TWO ZUNI PASSIVES

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1. INTRODUCTION.1 The prevalent view of the passive construction crosslinguistically, largely proceeding from an analysis of English passives, assumes that the passive form of a predicate is derived from an active counterpart and that this derivation is carried out by means of special passivizing morphology that alters the case and argument properties of the active predicate. This view of passive derivation is at odds with the fact that in some languages there are constructions that may legitimately be called passives—in light of (a) the absence of an agent or other external argument, together with (b) the intransitive use of a transitive base that (c) results in the prominence of a theme or patient argument, e.g. as topic—but that contain no identifiable ‘passivizing’ derivational morphology. Such is the case in Zuni, whose eventive passive construction2 in (1a) based on the root 'utte ‘bite’ contains stative -na and eventive -k; the stative passive in (1b) is formed with -na. Neither contains ‘passive’ morphology that might have properties of the kind traditionally presumed.

(1)a. kwa' hom 'utte - na - k - nam - kya
   neg. 1sg. Acc. bite - stat. - event. - neg. - past
   'I was not bitten.'

b. ho' 'utte - na - ye
   'I have been bitten'

In fact, we might also make the case for English that there is no passivizing morphology, the standard analysis notwithstanding. It has been noted several times (e.g. Bresnan 1982, Beedham 1987, Cowper 1995) that the participial suffix -en appears not only in the eventive passive (2a) and adjectival/stative passive constructions (2b) but also in the perfect (2c), in unaccusative attributive participles (2d), as well as in passive attributive participles, (2e). In other words, the participle suffix is not special to the passive, and it is unlikely that the same participle morphology has the ability to affect case and thematic properties in certain contexts but not in others.

(2) a. The window was broken by the children.
   b. The window is broken.
   c. The children have broken the window.
   d. Broken glass lay everywhere.
   e. The stolen jewels mysteriously reappeared.

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1 I am grateful to Leanne Hinton for the opportunity to present this research on Zuni at the 2000 Hokan-Penutian workshop, as a language that, as she put it, has at some point ever been considered Penutian. Fieldwork for this research has been supported by the Phillips Fund of the American Philosophical Society, the Whatcom Museum Society, the Bloch Fellowship of the Linguistic Society of America and the Harvard University Clark Fund.
2 In order to facilitate crosslinguistic comparison of the passive construction, what is usually called the verbal passive we refer to as the eventive passive, and what is called the adjectival passive we refer to as the stative passive. Use of these terms will make the English constructions more directly comparable crosslinguistically. Also, we believe that the event structure of the passives is the more crucial feature of the constructions than their putative syntactic category.
On the basis of evidence such as that in (1)-(2) we suggest that contrary to the traditional analysis of the passive, there is no ‘passivizing’ morpheme in bona fide passive constructions in many languages, certainly in Zuni but also including English.

Now, if there is no passivizing morphology of the kind originally presumed, then passives cannot be derived in the way they are said to be; in particular, the idea of suppressing certain properties of the active predicate via this morphology to form the passive must be abandoned. This latter suggestion has in fact already been made for semantic reasons. Beedham (1987) has suggested that the supposed derivational relationship between actives and passives should be called into question, claiming that the semantic relationship between the two is inaccurately characterized as a simple voice difference and that the eventive (verbal) passive involves a change of state interpretation that the active does not necessarily have. Instead, he points to the auxiliary rather than the participle as the locus of the passive interpretation in English.

Interestingly, there do seem to be various types of syntactic evidence that suggest that the event structures of passive constructions and their corresponding actives may differ. For example, an adverbial modifier with simultaneous temporal interpretation is possible with the active transitive form that expresses an activity (3a) but not with the corresponding simple passive form (3b) of the same predicate (Nichols 2000). A progressive form of the auxiliary must be used in the passive (3c) to be able to occur with the simultaneous adverbial, even though the active is not in the progressive itself. The oddness of (3b) indicates that the passive does not carry over the activity interpretive component of the transitive and therefore (or because of an additional resultative interpretation as Beedham suggests) the adverbial modifier expressing simultaneity is incompatible with the passive.3

(3) a. Mary blew bubbles as she walked across the room.
   b. * Bubbles were blown by Mary as she walked across the room
   c. Bubbles were being blown by Mary as she walked across the room.

In light of observations such as these, it is clear that the passive construction and our understanding of it needs to be reconsidered. We attempt in this paper to reexamine the nature of the passive construction by putting aside for the moment participial passive constructions like those in English and turning instead to the verb-stem passives of Zuni. The morphological structure of Zuni verb-stem passives allows to clarify the derivational origin of the passive construction as well as the relationship between the eventive (‘verbal’) and stative (‘adjectival’) passive: in addition to evidence for the absence of true passivizing morphology in passive constructions, Zuni provides direct morphological evidence that the eventive passive is not derived from the corresponding active predicate, nor is the stative passive derived from the eventive passive (as has been claimed on the basis of English, cf. Levin & Rappaport 1986, Cinque 1990). A reexamination of these various relationships turns out to tell us much about just what sort of construction the passive really is. In essence, the passive is not a grammatical-function changing derivation but rather is simply the construction of an eventive form of a transitive base minus an external (subject) argument. Zuni, for example, is able achieve this effect with derivational morphology that changes the event structure of a stative intransitive without changing the number of arguments; this morphology is not special to the passive but is found elsewhere in Zuni in other sorts of eventive derivations.

An interesting implication of the notion that there may be no true ‘passivizing’ morphology is that there is then no single passive derivation or construction, and consequently, ‘passive’ does not exist as a formal category crosslinguistically. Instead, the passive is a functional category: languages may share the functional goal to render the logical object of a transitive base the topic of the sentence. The general manner in which this goal is achieved, by not including an external thematic role in the construction, is shared by many languages, but the specific constructional means by which the external thematic role is excluded varies

3Nichols (2000) discusses two additional sorts of evidence for a resultative interpretation in passives in perception verb complements and small clauses.
crosslinguistically, e.g. from intransitive auxiliary passives (English, Hindi), to cases where reflexive morphology is also used to form the passive (Russian) or a dummy element is inserted in subject position (Navajo, Yoruba), to name only a few such strategies. The explanation of the passive we put forth here based on the analysis of Zuni turns out to have far-reaching consequences, accounting for why the passive is such a heterogeneous category crosslinguistically.

2. TWO ZUNI PASSIVES. In this section we give a detailed description of the two Zuni passives illustrated earlier in (1) and discuss several aspects of their structure particularly relevant to the current investigation: properties of the stative morpheme -na and the absence of any sort of subject in the eventive passive.

The two Zuni verb forms with passive interpretation are illustrated again in (4) and (5) below. For convenience we will sometimes refer to these as Passive 1 and Passive 2, respectively.

**Passive 1**

(4) ho 'utte - na - ye
    'I am bitten, I have been bitten'

**Passive 2**

(5) hom 'utte - na - k - 'appa
    1sg.Acc. bite - stat. - eventive - SR (DS)
    'I was bitten, i.e., s.t. bit me',
    * 'He/it bit me'

Zuni Passive 1 is formed off a transitive lexical base and is characterized semantically by a resultative stative interpretation, ((4) is essentially interpreted as ‘I am in the state of having been bitten’) and takes adverbial modifies such as ‘now, from this point on’ but not ‘yesterday’. The NP argument of the resultative stative passive is a structural subject, and this argument bears nominative case. The resultative passive is characterized morphologically by the presence of the stative suffix -na following the lexical portion of the stem. Where Zuni verbal inflection distinguishes stative vs. non-stative allomorphs, the resultative passive takes the stative allomorphs, e.g. as in the case of present tense inflection and the negation suffix.

Zuni Passive 2 is characterized semantically by an eventive interpretation, and is modifiable by adverbial expression such as ‘in two seconds’ but not ‘since yesterday’. Speakers are very clear on the interpretation of such passives: they are paraphrasable as either eventive passives in English or with an indefinite subject e.g., ‘something bit me’; the latter speakers say they use to emphasize that this is an action passive not a state. The NP argument of the eventive passive is a structural object and bears accusative case. Evidence for the former is discussed below. Zuni lacks lexical case-marking, so that the case borne by the argument in (5) is a structural accusative case. An interesting property of this eventive passive is the inability to occur with an agentive ‘by-phrase’. We will return to this aspect of the construction, a particularly revealing one, in section 3. Finally the Zuni eventive passive stem is morphologically characterized by the presence of what we will call the eventive suffix, -k, following the stative morpheme -na. The eventive passive takes only non-stative allomorphs of verbal inflection.

The box below summarizes the semantic, syntactic and morphological properties of these two passive constructions.
Note that the eventive suffix \(-k\) only surfaces in certain morphophonological environments, e.g.:

(6)  
(a) negation: \('tte - na - k - na'm -\)  
(b) switch reference (SS): \('tte - na - k - nan\)  
(c) switch reference (DS): \('tte - na - k - 'appa\)

But not:

(d) past: \('tte - na - 'kya\)  
(e) future: \('tte - na - k'yanna\)  
and other suffixes beginning with \{{'()}, ('t}\}

Examples cited here will be in one of the forms in (6a-c) when possible in order to make the presence of the eventive suffix most obvious.

In the following sections we examine each of the two passives in greater detail before moving on to the issues they raise with regard to the nature of passive derivation.

2.1 Passive 1: Resultative Stative. The hallmark of passivizing morphology is said to be the ability to absorb the agent thematic role of a transitive verb as well as the accusative case assigned by it (Jaeggli 1986, Baker, Johnson & Roberts 1989). It can be immediately seen from its usage with intransitive verbs and verbs with inanimate subjects that the Zuni stative suffix \(-na\) is not a passivizing morpheme.

\(-na\) can be used with active intransitive verbs to form a resultative stative, as in the case in (7b) where \(-na\) suffixed to hapo ‘gather’ produces the stative form hapona ‘be gathered’.

(7) a. hon hapo-kya  
‘We gathered’  

b. hon hapo - na - 'kya  
‘We were gathered’

Furthermore, stative \(-na\) is suffixed to the verb stem when an inanimate NP is subject of a verb of motion like kwato ‘enter’, ‘a: ‘go’, te'eti ‘arrive’, (8b).

(8)a. ho' le-m šok'ona kwato - kya  
1sg.Nom. wood-sg. hollow enter - past  
‘I entered the hollow tree’

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4Interestingly, both SR markers are possible with the eventive passive, the reasons for which we will not be able to discuss here.
b. lesnhol 'okšīk' 'a:teyana-n kwato - na - p
   there rabbit track-sg. enter - stative - DS
   'There were a rabbit's tracks going in[to the hollow tree]'
   [Bunzel 1933]

These examples illustrate that -na is simply a stativizing morpheme and does not affect the number of thematic roles or case assignment of a predicate.\(^5\)

When -na is added to a transitive root, the result is a resultative stative form whose transitive lexical base will determine that it has passive interpretation. The NP argument of this stative passive bears nominative case simply because it is now in essence a stative intransitive verb.

The most significant property of the Passive 1 resultative stative formation with -na, however, is that the Passive 1 -na stem is use by Passive 2 as its derivational base. While previous work on the English passive has suggested that eventive passives are derived from active predicates and stative passives from eventive passives, the Zuni facts indicate that the opposite situation obtains: the eventive passive is derived from the stative.

<table>
<thead>
<tr>
<th>LEXICAL MEANING</th>
<th>FORM STATIVE</th>
<th>ADD EVENTIVE MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive Root</td>
<td>'utte - na'</td>
<td>Eventive passive</td>
</tr>
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</table>

2.2 PASSIVE 2: EVENTIVE PASSIVE. As for Zuni Passive 2 - the eventive passive - the absence of any passive morphology, and in addition, the accusative case & structural object properties of its NP argument, may initially raise doubts as to whether this is indeed a construction on which conclusions about the passive ought to be based. Cook and Frantz (1978) go so far as to say as much, i.e. that the Zuni [eventive] passive\(^6\) is in fact not a passive at all. There are two distinct issues here to resolve, whether accusative case can appear in a legitimate passive, and whether Zuni Passive 2 is in fact not a covert transitive. In this section we discuss evidence that addresses both of these concerns.

\(^5\)On a typological note, it is interesting to contrast stative formation in Zuni with that found in other languages. Zuni stative -na appears possible with nearly any verb type, (e.g. intransitive 'gather', transitive 'bite' causative 'feed', verbs of motion 'arrive', 'go', 'enter'), except that a stative formation with -na does not appear to be possible with intransitives whose lexical meaning includes a resulting state. Hence (ib) čapi - na 'burn' + 'stative', 'It was burnt' is not a possible formation.

(i)a. kyak\(^w\)e - n čapi - kya
   house - sg. burn - past
   'The house burned'
(b. *čapi - na - 'kya
   burn - stat. - past
   * 'It was burnt'

In contrast, Dubinsky and Simango (1996) report that statives may be formed in Chichewa only from change of state verbs, exactly the set of derivations excluded by Zuni.

(ii) Stative formations in Chichewa

<table>
<thead>
<tr>
<th>VERB</th>
<th>STATIVE</th>
</tr>
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<tbody>
<tr>
<td>phika</td>
<td>phik-ika</td>
</tr>
<tr>
<td>swa</td>
<td>w-eka</td>
</tr>
<tr>
<td>luma</td>
<td>* lum-ika</td>
</tr>
<tr>
<td>ombela</td>
<td>* ombel-eka</td>
</tr>
</tbody>
</table>

\(^6\)They identify only a single type of Zuni passive.
2.2.1 ACCUSATIVE CASE IN PASSIVES. The presence of accusative case in the passive turns out to be not at all rare. Accusative is found, for example, in passives in Ukrainian (Sobin 1985), Nepali, Finnish (Goodall 1993), Polish and Welsh (Baker et al. 1989). Goodall (1999) presents some novel empirical evidence from Mandarin Chinese that accusative case may be available in the passive. Chinese passive constructions with bei (so-called ‘retained object’ constructions), (9a), are significantly better than their active counterparts, (9b).

(9) a. Taizi bei ta dale la table PASS he apply-ASP wax
   ‘He applied wax to the table.’

   b. *Ta dale taizi la
      he apply-ASP table wax

It appears that in the active only two of the three arguments of the verb da can be licensed, while in the passive because there is one less argument, both of the arguments are able to be licensed. Goodall concludes that the two constructions have a different number of arguments but make available the same number of cases: nominative & accusative. Examples like (9a) support the idea that there is no a priori reason why accusative case should be impossible in the Passive. Thus the occurrence of accusative case in the Zuni eventive passive has no bearing on the voice structure of this type of clause, and the absence of accusative in passives in English and other languages is likely due to reasons independent of the passive per se (e.g. movement to a nominative position).

In any case, we can confirm the passive nature of the Zuni construction in (5) from another angle, by showing that Zuni Passive 2, the eventive passive is not simply a transitive with an unspecified (indeterminate or expletive) subject.

2.2.2 TESTS FOR SUBJECTS. Constructions containing clauses without structural subjects are not unknown crosslinguistically, although admittedly they are not very common. McCloskey (1996) reports a possible instance from Modern Irish. In the case of Zuni, there are at least three tests that suggest the absence of any element in subject position. One test derives from the semantics observed for dummy-subject constructions crosslinguistically and two additional tests are suggested by the peculiarities of Zuni structure.

Some facts about pronominal usage in Zuni are necessary for interpreting the eventive passive structure. Pronouns are obligatory in Zuni, likely related to the lack of person agreement with the verb (verbs show only a-plural number agreement). Thus even if the 1st person argument in (10) is an understood topic, ho’ is required.

(10) ho’ / *Ø Gallup an ‘a:n -e
      1sg.Nom. G. to go - pres.
      ‘I’m going to Gallup’

While there is a full paradigm of nominative, accusative and possessive strong and weak pronouns for 1st and 2nd person singular and non-singular referents, there are no 3rd person pronouns.7 Instead, the absence of an overt NP or pronoun in argument position indicates a 3rd person argument whose referent has previously been established. As the contrasting grammaticality of the interpretations in (11a-b) indicate, this Ø usage has definite specific

7Newman (1965: 60) indicates the existence of Zuni 3rd person pronouns, but this analysis is incorrect since the forms given there are not pronouns. The forms given as (/)an are postpositions (with prefixal agreement in the case of plural arguments). The dual a:ci is a particle that is not limited to 3rd person and may be found with any of the personal pronouns. The suffix -ya’ accompanying the dual particle in certain cells of the table is actually a focus + specificity marker and is found only in specialized semantic contexts.
reference only. Indefinite reference requires the use of an indefinite pronoun, (12) (čo' o for indefinite specific and čo' o 'imat 'someone it seems' for indefinite nonspecific).

(11) Gallup' an 'a:n - e
    G. to go - pres.

a.  'He/She's going to Gallup'
b.  * 'Someone's going to Gallup'

(12) čo'ol Gallup' an 'a:n - e
    someone G. to go - pres.
    'Someone's going to Gallup'

Turning back to the eventive passive, this construction has no overt indication of a subject argument but is never interpreted with a specific subject, i.e. (13) cannot mean ' *He/it bit me'.

(13) hom 'awa - na - k 'appa
    1sg.Acc. find - stat. - event. - DS

a.  'I was found; s.o.(non-specific) found me; they (pl. non-specific) found me'
b.  * 'He/it found me.'

Speakers usually offer for passive sentences like (13) the English equivalents indicated in (13a), though none of the interpretations is necessarily preferred over the other; they report that the key to the interpretation of these sentences is that whoever or whatever is responsible for the action is unknown. Thus a sentence like that in (14) can have one of at least three possible interpretations that are distinguished in English, though these three equivalents merely get at different aspects of a single interpretation in Zuni (indeed, if the subject of (13) were truly plural, a plural agreement prefix would be required on the verb.)

Therefore, while the absence of any overt evidence for a subject in the eventive passive construction in (13) might suggest to some that this passive may have a null indefinite subject, the properties of pronominal reference in Zuni indicates otherwise: null indefinite subjects are not a feature of Zuni grammar. If there is a structural subject in eventive passives, then it can only be of one sort, a null expective subject. We return to this possibility in a moment.

First, however, the argument against a null indefinite subject in Zuni eventive passives can be further supported by evidence from subject-oriented reflexives. Zuni makes use of a reflexive possessive pronoun yam (nam for younger speakers) that may only be bound by the subject of its clause, (14). The impossibility of the reflexive possessive pronoun in an eventive passive construction (14b) indicates the absence of an appropriate binder in the subject position of the clause.

(14)a.  ho'į Nemmek'an yamį/*k nicikya 'uk-ky
    1sg.Nom. N. to Refl.Poss ring give-past
    'I gave Nemmek myį/*herk ring'

b.  hom 'ape'i - na - 'kya *yam / hom 'ačiyann - akkya
    'I got cut with my / *someone's knife'

[Cook & Frantz 1978]

Moreover, the passive argument itself cannot serve as the binder of possessive yam, (15), indicating that the passive argument itself is not a structural subject but rather an object.

78
(15) * homi yamî nicikya 'uk - na - 'kya
    1sg.Acc. Refl.Poss. ring give - stat. (-event.) - past
    ‘I was given my ring’

Even if there is no covert indefinite subject in eventive passives, there is the possibility that a structural subject position may be filled with a null expletive element. Expletive subjects are found in Zuni, and their presence is signaled by the verbal prefix te-, (16a-b).\(^8\) The te- prefix is never found, however, with the eventive passive stem in Zuni (cf. (16c)).

(16)a. te - k'ya'ri
    expl. - be.hot.
    ‘It’s hot out’

b. tel-oš'e-'a
    expl.-hungry-pres.
    ‘There was a famine’

c. kwa' (*tel-)utte-na-k-nam-kya
    neg. (expl.-)bite-stat-event.-neg.-past
    ‘he was not bitten’

The indefiniteness requirement in expletive constructions is a useful diagnostic for the presence of a null expletive linked to an argument in the complement part of the clause. If there is no expletive, there should be no definiteness effect (i.e. requirement of indefiniteness) on the argument inside the verb phrase. McCloskey (1996) reports that there is no such requirement in the parallel Irish constructions. The arguments of Zuni eventive passive clauses behave similarly and may have either definite or indefinite reference.\(^9\)

(17)a. There branched off on the left a/*the dark tunnel

b. kwa' Nemme - ya' utte - na  - k  - nam - kya
    neg. N. - Acc.(Foc.) bite - stat. - event. - neg. - past
    ‘Nemme was not bitten’

c. hewe' awa - na  - ky  - 'appa
    money find - stat. - eventive - DS
    ‘The money/some money was found’

The natural conclusion to draw from the absence of either te- or a definiteness effect is that no null expletive is present to induce a pseudo-transitive effect (and accusative case) in this construction.

While these tests provide us with evidence against certain types of elements occurring in subject position of the eventive passive, we can go even further and eliminate the possibility that

\(^{8}\) te- before vowel-initial stems. The syntactic status of te- is not entirely clear: the behavior of te- is consistent with either agreement or an incorporated nominal.

\(^{9}\) The lack of a definiteness effect in the Zuni eventive passive may also be taken as an indication that the accusative case assigned here is structural case, not the inherent case described by Belletti (1988) that is associated with an (in)definiteness effect.
any sort of structural subject position exists at all in eventive passives, whatever may fill it. Causative morphology that is sensitive to structural properties of the base predicate provides us with this type of evidence. One type of causative found crosslinguistically has the property that, whether the causative formation itself is periphrastic or morphological, it does not affect the event structure of the base predicate. This type of causative is sometimes referred to as a syntactic causative (e.g., Hale & Keyser 1993) to contrast it with so-called lexical causatives, such as transitive break from intransitive break, that do change the event structure of the base. Syntactic causatives are identifiable in Zuni by the presence of the verbal suffix -k'ya and may be formed from either a transitive (18a) or an intransitive base (18b).

(18a) hon k'yawe' tutu - k'e - nap - kya
    1pl.Nom. water.pl. drink - caus. - pl.subj. - past
    ‘We made him drink water.’

b. ta: s 'imat suski yam tuna: 'iluwah - k'ya - kkya
    again then I.think coyote self's eyes run - caus.- past
    ‘So again Coyote made his eyes run around’
    [Newman 1965]

Interestingly, a -k'ya syntactic causative may not be formed on the Zuni eventive passive, as (19a) indicates. The reason for this appears to be that while -k'ya is fairly liberal in the type of predicate that it may combine with, one restriction on its distribution is that it must be added to a predicate with its own subject.

(19) a. * hom 'utte - na - kk'ye - kkya
    1sg.Acc. bite - stat. - caus. - past

    Interp 1. (= causative of Passive 2)
    * ‘He caused me to be bitten, He caused s.o. to bite me’

b. ? ho' 'utte - na - kk'ye - kkya
    1sg.Nom. bite - stat. - caus. - past

    Interp 2. (= causative of Passive 1)
    ? ‘He caused me to have been bitten’

The ill-formedness of (19a) can be contrasted with (19b), which though decidedly odd, is considered by speakers to be somewhat better that (19a). The interpretation of causative + resultative stative requires a special context for appropriate usage, hence the oddness speakers attribute to it out of context, yet the causative is formable here in a way that it is not with the eventive passive.

While both passives present an intransitive base to the causative predicate, they do differ in the status of the argument of that intransitive. The resultative passive that serves as the base for the causative in (19b) has a nominative argument and therefore a structural subject. The eventive passive has an accusative argument. Since the syntactic causative is so liberal in its distribution with regard to event structure and predicate type, we conclude from the ungrammaticality of (19a) that there is no subject position available in the eventive passive, i.e. any covert element in subject position is ruled out, and the accusative argument itself does not occupy subject position.

The results of this section can be summed up with two important observations. First, both the Zuni stative and eventive passives are passives in the traditional sense since they both

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10Interestingly, even though this would appear to be a semantically interpretable combination.
lack an agent or other argument corresponding to the agent or other subject argument in the transitive, with the result that the semantic object (e.g., theme, patient, goal) argument is the topic argument of the construction. What is surprising, however, is that despite their recognizability as canonical passives in these respects, neither of the two Zuni passive stems, illustrated again in (20), actually contains any ‘passivizing’ morphology of the canonical sort.

(20)  

Passive 1  
\text{utte} + \text{na} \quad \text{trans.V.root} + \text{stative}

Passive 2  
\text{utte} + \text{na} + \text{k} \quad \text{trans.V.root} + \text{stative} + \text{eventive}

Insight into this state of affairs can be gained from a consideration of the relationship of the external thematic role to both event structure and syntactic structure, which we turn to next.

3. Passive without Passive Morphology: Agent vs. ‘Causing Process’. Cook and Frantz (1978) argue that the Zuni [eventive] passive is not in fact a passive at all, since according to a number of syntactic tests the NP remains structural object. For them, a true passive construction must involve advancement to subject. We do not dispute their syntactic results: the NP in a Zuni eventive passive construction is indeed a structural object. Despite this property, the Zuni eventive passive is much like other passives crosslinguistically in functioning to maintain the object as topic by using an eventive predicate missing an agent argument. (21) contains an example of Zuni passive usage within an extended context (21a-d represent a continuous text) and serves to illustrate this point.

(21)  

(a) \text{'a:mu:k\text{\textasciicircum}i te:wa:k\text{\textasciicircum}e 'an\text{\textasciicircum}s\text{\textasciicircum}e tewa-p} \quad \text{hom \ \}\text{\check{s}ema} \text{- nap - kya}

\text{Hopis Tewas Bear Clan be.next.day-DS 1sg.Acc. call - pl.subj. - past}

(b) \text{hom \ 'illi-n} \quad \text{tin-allu}

\text{1sg.Acc. have-subord. stay.pl-go.around}

(c) \text{'itok'ya - na - 'kya} \quad \text{hepalokya}

\text{feed - stat.(event) - past} \quad \text{[type of food made of corn paste]}

(d) \text{'a:-mu:k\text{\textasciicircum}i 'ewa\text{\textasciicircum}stok} \quad \text{hom \ seto - pa ...}

\text{pl.-Hopí girls 1sg.Acc. carry.on.back-plsubj.}

\text{[Bunzel 1933]}

(a') The Hopis and Tewas Bear Clan people sent for me the next day.

(b') They took me around,

(c') I was fed hepakokya,

(d') the Hopi girls took me on their backs...

The first person argument is the object of $\text{\check{s}ema}$ ‘call’ in the transitive clause in (21a). The first person argument continues to be the object of ‘illit’ ‘have’ in the serial verb construction, (21b); here the agent is the same and is merely indicated by pronominal usage (recall that Zuni 3rd person pronouns are $\emptyset$). In the next clause containing the passive (21c), the first person object argument continues to be the topic, and the continued agent is further reduced to become completely unspecified by means of the eventive passive construction. When a new agent ‘the Hopi girls’ is introduced in the final clause (21d), the switch is made back to a canonical transitive construction. The role of the eventive passive in this sequence indicates that the Zuni passive fits in quite well with what we know about passive use and discourse structure.

The Zuni eventive passive, or the -k passive, is therefore able to encode passive meaning without passive morphology and does this somehow by constructive an eventive predicate minus an agent argument. The question is, how is something like the Zuni -k passive possible?
The answer lies in the separation the notions ‘causing process’ and ‘agent’. The presence of an agent is commonly taken to both signal as well as impart active or agentive meaning. The form of Zuni passives suggests that the notion of agentivity is a semantically complex construct and includes at least two distinct components: a causing process and an agent. Under this view, in an eventive predicate like ‘break’ in (22), the agent ‘John’ is not the cause or causer of breaking but rather merely an actor in the causing process. A view of agentivity and causation along similar lines is proposed by Levin & Rappaport Hovav (1995:102-103), who distinguish the notion of external cause from a volitional agent.

(22) John broke the vase (i.e. when he dropped it and it hit the floor)

This view of agentivity and the relationship between agentivity and events relies on events being decomposable into their constituent subevents as argued, for example, by Pustejovsky (1991, 1995), as well as on the ability of languages to refer to and/or encode subevents. The event structure for an eventive transitive like break, given in (34) below, contains two subevents, a Process and a Transition. An important aspect of this event structure is that the Process subevent is understood by implication to be the causing process of the breaking event (Pustejovsky 1995). In Zuni, which is morphosyntactically sensitive to the distinction between a causing process and its actor, this causing process may be encoded in structure alone with the morpheme -k.

(23)    
         3                      3                      3
                E                        Process                  Transition

In fact, Zuni is quite adamant about the expression of the causing process alone without an agent in -k constructions, so that in the eventive passive an agent must not be specified even as a postpositional adjunct, (24).

(24) hom   'utte - na - k - nan (*waccita 'akkya)
     1sg.Acc. bite - stat. - event. - SS ( dog instr. )
     ‘I was bitten (*by a/the dog)’

Further evidence for the semantic and morphosyntactic separation of agent from causing process comes from the use of the Zuni eventive -k construction for events that could not possibly involve an agent. The sentences (25a-b) occur in close proximity in a text. The sentence (25a) is in the form of the resultative stative, indicated both by interpretation as well as the stative allomorph -ye of the present tense suffix. The second sentence, based on the same lexical root ‘swell’, is in the form of an eventive passive. Here, the interpretation is one of a state resulting from an event of swelling;11 in this context (of a corpse swelling up) there is no question of the possibility of an agent as the causer of or actor in the swelling event.

(25) a.   'el'e   šole - na - ye 
         corpse  swell - stat. - pres.
         ‘The corpse was swollen.’

11 The difference in stativity in (25a-b) is also indicated by tense inflection. The tense inflection in (25) illustrates the Zuni ‘narrative’ use of present and past tense, where tense may be marked relative to the particular topic time. A state holding at the topic time will be marked with present tense, while an event occurring prior to the topic time will be marked with past.
b.  \( \text{\$ole - na - 'kya} \)
    swell - stat. (- event.) - past
    ‘[He had been killed wantonly, and so] he[the corpse] swelled up’

[Bunzel 1933]

While the event in (25b) lacks an agent, the context explicitly includes a cause of the swelling, so that the morphosyntactic representation of the event will also reference this causing process. Thus ‘swell up’ here is expressed as an eventive passive rather than a change-of-state intransitive, which in Zuni is encoded as a pure transition, cf. (26) below.

(26)  \( \text{k'uhmo - ti - kya} \)
      break - inch. - past
      ‘It broke’

Based on these observations of the Zuni eventive passive, we summarize in (27) what might be called a principle of agentivity, which takes into account the semantic complexity of agentivity.

(27)  **Principle of Agentivity**
    a. ‘Causing process’ and ‘agent’ are semantically distinct.
    b. An agent is not a cause(r) but merely an actor in the causing process.
    c. ‘Causing process’ may be encoded in morphosyntactic structure alone, or with an actor.

Now, if the process subevent in a complex event structure corresponds semantically to a cause, what does it correspond to syntactically? In other words, what morphosyntactic property is the Zuni eventive suffix \(-k\) an instantiation of?

The Zuni data described here seems to suggest that causative derivational morphology may in fact be of more than one type. First, it may, as in the case of canonical causative derivational morphology, introduce both a causing process as well as an agent of that causing process (cf. the Zuni causative morphology in example (18)). In addition, under the proposal made in (27) that ‘causing process’ and ‘agent of causing process’ are distinct notions, we might predict that a second type of causative morphology might also exist that encodes causing process alone without the agent of that process. In other words, causative morphology essentially encodes ‘causing process’, and it is a property of individual lexical items belonging to this derivational category as to whether they do or do not allow the causer to specified in addition (= assigned a thematic role). Thus the semantically complex nature of the notion of causation leads us to expect to find languages like Zuni which possess more than one type of derivational morphology with respect to the specification of the causer. In other words, rather than constituting an arbitrary fact of language, Zuni \(-k\) morphology is an expected sort of lexical variation if an agent is discrete from the causing process, i.e., not implicit in the causing process but merely participating in it.

This view of agents and their relationship to events predicts that there should exist paradigms of derivational morphology like that in Zuni illustrated in (28) which hinges precisely on the \(\pm\)specified causer distinction. The morphemes in this paradigm are semantically similar and differ only in the property that one \((-u\)) is specified for an agent in the causing process and the other \((-k\)) is not. The result in Zuni is a paradigm that encodes several degrees of eventivity and agentivity.
(28) Derivation of Eventive Predicates ± Agent

<table>
<thead>
<tr>
<th>(a) Simple Stative Stems</th>
<th>(b) Eventive Intransitives</th>
<th>(c) Transitives</th>
</tr>
</thead>
<tbody>
<tr>
<td>'uli ‘be inside’</td>
<td>'uli - k ‘be put inside’</td>
<td>'uli - u ‘x put y inside’</td>
</tr>
<tr>
<td>ho' 1sg.Nom inside - DS</td>
<td>hom 'uli - k -app ’a</td>
<td>hom Nemme 'ul - u - p</td>
</tr>
<tr>
<td>‘I was inside’</td>
<td>1sg.Acc. inside - event. - DS</td>
<td>1sg.Acc. N. inside -trans. - DS</td>
</tr>
<tr>
<td></td>
<td>‘I was put inside’</td>
<td>‘Nemme put me inside’</td>
</tr>
</tbody>
</table>

Other examples:

i. 'ansatto ‘helped’
   ‘ansatto - k ‘be helped’
   ‘ansatto - u ‘x help y’

ii. 'imo ‘be sitting’
    'imo - k ‘be seated’
    'imo - u ‘x seat y’

iii. palo ‘buried’
    palo - k ‘be buried’
    palo - u ‘x bury y’

The base of the derivation is a stative root, such as 'uli ‘be inside’. To form an eventive predicate from a stative root in Zuni there are two choices, an eventive without a specified agent formed by suffixing -k to the root (middle column, (28b)), and an eventive with a specified agent formed by suffixing -u or -p to the root (right column, (28c)). As in the case of the eventive passive, the morpheme -k in the eventive intransitive is associated with the presence of an accusative case.

Significant about the paradigm in (28) is the fact that the eventive morpheme -k occurs here in a context other than the passive and with a lexical base whose sole argument is retained in the derived form. This should dispel any lingering doubt that -k itself might be a ‘passivizing’ morpheme with the function of suppressing the external argument. In essence, the Zuni eventive passive is an eventive intransitive formation parallel to the middle column, (28b), but on a derived stative base.

To briefly summarize: we suggested in the introduction that the absence of true passivizing morphology may be taken as an indication that passives are not necessarily derived by suppressing or reassigning the external argument role of a transitive predicate. A closer look at the structure of Zuni passives reveals that passives are indeed derivable by other methods than the standardly assumed ‘reassignment’ operation.

4. SUMMARY AND IMPLICATIONS FOR THEORIES OF PASSIVE FORMATION. We have suggested here that many of the assumptions concerning the form and derivation of the passive are supported in English only by either ambiguous or outright problematic empirical evidence, including the notion that the passive forms part of a ‘voice alternation’ that consists of deriving a passive construction from a transitive predicate. In addition, the form of Zuni stative and eventive passives provides direct counterevidence to arguments for ‘passivizing’ morphology that suppresses or absorbs case and thematic roles. Instead passives appear to be derived by adding properties to a lexical root containing only object information; in other words, they are derived in the same manner as transitives.

Thus one important claim of this study is there is no ‘passivizing’ morphology in many languages that have recognizable passive constructions, despite the fact that the passive was originally defined essentially on the basis of the presence of such morphology. Instead what we find is that the passive crosslinguistically consists of various different strategies that aim at excluding the external thematic role from the predicate. Zuni, representing one type of passive strategy, makes use of derivational morphology that corresponds to the causing process subevent but is lexically specified as lacking an external thematic role for the causer. English employs another method of avoiding the external thematic role and adds a change of state intransitive auxiliary be instead (and as a result the lexical root takes on participial form). Contrary to the standard approach to the passive, then, in auxiliary passives the essence of the passive is in the
auxiliary, not in the participle. Various alternative forms of the English strategy may be found, for example Hindi uses the auxiliary *jana* ‘go’ instead of ‘be’, (29a), and in Korean the change of state auxiliary *eci* ‘become’ is a bound morpheme that attaches directly to the verb stem, (29b).\(^\text{12}\)

\[(29)\]

**Hindi**

a. cor pakRa: (*Ram - se) ga - ya:
   
   thief catch (Ram - by) go - past.M.sg.
   
   ‘The thief got caught (*by Ram)’

**Korean**

b. totuknom-i cap - eci - ess - ta
   
   thief-Nom. catch - become - past - decl.
   
   ‘The thief got caught’

Russian has a third type of passive, in which reflexive morphology is also used in the passive. Navajo and Yoruba employ a dummy subject in transitives to construct a passive, and Javanese and Indonesian both use subject agreement morphology from a different paradigm and require the agent to be syntactically backgrounded but nevertheless present; these represent yet a fourth and fifth type of passive construction.

The conclusion to be drawn from such variation is that while there seems to be a notional category of passive serving a particular discourse function, there is no formal category of passive. As a result, what we identify crosslinguistically as the passive are the various structural solutions to the functional problem of object topicality with a transitive base, constrained by independent grammatical principles of particular languages. This phenomenon is not limited to the passive. We find a similar heterogeneity of structures that make up the class of switch-reference obviation systems (cf. the collection of papers in Haiman and Muñoz 1983) or that constitute an ergative system (Bittner and Hale 1996).

A contrast between passives and causatives in this light is revealing. Both passives and causatives are usually thought of as argument changing derivations (cf. Baker 1988 chapters 4 and 6) of a related though opposite type: passives remove an argument while causatives add an argument. Yet while the passive consists of a collection of disparate structures crosslinguistically, causative formations falls into essentially two categories, morphological (affixal) vs. syntactic (periphrastic), both involving the introduction of a syntactic V head + external argument (Baker 1988, chapter 4). If the passive were truly the simple reductive inverse to the causative that it is said to be, we might not expect to find the wide constructional variation in the passive that we do.

Finally, the heterogeneous approach to the passive may actually provide us with explanations for phenomena connected to the passive for which otherwise exist either awkward accounts or no explanations. Briefly, we take the example of the variability of whether an agentive phrase is possible with the passive. For the obligatory absence of an agentive phrase Jaeggli (1986) cites Comrie (1977) for Latvian, certain traditional styles of Persian and Classical Arabic and Siewierska (1984) for Latvian, Urdu, Kupia, Classical Arabic, Amharic, Igbo, Tera, Sonrai, Fijian, Atjñamathanha, Cupleñö, Cora, Huichol, Cahuilla, Shoshoni, Pepeano. For other languages, Siewierska indicates that the agentive phrase in the passive is obligatory, e.g. Kota (Dravidian), Palauan and Indonesian (Austronesian).

Jaeggli (1986: 602) explains this crosslinguistic variation essentially by stipulation: passive morphology in certain languages subcategorizes for an agentive phrase and in other languages does not. Of course, if there is no passivizing morphology as has been claimed in this study, this explanation cannot be right and we are still left with this variability in the expression of the agent.

\(^{12}\)There is a second passive formation in Korean which makes use of derivational morphology that is formally very similar to causativizing morphology, a surprising circumstances that has been remarked on before. An investigation of this state of affairs is beyond the scope of this paper, but the analysis of the Zuni eventive suffix -k in section 3 hints at why this similarity between ‘passivizing’ and causativizing morphology may not be surprising after all.
to explain. If the passive crosslinguistically is the sort of heterogeneous phenomenon suggested here, there may be as many explanations for this variation as there are passive constructions. The agentive *by*-phrase may be permissible in English simply because the semantics of the passive change-of-state auxiliary *be* do not disallow it, while on the other hand the semantics of the passive auxiliary *jana* 'go' in Hindi (29a) will not permit it. Zuni eventive passives disallow agentive phrases (cf. example (24)) because the morpheme -k is lexically specified as -specified causer. Indonesian and Javanese passives obligatorily require an agentive phrase since these constructions are essentially transitives with word order and agreement signaling a shift in topic to the object.

(30) **Javanese**

a. Amrih tuku dolanan
   A. buy toy
   'Amrih bought a toy'

b. Dolanan di-tuku Amrih, 
   toy 3sg-buy A.
   'Amrih bought the toy'

With the knowledge that the passive crosslinguistically is properly understood as a collection of different structures with a similar functional goal, we now can predict that the explanation for the variable distribution of the agentive phrase will be language specific rather than general.

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REPORT 11

SURVEY OF CALIFORNIA AND OTHER INDIAN LANGUAGES

PROCEDINGS OF THE MEETING OF THE HOKAN-PENUTIAN WORKSHOP

June 17-18, 2000
University of California at Berkeley

Laura Buszard-Welcher, Editor
Leanne Hinton, Series Editor
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PREFACE

The year 2000 was the 30th anniversary of the first Hakan languages conference. That first conference was imagined, planned and run by Prof. Margaret Langdon at the University of California at Berkeley, with the assistance of Prof. Shirley Silver of California State University at Sonoma. Almost every year since then, Hakan workshops and then Hakan-Penutian workshop in the previous few years had been either very small or even cancelled due to the lack of a sufficient number of people submitting paper titles. There was some thought of abandoning the Hakan-Penutian workshops altogether. Margaret felt that it would be a shame for this long tradition to end without a last hurrah, and so I offered to hold a Hakan-Penutian Workshop at Berkeley in conjunction with the “Breath of Life” Language Workshop for California Indians. The Breath of Life Workshop is a biennial gathering of California Indians here at Berkeley, and is designed primarily for people whose languages have no speakers left. We give them tours of the campus archives and show them how to use publications, fieldnotes and recordings of their languages for their own purposes – primarily language learning and teaching. I felt it would be a good thing to show the linguists who spent their careers working on these endangered languages to see the use their work is being put to by the descendants of the very people they worked with years ago. Therefore, the first session of the Hakan-Penutian Workshop consisted of presentations by the participants in the Breath of Life Workshop. The anticipation of this treat may have played a role in bringing a relatively large crowd here in 2000, perhaps along with billing the workshop as “The (Last?) Hakan-Penutian Workshop.” Sixteen papers (not counting the Breath of Life presentations) were given at the workshop, eight of which are published in this volume.

With both the Hakan and Penutian hypotheses in doubt, there is always a question as to which languages should be included at the workshop. Although my sympathies are with the “splitter” camp in linguistics, I’m definitely a social lumper. Therefore, for purposes of the workshop I chose to define “Hakan” and “Penutian” as rubrics rather than language stocks, and advertised the workshop as being “for any language that has ever been hypothesized to be Hakan or Penutian.” We thus have papers ranging from Tsimshianic to Zuni, and—oh, well—we even accepted Juliette Blevin’s excellent paper on Yurok, an Algic language, which has never been hypothesized as either Hakan or Penutian.

At the business meeting held at the end of the Hakan-Penutian workshop, no-one wanted to say that this was the last one. Instead, we voted to continue with the workshops on a biennial basis, to be held here at Berkeley from now on, overlapping with the Breath of Life Workshop as it did in 2000. As I write this preface, the two years have already passed, and we are preparing for the 2002 Breath of Life Workshop, which this year will overlap with—not the Hakan-Penutian Workshop—but the 50th Anniversary Celebration of the Survey of California and Other Indian Languages. The upcoming conference for the Celebration subsumes participants in Hakan-Penutian Workshops. I imagine that our biennial gathering will continue on: whether it will be a Hakan-Penutian workshop in 2004 or something broader than that remains to be seen.

Leanne Hinton
Director of the Survey of California and Other Indian Languages
Juliette Blevins
Notes on Sources of Yurok Glottalized Consonants

Catherine Callaghan
Problems of Writing a Historical Grammar

Victor Golla
The History of the Term "Penutian"

Anthony Grant
Fabric, Pattern, Shift and Diffusion: What Change in Oregon Penutian Languages Can Tell Historical Linguists

Margaret Langdon
The Story of Johnny Bear: A European Tale in 'ilipay Kumeyaay

Lynn Nichols
Two Zuni Passives

Marie-Lucie Tarpent
Tsimshianic l-Initial Plurals: Relics of an Ancient Penutian Pattern

Esther Wood and Leanne Hinton
A Report on George Grekoff's Collection of Chimariko (and Other) Materials

Leanne Hinton
The Proceedings of the Hokan-Penutian Workshops: A History and Indices