) '(By good citizens) there is obeying laws.'

Fourth, it appears in a few languages that 'reflexive' forms come to function with an impersonal passive meaning, as illustrated in (50) from Polish; note the impossibility of including an agent phrase.

- (50) a. Idzie sie szybko (*przez uczniow) is walked REFL quickly by schoolboys 'One walks quickly; there is quick walking.'
 - b. Dokonuje sie prace (*przez uczonych) is completed REFL works by scientists 'The works are being completed.'

And fifth, a language may have impersonal constructions which are syntactically and morphologically independent of the existence of basic passives. This is illustrated in (51) for Irish. In (51a) is an example of a simple active clause in Irish; (51b) is the basic passive of (51a); (51c) is an impersonal passive corresponding to (51a). Note that the impersonal passive construction in (51c) is completely different from the basis passive in (51b): in (51b), the basic passive is formed with an auxiliary plus participle, while in (51c), the impersonal passive involves a distinct form of the verb.

- (51) a. Bhuail si e
 (Active)
 hit she him
 'She hit him.'
 - b. Bhi se buailte aici (Basic passive) aux he hit(PART) at her 'He was hit by her.'
 - c. Buaileadh (lei) e (Impersonal passive) hit(IMPRS) (with her) him

'There was hitting of him (by her).'

In fact, bogglingly, Noonan (1978) shows that a basic passive in Irish may be further subject to the impersonal construction in that language: (52) is an impersonal passive formed on the basic passive in (51b).

(52) Bhiothas buailte (aici) aux(IMPRS) hit(PART) (at her) 'There was being hit (by her).'

3.3 Passives on ditransitive verb phrases

Among the common three-place or ditransitive verb phrases in a language will be translations of verbs like *give*, *show*, *teach*, etc. Languages vary as to which of the two objects in such clauses can appear as the derived subject in a passive. In French, for example, only the patient and not the recipient can serve as the subject of a passive. Thus, given an active ditransitive clause like (53a), we find a passive with the patient as subject, as in (53b), but not one with the recipient as subject, as illustrated by the ungrammaticality of (53c).

- (53)Jean donné 1e livre à Pierre a. Jean has given the book to Pierre 'Jean gave the book to Pierre.'
 - b. Le livre a été donné à Pierre the book has been given to Pierre 'The book was given to Pierre.'
 - c. *Pierre a été donné le livre Pierre has been given the book 'Pierre was given the book.'

In Yindjibarndi, in contrast, only the recipient and not the patient of a ditransitive verb can become the subject of a passive clause. Thus, given an active clause like (54a), we can form a passive in which the recipient is subject, as in (54b), but (54c), in which the patient is subject, is ungrammatical.

- (54) a. Ngaara yungku-nha ngayu murla-yi man give-PAST 1SG.OBJ meat-OBJ 'A man gave me the meat.'
 - b. Ngayi yungku-nguli-nha murla-yi ngaarta-lu. I give-PASS-PAST meat-OBJ man-INSTR 'I was given the meat by a man.'
 - c. *Murla yungku-nguli-nha ngayu ngaarta-lu. meat give-PASS-PAST 1SG.OBJ man-INSTR 'The meat was given to me by a man.'

In Kinyarwanda, on the other hand, both the recipient and the patient can serve as subject in a passive clause:

- (55) a. Umugabo y-a-haa-ye umugóre igitabo man he-PAST-give-ASP woman book 'The man gave the woman the book.'
 - b. Umugoré y-a-haa-w-e igitabo n-ûmugabo woman she-PAST-give-PASS-ASP book by-man

'The woman was given the book by the man.'

c. Igitabo cy-a-haa-w-e umugoré n'ûmugabo book it-PAST-give-PASS-ASP woman by-man 'The book was given to the woman by the man.'

English at first glance is similar, but with complications. We find both recipient passives and patient passives:

- (56) a. John was given the book by Mary.
 - b. The book was given to John by Mary.

Unlike the Kinyarwanda case, however, English also has two different active constructions for expressing such meanings:

- (57) a. Mary gave John the book.
 - b. Mary gave the book to John.

The fact that for most speakers the preposition to is required in (56b) (*The book was given John by Mary) suggests that (56b) is the passive of (57b) and that (56a) is the passive of (57a). There are a variety of proposals for describing the relationship between the two sentences in (57) (cf. Dryer 1986, and Chapter I.4, section 2.3) which we will not discuss here, but it appears that we can in general predict that if a language does exhibit two different active constructions analogous to those in (57), then the language will also exhibit two passives, analogous to those in (56).

In addition to the classical three-place predicates such as *give*, languages will commonly have three-place predicators like *put*, *place* which require a Patient and some sort of Locative in addition to an Agent to form a sentence. And again, the predicate will always have passive forms taking the Patient as the subject if it has any passives at all. It may or may not have passives taking the Locative as subject. English for example by and large does not have locative passives: *The chest was put the jewels (in). We may note that locative passives in some cases are easier if the verb is otherwise intransitive, e.g. This bed was slept in.

On the other hand, other languages, such as Kinyarwanda and Chichewa (and commonly in Bantu) as well as Malagasy and the Philippine languages generally, quite productively form passives whose subjects are semantically locatives. There appear to be two general syntactic means for forming such passives. Moreover these means are not specific to Locatives but apply in general to passives which have non-patient subjects.

3.4. Other passives with non-patient subjects

One general means of forming such passives is first to modify the n-place predicate (n greater than 2) to a form in which the non-patient is treated like the (direct) object of simple transitive verbs, and then form a passive as is done generally in the language on transitive verb phrases. Example (58) from Kinyarwanda illustrates this strategy (from Kimenyi 1980):

- (58) a. Úmwáalímu y-oohere-je igitabo kw-iishuûri teacher he-send-ASP book to-school 'The teacher sent the book to school.'
 - b. Úmwáalímu y-oohere-jé-ho ishuûri igitabo teacher he-send-ASP-to school book 'The teacher sent the school the book.'

c. Ishuûri ry-oohere-je-w-é-ho igitabo n-úúmwáalímu school it-sent-ASP-PASS-ASP-to book by-teacher 'The school was sent the book by the teacher.'

Note that in (58b) the basic verb 'send' is modified in form by the presence of the goal locative suffix -ho (morphologically related to the goal locative preposition kwa) and 'school' occurs immediately postverbally without a goal locative marker. Kimenyi justifies that this postverbal NP has the properties shared by the sole objects of simple transitive verbs.

In (58c) this complex verb is passivized in the normal way in Kinyarwanda, by the non-final suffix -w-, and 'school' is clearly a derived subject, occurring in subject position, triggering subject agreement on the verb, and in general (as Kimenyi supports in detail) having the characteristic syntactic properties of subjects of basic verbs. Bantu languages such as Kinyarwanda and Chichewa (Trithart 1977) are particularly rich in ways of presenting oblique NPs of actives as derived objects. Essentially any oblique NP in Kinyarwanda can be the surface direct object of some derived form of a verb. See Kimenyi (1980) for detailed support of this claim.

The second general means of forming non-patient passives is to derive passive forms directly from the n-place predicate in such a way that the desired NP is the subject. So where such derivational processes are well developed, as in Austronesian, we find different morphological forms of passives of ditransitives according to whether their subject is a Patient or non-Patient, and sometimes we even find different morphologies on the verb depending on what sort of non-Patient is the subject. The basic pattern is illustrated below from Malagasy, a subject-final language:

- (59) a. Nanasa ny lamba amin-ny savony Rasoa washed the clothes with-the soap Rasoa 'Rasoa washed the clothes with the soap.'
 - b. Nosasan-dRasoa amin-ny savony ny lamba washed-by Rasoa with-the soap the clothes 'The clothes were washed with the soap by Rasoa.'
 - c. Nanasan-dRasoa ny lamba ny savony washed.with-by Rasoa the clothes the soap 'The soap was washed the clothes with by Rasoa.'

Note in particular that the verb forms in (59b) and (59c) are different. The form in (59b) tells us that the Patient is the subject, and that in (59c) some non-Patient (finer distinctions can be made) is the subject. Philippine languages are particularly rich in the variety of verbal forms they present according to the semantic role of their subject. Example (60) below from Kalagan (Collins 1970) is a relatively simple case; six different verbal forms are cited for Kapampangan in Mirikitani (1972) and up to twelve for Tagalog by Schachter and Otanes (1972), though not all verbs accept all forms.

- (60)K[um]amang adti balkon a. aku sa tubig lata na [ACTIVE]-get I(SUBJ) DO water porch with can on 'I'll get the water on the porch with the can.'
 - **b**. Kamang-in adti balkon ku ya tubig na lata get-PASS(PATIENT) I(AG) **SUBJ** water with porch can on 'The water will be got by me with the can on the porch.'
 - Pag-kamang balkon c. ku ya lata sa tubig adti PASS(INSTR)-get I(AG) **SUBJ** can DO water on porch 'The can will be got water with by me on the porch.'

d. Kamang-an ku ya balkon sa tubig lata na get-PASS(LOC) I(AG) **SUBJ** porch DO water with can 'The porch will be got water on by me with a can.'

4. Constructions that resemble passives

While many languages exhibit constructions that conform to the characteristics of passive constructions discussed above, other languages exhibit constructions that resemble passive constructions and linguists are often not sure whether these constructions should be considered passives or not. In this section we discuss some examples of such constructions, and discuss briefly how they resemble passives and why they are generally not considered passives. In general, these constructions can be seen as lacking what we have taken to be the defining characteristic of passives: in a passive, the subject in the corresponding active is expressed by an element that is neither a subject nor an object in the corresponding passive or is not expressed at all; if it is not expressed, its existence is still entailed by the passive.

4.1 Middles

We have followed traditional practice in including the entailment of an agent as definitional of passives. Constructions which lack this characteristic but which otherwise resemble passives are generally called middles. The pair in (61) illustrate this contrast.

- (61) a. The ship was sunk.
 - b. The ship sank.

While the passive in (61a) entails (61b), it has the additional entailment that there was some agent that caused the ship to sink, an entailment that is missing from the middle in (61b). This semantic difference coincides with the grammatical fact that if the language allows expression of the agent in passive clauses, such is possible in a passive but not in a middle. Thus we can say *The ship was sunk by the enemy* but not *The ship sank by the enemy.)

While English does not employ any middle morphology, other languages do, and in some cases the morphology used for middles is similar to that used for passives. For example Classical Greek had a middle voice in addition to active and passive, and although the Greek middle has a range of functions that make it more than a middle in the technical sense used here, the middle and passive voices are identical in form in some tenses. Thus (62) can be interpreted either as a passive or as a middle.

(62) Paú-omai stop-MIDDLE/PASSIVE.1SG I stop / I am stopped.

The suffix -ka in Quechua sometimes has a middle interpretation, as in (63a), and sometimes a passive interpretation, as in (63b).

- (63) a. Punku kiča-ka-rqa-n. door open-MID-PAST-3 'The door opened.'
 - b. Čuku apa-ka-rqa-n. hat take-PASS-PAST-3 'The hat was taken.'

The example in (63a) is a middle in that no agent is implied (though of course not excluded), while (63b) is passive since the meaning of the social action verb *take* does imply the existence of an agent. And in many languages, morphology that is basically reflexive is also used with both a middle and a passive function; the Spanish examples in (64) are analogous to the Quechua ones in (63).

- (64) a. Se quemó el dulce REFL burn.PAST.3SG the jam 'The jam burned.' (or 'The jam was burned.')
 - b. Se cumplieron las promesas REFL fulfill.PAST.3PL the promises 'The promises were fulfilled.'

Nevertheless, despite the morphological and semantic similarities between middles and passives, the two can be distinguished by the diagnostic of whether an agent is entailed.

4.2 Unspecified subject constructions

A second and less common type of construction that is not always easy to distinguish from a passive is an unspecified subject construction, a construction with a subject whose meaning is roughly paraphraseable in English by 'someone' (or by 'someone or something'), or by 'they' or 'people' used generically. We use the term here to refer specifically to inflected forms of verbs, where there is a pronominal affix on the verb indicating that the subject is unspecified in this sense. For example, Kutenai has an unspecified subject suffix -(n)am that occurs on verbs as in (65).

- (65) a. qaky-am-ni "taxa" say-UNSPEC.SUBJ-INDIC now 'Someone said "Now!"'
 - b. taxas ?at qaky-am-ni
 then HABIT say-UNSPEC.SUBJ-INDIC
 ?in ?at n-uł qanałunis-nam-ni
 there HABIT INDIC-finish travel-UNSPEC.SUBJ-INDIC
 'They say people used to travel that way.'

This suffix in Kutenai is clearly an unspecified subject affix rather than a passive affix because it only occurs on intransitive verbs, never on transitive verbs; it cannot occur, for example, in a clause meaning 'someone killed him'. Its pronominal nature is brought out clearly by the fact that it also occurs on nouns to indicate an unspecified possessor, as in (66).

(66) ?a·kitła?-nam house-UNSPEC.POSS 'a house, someone's house'

There are various additional reasons that we will not go into here for saying that it is a pronominal affix rather than a voice affix.

Now Kutenai also has a passive affix -(i)[‡] that is used with transitive verbs, illustrated above in (13), and in (67).

(67) taxas pał ?at k'-unił-ił then PTCL HABIT SUBORD-fear-PASS 'Now people feared him; he was feared.' How do we know that the suffix -i\(\frac{1}{2}\) in (67) is a passive suffix rather than an unspecified subject suffix? The answer to this becomes clear when we look at an example in which the semantic object is first or second person, as in (68).

(68) hu n'-iktuqu?-l-ni
1.SUBJ INDIC-wash-PASS-INDIC
'I was washed.'

If the suffix -(i)* were an unspecified subject marker rather than a passive suffix, then (68) would literally mean 'someone washed me' and the first person argument would be treated as an object of the verb, with the first person singular object suffix -nap illustrated in (69a), but we get the first person subject proclitic hu illustrated in (69b).

- (69) a. n'-iktuqu-nap-ni INDIC-wash-1SG.OBJ-INDIC 'He washed me.'
 - b. hu n-iktuqu?-ni 1.SUBJ INDIC-wash-INDIC 'I washed him.'

The fact that the first person argument behaves as a subject rather than as an object in (68) shows that the construction in (68) is a passive rather than an unspecified subject construction.

Consider, in contrast, the Oneida construction in (70), which was mentioned earlier (see (9) above) as one construction that is used to fill the function served by a basic passive in languages without a basic passive.

(70) úhka? ok wa?-ukw-alahsátho-?
PRT PRT FACTUAL-UNSPEC.SUBJ:1.OBJ-kick-PUNC
'Someone kicked me: I was kicked.'

This Oneida sentence could be translated into English either by 'Someone kicked me' or by 'I was kicked', which mean approximately the same thing. The question is which of these two English translations more closely reflects the grammatical structure of the Oneida sentence: is it a transitive active sentence with an unspecified subject or is it a detransitivized passive sentence? In other words, does the morpheme -ukw indicate that it has an unspecified subject or does it indicate that the clause is passive? It turns out that a detailed analysis of Oneida morphology makes it clear that the former of these two possibilities is the correct answer: the morpheme -ukw is clearly a pronominal morpheme, with components that can independently be shown to indicate an unspecified subject and a first person object respectively.

While the Oneida construction is fairly unambiguously an unspecified subject construction, there are constructions in other languages whose status is less clear. There is a construction in Algonquian languages whose analysis has been a source of debate for many years. This construction is illustrated by the example in (71) from Plains Cree.

(71) ni-sa·kih-ikawi-n 1-love-PASSIVE/UNSPEC.SUBJ-SG 'I am loved.' or 'Someone loves me.'

According to Wolfart (1973), the suffix -ikawi in (71) is an unspecified subject suffix, while according to Dahlstrom (1991), it is a passive suffix. The issue essentially revolves around the question of whether the first person singular prefix ni- is to be interpreted as a subject prefix, in which case the construction is passive, or an object

prefix, in which case the construction is an unspecified subject construction. Analogous forms in the closely related language Ojibwa are interpreted by Bloomfield (1958) as passive forms, but Hockett, in the preface to Bloomfield's grammar, argues that this analysis is mistaken, that the forms in question are really unspecified subject forms. See also Dryer (1997) for further discussion of the situation in Cree. A similar disagreement surrounds a prefix in Tlingit, which Story (1979) and Naish (1979) analyze as an unspecified subject prefix but which Boas (1917) analyses as a passive prefix. In fact, closely related languages can differ with respect to whether cognate constructions are passives or indefinite subject constructions. Mackay (1991) argues that the suffix -kan in (72) is an indefinite subject suffix, since the notional object is represented by an object prefix.

(72) kin-<u>i</u>šk<u>i</u>-kan-la 10BJ-hit-INDEF.SUBJ-PERF 'Someone hit me.'

But she notes that in the closely related language Tepehua, the notional object is represented on the verb by subject affixes rather than object affixes with verbs bearing this suffix, arguing that it is a passive in Tepehua.

4.3 Inverses

A further type of construction which resembles passives is what are often called *inverses*. The prototype of this construction is again represented by Algonquian languages. The pair of Ojibwa examples in (73) represent what are traditionally referred to as direct and inverse.

- (73) a. aw nini w-gi:-wa:bm-a:n niw kwe:w-an that man 3-PAST-see-DIRECT.ANIM.OBV that.OBV woman-OBV 'The man saw the woman.'
 - b. aw kwe: w-gi:-wa:bm-igo:n niw ninw-an that woman 3-PAST-see-INVERSE.ANIM.OBV that.OBV man-OBV 'The woman was seen by the man.'

Using the more traditional terminology actor and goal to avoid begging the question as to what is the correct analysis, the direct and inverse in (73) differ as to which of the two elements has the grammatical statuses proximate (unmarked) and obviative (marked as OBV): in the direct clause in (73a), the actor is proximate and the goal is obviative, while this is reversed in the inverse in (73b). There are interacting grammatical, semantic, and discourse factors governing the contrast of proximate and obviative, but as a first approximation, we can say that the proximate element is the one that is more topical in the surrounding discourse. The crucial question here is whether the relation of direct and inverse should be considered an instance of active and passive. The answer to this question depends on whether the grammatical relations in direct and inverse are the same. If they are the same, in other words if the actor is subject in both clauses, then both are active and the inverse is not an instance of a passive. But if the goal is subject in the inverse, then this would appear to mean that the inverse is some sort of passive. Whether the goal is subject is something on which both positions have been taken, at least for different Algonquian languages; Dahlstrom (1991) defends the view for Cree that the actor is the subject in the inverse, thereby arguing against a passive analysis. Rhodes (1976) argues that in Ojibwa the goal is subject in the inverse, thereby arguing for a kind of passive analysis. However, even under the view that the goal is subject in the inverse, there is still a further question as to whether the construction should be considered a passive, revolving around the grammatical status of the actor and whether the clause is transitive. The transitivity of inverse clauses shows up most clearly in forms where at least one of the arguments is nonthird person, illustrated by the Cree examples in (74).

- (74) a. ni-wa·pam-a·-w 1-see-DIRECT-3 'I see him.'
 - b. ni-wa·pam-ik-w 1-see-INVERSE-3 'He sees me.'

In these cases, the direct is obligatory whenever the actor is higher than the goal on the person hierarchy 2 nd > 1 st > 3 rd, as in (74a), and the inverse is obligatory whenever the actor is lower on this hierarchy, as in (74b). Under the view that the inverse is a passive, this means that passive is the sole way to express meanings in which a third person is acting on a nonthird person, something that is unlike what we normally find among passives in other languages.

Our definition of passive requires that the agent, if expressed, be expressed neither as a subject nor as an object. This implies that passives will be intransitive, or more accurately, that they will have valence one less than that of the corresponding active. But inverse clauses in Algonquian languages exhibit all the properties of being transitive: for example, the inverse clauses in (74) exhibit inflection for two arguments, just like the direct clauses. In fact, Perlmutter and Rhodes (1988) propose the inverse clauses in Ojibwa involve subject-object reversal, with the object becoming the subject and the subject becoming the object. If we define passives so as to require a decrease in valence, then the inverse clause in Ojibwa is not a passive, even if it involves a change in grammatical relations.

We can distinguish two sorts of inverse clauses in Algonquian languages, those in which both arguments are third person and they differ in terms of which is proximate, and those in which at least one of the arguments is nonthird person. A number of other languages exhibit constructions that correspond to just one of these two types of inverses. Navajo (Athapaskan) exhibits an alternation without an apparent difference in transitivity:

- (75) a. \text{\tilde{\psi}} dzaan\text{e\feqz} yi-ztal horse mule it.it-kicked 'The horse kicked the mule.'
 - b. tíí dzaanééz bi-ztał horse mule it.it-kicked 'The mule kicked the horse.'

Unlike the Algonquian case, there is no grammatical distinction of proximate versus obviative in Navajo, although here the word order is crucial: the prefix yi- in (75a) indicates that the first noun is the agent, while the prefix bi- in (75b) indicates that the first noun is the patient. Other languages exhibit an inverse like the second sort of Algonquian inverse, in which at least one argument is nonthird person. Delancey (1981) cites the following example from Nocte (Tibeto-Burman).

- (76) a. nga-ma ate hetho-ang
 I-ERG he teach-1ST.3RD
 'I will teach him.'
 - b. ate-ma nga-nang hetho-h-ang he-ERG I-ACC teach-INV-1ST.3RD 'He will teach me.'

In both examples in (76), the suffix -ang on the verb indicates that the verb has a first person argument and a third person argument. Without further indication as to which of these is subject and which is object, as in (76a), the subject is interpreted as the one that is higher on the person hierarchy, in this case the first person argument. If there is an inverse suffix on the verb, as in (76b), the subject is interpreted as the one that is lower on the person hierarchy, in this case the third person argument. Other languages that exhibit constructions that might be called inverses of either of these two sorts include Kutenai (Dryer 1994), Nootka (Whistler 1985), Cherokee (Scancarelli 1986), and a number of other American Indian languages.

4.4 Antipassives

One further construction that resembles passive is antipassive, generally found in ergative languages. Like passive, antipassive involves a decrease in the valence of the clause, although in antipassives it is the patient-like constituent that is absent or a nonargument. The pair of examples in (77) illustrate a pair of basic and antipassive clauses respectively from West Greenlandic Eskimo.

- (77) a. arna-p niqi-Ø niri-vaa woman-ERG meat-ABS eat-INDIC.3SG.3SG 'The woman ate the meat.'
 - b. arnaq-\mathcal{\mathcal{D}} niqi-mik niri-NNig-puq woman-ABS meat-INSTR eat-ANTIPASSIVE-INDIC.3SG 'The woman ate meat.'

The fact that the antipassive in (77b) is intransitive is reflected by the fact that the verb cross-references only the absolutive *arnaq* 'woman', and this absolutive corresponds to the ergative, or transitive subject, in (77a). Intransitive subjects are absolutive.

It should be noted that while antipassive constructions are typically associated with ergative languages, it is also not uncommon for ergative languages to have passives. For example, in addition to the antipassive construction in (77), West Greenlandic also has a passive construction. The examples in (78) illustrate an active sentence with its corresponding passive sentence.

- (78) a. inuit nanuq taku-aat people.ERG bear.ABS see-3PL.3SG.INDIC 'The people saw the polar bear.'
 - b. nanuq (inun-nit) taku-niqar-puq bear.ABS (people-ABL) see-PASSIVE-3SG.INDIC 'The polar bear was seen (by the people).'

The differences between the active (78a) and the passive (78b) are: (i) the passive suffix on the verb in (78b); (ii) the optionality and ablative marking of *inunnit* 'people' in (78b); and the fact that the verb crossreferences both nouns in the active (78a) but only *nanuq* 'bear' in the passive (78b).

5. The functional load of passive in grammars

We began this study by considering the functional role of passives in terms of foregrounding and backgrounding elements relative to actives. Passives certainly do have these functions, though they effect them in a rather specific way: namely, by forming derived predicates whose argument structure differs in the ways we have considered from those they are derived from.

We have seen as well that languages vary considerably with regard to the productivity of their passives. Some languages have no passives at all; others present passives on a limited class of transitive and ditransitive verbs (those with Patient objects), and not with intransitive verbs at all. Other languages on the other hand, such as many among the Bantu and Austronesian groups, essentially allow all verbs to passivize, and commonly a given verb will have several different passive forms according, for example, to the aspect of the derived structure or the semantic role of its derived subject. Given the productivity of passive in these languages it would be surprising if passive formation did not interact with other rules of the grammar in regular ways.

One way to assess the importance of passive relative to other rules of grammar in a language is to ask what other syntactic/morphological operations can apply to passive structures, and why such operations effectively require that the structures they apply to be passive. As we mentioned earlier, passives, where they exist, are normally well integrated in the grammar, in the sense that major operations such as relative-clause formation, question-formation, and nominalizations typically can apply to passive structures. Some operations however, such as imperative formation, often cannot. English is in this sense a typical language with passives.

In languages with highly productive passives, however, we find that the possibility of forming structures which are in principle independent of passives often depends on the existence of specific passives. Thus if in English we lost the possibility of forming passives, we would not be obliged to change the way relative clauses are formed, or questions, or nominalizations, or reflexives; for in fact no major syntactic operation in English ever requires that the structure it operates on be passive. However, in Malagasy and the languages of the Philippines, by and large only main clause subjects can be relativized. That is, while we can literally say 'the man who washed the clothes', relativizing on the subject of 'washed', in Malagasy or Tagalog, we cannot literally say 'the clothes that the man washed' (*ny lamba izay nanasa ny lehilahy). The expected structure can only mean 'the clothes which washed the man'which doesn't make much sense. In any event, a relative clause is always understood in such a way that the head noun is the semantic subject of the main verb of the subordinate clause. Thus to refer to the clothes that John washed we must formally construe clothes as the subject of the subordinate clause. That is, we must say 'the clothes that were washed by John' using an appropriate passive form of 'wash' (cf. 59b, in this case the one in which the Patient is the subject). And to say 'the soap with which Mary washed the clothes' we must again use the passive form which presents the instrumental as the subject; literally 'the soap which was washed + with by Mary the clothes' (cf. 59c). Hence in Malagasy and the Philippine languages, if we lost all passives, we would have to make very significant changes in the way relative clauses were formed. Similarly, the formation of constituent questions ('who did John kiss?') and 'clefts' ('it was Mary who John kissed') are not independent of passives in these languages. Thus many major syntactic processes in effect require in certain contexts that what they operate on be passive. (See Keenan 1972 for a much more thorough discussion of this point.)

Similarly in Bantu languages like Kinyarwanda we find that certain major processes such as relative-clause formation by and large (see Kimenyi 1980 for much discussion) operate only on subjects or direct objects. Thus to say 'the knife with which John killed the chicken' we must construe the subordinate clause as one in which 'knife' is either a subject or an object; it cannot be directly relativized as an oblique NP. So again, major syntactic operations depend on the existence of ways of forming derived objects and subjects in a way quite unlike English. Thus other constructions perform roles in grammar similar to those of passives.

It is often the case that if passives are highly productive in a particular language, then other syntactic processes may require the structures they operate on, in various

cases, to be passive. The chapter by Foley on Information Packaging in the Clause (I.7) contains extensive further discussion on the functional load of passive constructions.

Suggestions for further reading:

In addition to chapters I.7 [Information Packaging in the Clause], I.3 [Noun Phrase Functions], and I.4 [Clause Types] in this volume, other relevant readings include Siewierska (1984), which discusses a wide array of issues surrounding passive constructions and Klaiman (1991), which discusses passive constructions in relation to a number of related constructions, such as middles. Three anthologies which deal specifically with passives and related constructions are Shibatani (1988), Givón (1994), and Fox and Hopper (1994). There is much discussion of passives in the literature on Relational Grammar, including Perlmutter and Postal (1983), Postal (1986), and Blake (1990).

References

- Blake, Barry J. 1990. Relational Grammar. London: Routledge.
- Bloomfield, Leonard. 1958. Eastern Ojibwa: Grammatical Sketch, Texts, and Word List. Ann Arbor: University of Michigan Press.
- Boas, Franz. 1917. Grammatical Notes on the Language of the Tlingit Indians. University of Pennsylvania University Museum Anthropological Publications 8, No. 1.
- Bowden, John. 1997. Taba (Makian Dalam): Description of an Austronesian Language of Eastern Indonesia. University of Melbourne Ph.D. Thesis.
- Carlson, Robert. 1994. A Grammar of Supyire. Berlin: Mouton de Gruyter.
- Chomsky, Noam. 1957. Syntactic Structures. The Hague: Mouton.
- Cole, Peter, and Jerrold M. Sadock, eds. 1977. Syntax and Semantics, Volume 8: Grammatical Relations. New York: Academic Press.
- Collins, G. 1970. *Two views of Kalagan grammar*. Unpublished Indiana University Ph.D. dissertation.
- Comrie, Bernard. 1977. In defense of spontaneous demotion: the impersonal passive. In Peter Cole and Jerrold Sadock, eds., *Syntax and Semantics 8: Grammatical Relations*, pp. 47-58. New York: Academic Press.
- Cooreman, Ann. 1987. Transitivity and Discourse Continuity in Chamorro Narratives. Berlin: Mouton de Gruyter.
- Dahlstrom, Amy. 1991. Plains Cree Morphosyntax. New York: Garland Publishing.
- Delancey, Scott. 1981. An interpretation of split ergativity and related patterns. *Language* 57: 626-657.
- Dixon, Robert M. W. 1977. A Grammar of Yidiny. Cambridge: Cambridge University Press.
- Dryer, Matthew S. 1986. Primary objects, secondary objects, and antidative. *Language* 62: 808-845.

- Dryer, Matthew S. 1994. The discourse function of the Kutenai inverse. In T. Givón, ed., *Voice and Inversion*, pp. 65-99. Amsterdam: John Benjamins.
- Dryer, Matthew S. 1997. Passive vs. indefinite subject construction in Cree. In David Pentland, ed., *Papers of the Twenty-Sixth Algonquian Conference*. Winnipeg: University of Manitoba.
- Duranti, A, and E. Byarushengo. 1977. On the notion of 'direct object' in Haya. Haya Grammatical Structures: Southern California Papers in Linguistics 6: 45 - 71.
- Durie, Mark. 1985. A Grammar of Acehnese. Cinnaminson: Foris Publications.
- Evans, Nicholas D. 1995. A Grammar of Kayardild. Berlin: Mouton de Gruyter.
- Fox, Barbara, and Paul J. Hopper, eds. 1994. *Voice: Form and Function*. Amsterdam: John Benjamins.
- Givón, T. 1972. Review of Some Problems in Transitivity in Swahili. African Studies 31: 273 277.
- Givón, T. 2001. Syntax: A Functional-Typological Introduction, Volume 1. Amsterdam: John Benjamins.
- Givón, T., ed. 1994. Voice and Inversion. Amsterdam: John Benjamins.
- Howard, I, and A Niyekawa-Howard. 1976. Passivization. In Masayoshi Shibitani, ed., *Syntax and Semantics 5: Japanese Generative Grammar*, pp. 201 237. New York: Academic Press.
- Jaggar, P. 1981. *Some unusual lexical passives in Hausa*. Unpublished M.A. Thesis, University of California at Los Angeles.
- Keenan, Edward. 1978. The syntax of subject-final languages. In Winfred P. Lehmann, ed., *Syntactic Typology*, pp. 267-327. Austin: University of Texas Press
- Keenan, Edward L. 1972. On semantically based grammar. *Linguistic Inquiry* 3: 413-461.
- Keenan, Edward L. 1976b. Some universals of passive in relational grammar. In *Papers from the 11th Meeting of the Chicago Linguistic Society.*
- Kimenyi, Alexandre. 1980. *A relational grammar of Kinyarwanda*. University of California Publications in Linguistics 91. Berkeley: University of California Press.
- Kirsner, Robert. 1976. On the subjectless pseudo-passive in standard Dutch and the semantics of background agents. In *Li* (1976), pp. 385 415.
- Klaiman, M. H. 1991. *Grammatical Voice*. Cambridge: Cambridge University Press.
- Langacker, Ronald. 1976. *Non-distinct Arguments in Uto-Aztecan*. University of California Publications in Linguistics 82. Berkeley: University of California Press.
- Lawler, John. 1977. A agrees with B in Achenese: A problem for relational grammar. In In Cole and Sadock 1977, pp. 219-248.

- Lazdina, Tereza Budina. 1966. *Teach Yourself Latvian*. London: The English Universities Press.
- Lee, Chung Min. 1973. Abstract Syntax and Korean with Reference to English. Seoul: Pan Korea Book Corp.
- Li, Charles, ed. 1976. Subject and Topic. New York: Academic Press.
- Li, C., and R. Lang. 1979. The syntactic irrelevance of an ergative case in Enga and other Papuan languages. In Frans Planck, ed., *Ergativity*, pp. 307 324. New York: Academic Press.
- Manley, Timothy M. 1972. *Outline of the Sre Structure*. Honolulu: University of Hawaii Press.
- Mazaudon, M. 1976. La formation des propositions relatives en tibétain. Bulletin de la Société de Linguistique de Paris 73: 401-414.
- Mirikitani, Leatrice T. 1972. *Kapampangan Syntax*. Oceanic Linguistics Special Publication No. 10 Honolulu: The University Press of Hawaii.
- Naish, Constance. 1979. A Syntactic Study of Tlingit. Summer Institute of Linguistics.
- Nguyen, Phu Phong. 1976. Le Syntagme Verbal en Vietnamien. Paris: Mouton.
- Noonan, Michael. 1994. The tale of two passives in English. In Barbara Fox and Paul Hopper, ed., *Voice: Form and Function*. Amsterdam: John Benjamins.
- Perlmutter, David. 1978. Impersonal passives and the unaccusative hypothesis. In *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*, pp. 157-189.
- Perlmutter, David, ed. 1983. *Studies in Relational Grammar 1.* Chicago: University of Chicago Press.
- Perlmutter, David, and Richard Rhodes. 1988. Thematic-syntactic alignments in Ojibwa: evidence for subject-object reversal. Paper delivered at the LSA.
- Pickett, Velma. 1960. *The Grammatical Hierarchy of Isthmus Zapotec*. Language Dissertation 56. Baltimore: Linguistic Society of America.
- Postal, Paul. 1986. *Studies in Passive Clauses*. Albany: State University of New York Press.
- Rajaona, Simeon. 1972. Structure du malgache : étude des formes predicatives. Fianarntsoa: Ambozontany.
- Randriamasimanana, Charles. 1986. *The Causatives of Malagasy*. Honolulu: University of Hawaii Press.
- Rhodes, Richard. 1976. *The Morphosyntax of the Central Ojibwa Verb*. University of Michigan dissertation.
- Roland, Katy. 1994. The pragmatics of Modern Greek voice: active, inverse, and passive. In T. Givón, ed., *Voice and Inversion*, pp. 233 260. Amsterdam: John Benjamins.

- Scancarelli, Janine. 1986. Pragmatic roles in Cherokee Grammar. In *Proceedings of theTwelfth Annual Meeting of the Berkeley Linguistics Society*, pp. 224-234.
- Schachter, Paul, and Fe T. Otanes. 1972. *Tagalog Reference Grammar*. Berkeley: University of California Press.
- Shibatani, Masayoshi, ed. 1988. *Passive and Voice*. Amsterdam: John Benjamins.
- Siewierska, Anna. 1984. *The Passive: A Comparative Linguistic Analysis*. London: Croom Helm.
- Story, Gillian. 1979. A Morphological Study of Tlingit. Summer Institute of Linguistics.
- Svartvik, Jan. 1966. On Voice and the English Verb. The Hague: Mouton.
- Timberlake, Alan. 1976. Subject properties of the North Russian passive. In Charles Li, ed., pp. 545-557.
- Trithart, L. 1977. *Relational grammar and Chichewa subjectivization rules*. Bloomington: Indiana University Linguistics Club.
- Whistler, Kenneth. 1985. Focus, perspective, and inverse person marking in Nootkan. In Johanna Nichols and Anthony C. Woodbury, eds., *Grammar Inside and Outside the Clause*, pp. 227 265. Cambridge University Press.
- Wolfart, H. Christoph. 1973. *Plains Cree: A Grammatical Study*. Transactions of the American Philosophical Society, New Series, Vol. 63, Part 5. Philadelphia: American Philosophical Society.