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EDITED BY  
ELOISE JELINEK  
SALLY MIDGETTE  
KEREN RICE  
AND  
LESLIE SAXON

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# **ATHABASKAN LANGUAGE STUDIES**

ESSAYS IN HONOR OF  
**ROBERT W. YOUNG**



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# TRANSITIVITY DECREASE IN NAVAJO AND ATHABASKAN: ACTOR-AFFECTING PROPOSITIONAL DERIVATIONS

ANDREJ A. KIBRIK

Institute of Linguistics, Moscow

## 1. Introduction

This paper deals mostly with a morphological category shared by all Athabaskan languages that has been traditionally known as the "classifier". Standard average Athabaskan "classifiers" are a four-element set of morphemes one of which necessarily appears in every occurrence of every verb. In Navajo, the underlying shape of these morphemes is: Ø-, *l*-, *d*-, and *l*-; however, superficially they can appear in very different ways or be invisible altogether (see Hoijer 1946, Kari 1976:46ff.). As is generally recognized, the function of "classifiers," if any, is related to transitivity marking. In another paper (Kibrik 1993) I have looked at the transitivity increasing processes (causativization and the like). In this paper, the subject is transitivity decrease and its marking by "classifiers," along with other means.

This paper is the first part of a larger study of transitivity decreasing processes in Athabaskan. Here I will consider only those transitivity decrease phenomena that are related to Actor suppression (passive and the like). The discussion will be based primarily on the Navajo<sup>1</sup> evidence, since Navajo is more or less representative of Athabaskan in general as concerns Actor-affecting processes.

To state it in its most simplified form, the main intent of this study is to show that "classifiers" are more functional elements than is usually claimed. Many basic things in Navajo verb structure look quite strange, arbitrary, and overcomplicated in the traditional presentation, including stem variation, mode-aspect inflection, theme categories, and "classifiers." Recently a number of attempts have been made to simplify and clarify some of these issues (Hardy 1979, Kari 1979, Leer 1979). Even the nucleus of the verb, that is the stem, was divided into root and suffix, and shown to be more regular than had seemed before. Below I address the "classifier" category that is immediately adjacent to the stem, and hence can be expected to be somewhat lexicalized and irregular, but not more than the stem itself.



In Kibrik 1993 I tried to provide some functional motivation for the distribution of “classifiers” in Navajo verbal lexeme formation; here, dealing primarily with inflectional processes, I will try to demonstrate motivation for the distribution of “classifiers” in the verb forms. At any rate, the term “classifier” lacks any meaningful content and will be abandoned.

As I try to show below and in the forthcoming part of this study, all processes invoking a “classifier” shift can be subsumed under the category of **semantic transitivity**, as defined by Hopper and Thompson 1980. Therefore a terminological replacement for “classifier” will be **transitivity indicator (TI)** (this term was also used by Ichihashi 1991 in application to Yuman data).

Semantic transitivity of a verb/corresponding situation does not necessarily coincide with grammatical transitivity, and is a graded rather than binary parameter. Further, it is a complex parameter comprising a set of more primitive parameters, including those related to the number of participants, their inherent and current features (agency, affectedness, individuation), semantic verb class (action/nonaction), aspect (telicity, punctuality), and modality; see Hopper and Thompson 1980. A prototypical highly transitive clause contains two participants (one of which is an agent, and the other is totally affected and highly individuated), and the verb is a telic punctual volitional affirmative realis action. A prototypical intransitive clause can be defined *mutatis mutandis*.

A change in each of these parameters can cause a change in overall transitivity, which may or may not be reflected in the clause morphosyntax of a particular language. There are two types of semantic processes affecting transitivity — those that **increase** and those that **decrease** transitivity. A typical example of the former is the causative, of the latter — the passive. Languages differ as to which of these two directions of transitivity shifts they favor (see Nichols 1982, Kibrik 1996). There are primarily transitivity increasing (Nakh-Daghestanian) and primarily transitivity decreasing (Indo-European) languages.

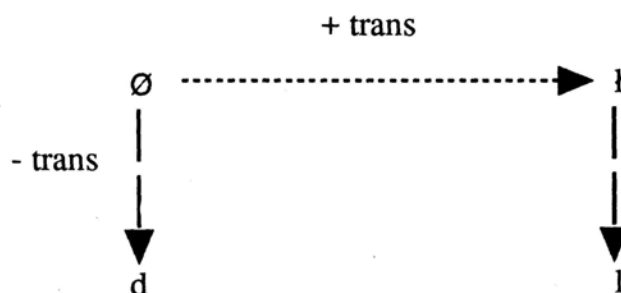
Athabaskan languages are exceptionally sensitive to transitivity changes: nearly all of the components of transitivity registered by Hopper and Thompson cross-linguistically find some reflection in Athabaskan. In the light of the theory of semantic transitivity, the majority of the instances of TI distribution that may look arbitrary and morphologically frozen otherwise, appear well-motivated and consistent. Furthermore, in Athabaskan both directions of transitivity shifts are abundantly represented. Here I concentrate on the Actor-affecting transitivity decreasing processes — passive, anticausative, potential, semipassive, and some others; i.e., those in which transitivity decrease is due to some change occurring to the Actor. They constitute a relatively simple and easy types of detransitivization processes since they are clearly related to transitivity even in its traditional, grammatical understanding. Other processes, including those related to

Undergoer changes (e.g. reflexives), or to the aspectual facet of transitivity (e.g., iterative), and still more intricate cases that become illuminable due to Hopper and Thompson's theory remain for future research.

Two theoretical notions and one assumption still have to be introduced here. By the **propositional structure** (PS) of a verb I mean its valence, together with the whole range of other semantic parameters potentially affecting transitivity — aspect, semantic class, affirmation etc. (see above).<sup>2</sup> By **propositional derivation** (PD) I mean any change in a verb's semantics changing its PS. My assumption (justification is outside the scope of this paper; it is frequently implied by linguists but rarely verbalized) is the following: each verb (stem or lexeme depending on the language) in each language has its original, inherent, prototypical PS. This original PS can undergo various PDs, among them those that can be characterized as transitivity increasing or transitivity decreasing.

My hypothesis about the prototypical function of the Athabaskan TIs is the following. The TI  $\emptyset$ - marks the identity of the PS of the present verb occurrence with the original stem's PS; in other words, quite iconically, zero is the sign of no change. The TI  $\mathfrak{l}$ - marks the transitivity of the original PS. The TI  $\mathfrak{d}$ - is the mark of detransitivization of the original PS. The TI  $\mathfrak{l}$ - marks the detransitivization of an already transitivity verb, thus referring to two stages of semantic derivation at once.<sup>3</sup> These relations can be diagrammed as follows:<sup>4</sup>

(1)



Now, several additional notions related to Navajo material must be introduced.

First, I follow a recent tradition in Athabaskan, and in particular Navajo, studies assuming that Navajo is a **pronominal argument** language: that is, arguments in the Navajo clause are represented by the pronominal elements within the verb, and not by independent NPs (Jelinek 1985, Sandoval and Jelinek 1989, Saxon 1989, Willie 1991, Kibrik 1988, 1992, among others). Not only are personal pronouns arguments, but also other pronouns appearing in the same morphological positions: indefinite, areal, etc.

Second, in order to adhere to cross-linguistically consistent terminology, I find it impossible to use the labels "subject" and "object" as applied to Navajo — meaning either independent NPs or pronominal slots/morphemes (see Jelinek 1985, Saxon 1989) inside the verb form. I distinguish between two sets of terms (somewhat differently from Kibrik 1993). Semantically, I use two semantic macroroles — Actor and Undergoer (following e.g. Van Valin 1993), the former being the more controlling and usually agentive participant, the latter the more affected and less controlling participant. Macroroles are not equivalent to more elementary semantic roles like agent and patient: for example, Actors can be non-agentive, e.g. in experiential verbs like 'see'. A cover term for Actor and Undergoer is "core arguments" (as opposed to non-core arguments).

Formally, I speak in terms of verb-marked cases: Nominative is the name of the verbal pronominal slots 2 and 5A-B (using Kari's [1989: 444] right-to-left numbering) requiring the proper forms of pronouns; Accusative is the name of the verbal pronominal slot 5C, with the corresponding pronouns; Oblique is the pronominal slot accompanying so-called "postpositions" (rather preverbal proclitics; see Kibrik 1990). (A Dative case can also be argued for, but this is irrelevant for this paper.) Normally there is an isomorphic relationship between semantic macroroles and verb-marked cases: Actor is marked by a pronoun in the Nominative slot, Undergoer in Accusative, and non-core arguments as Obliques.

There is no independent evidence of the relevance of syntactic relations in Navajo — this language appears to be completely non-relational. To my knowledge, there are no syntactic processes like relativization, complementation, gerundial clause formation, raising, Equi etc. that would be restricted to some grammatical relation. All these phenomena are syntactically neutral in Navajo; see Foley and Van Valin 1977, Kibrik 1992.

Third, I use the received Athabaskanist terms "verb stem," "theme," and "base" in the following ways. "Stem" is a paradigmatic set of morphemes — mode variants; the same term also applies to both a variant in this set and to the invariant of the set. "Theme" is stem plus the lexically determined TI (which is most frequently Ø- but sometimes can be non-zero; lexical TI can be subsequently modified in the inflected forms).<sup>5</sup> "Base" is theme plus all affixes loosely considered lexical (usually following Young and Morgan's 1987 model); base is in fact equivalent to lexeme.

## 2. Towards the history of a misnomer<sup>6</sup>

"Classifier" is a recognized misnomer among Athabaskan linguists (Krauss 1969:81, Cook 1984:162, Young and Morgan 1987g:117, Thompson 1989b:9, Rice 1989:434). This term goes back originally to Goddard's study of Hupa (1905) where he divided all verbs into four

classes depending on the root-preceding element. Goddard wrote that most Hupa verbs

are seen to fall into two classes, according to the presence or absence of -L [= l - A.K.] before the root <...> In a general way -L may be considered the sign of the transitive. Its absence marks the intransitive <...> While it is quite evident that in its past history this -L was in some way closely connected with the transitive forms of the verbs, it is doubtful if at the present it has such a force <...> The third class has immediately before the root either d- or t-. <...> The verbs of this class are of three kinds; a number containing certain roots which never occur without the dental sound which is the characteristic of the class, verbs having the prefix na- with the iterative force of again, and all passive formed from class i.

The fourth class has -l preceding the root. It is composed of a number of verbs having roots which evidently require this sound preceding, since they do not occur without it, and all passive corresponding to class ii. (Goddard 1905:34-5)

From this extract it is clear that Goddard already was aware of all the basic features of "classifiers" recognized by present-day Athabaskanists: that they form a coherent four-element set of morphemes; that they are partially motivated by transitivity distinctions, and partially are fossilized elements of verb themes; and that they can differ within the same verb, depending on whether it is an active or a passive form. From these facts alone, it can be seen that no classes in fact exist: they cannot be defined either in formal or in semantic terms.

Goddard soon abandoned the terminology based on the idea of verb classes. In his description of Kato he spoke about "third modal elements" L, t/d and l (Goddard 1912:57).

Sapir's first Athabaskan work (on Chasta Costa) acknowledges both of Goddard's usages: "...a third modal element or 'class' sign" (Sapir 1914:300; quotes on the term 'class' are significant). In a number of later works by Sapir he used only the "third modal" terminology (Sapir 1915a: 770, 1915b:540, 1921:133-4, 1923:136). Moreover, in Sapir (1921:137) he spoke of "classifier verbs," using the term "classifier" in a totally different sense (referring to what is now commonly called classificatory verb stems). Any terminology referring to "verb classes" is absent also from Haile's (1941-42) *Learning Navaho*, written under an exceptionally strong influence of the late Sapir. Haile used the word "pre-stem." To my knowledge, the only time the term "classifier" appeared in a published work written by Sapir, again in eloquent quote marks, was in his late paper on Navajo (1936:227).

Apparently the term “classifier” as such was first used in Na-dene studies by Boas, in application to Tlingit where verbal pre-stem morphemes were supposed to mark nominal classifications of the verb’s arguments (Boas 1917:27-35). It is not clear whether Boas’ usage can be in any way traced back to Goddard. Boas’ book contains no references to Athabaskan, and the usage of similar terms in early Athabaskan and Tlingit studies may be a mere coincidence.<sup>7</sup> It should be made very clear that what Goddard and Boas had in mind when they used similar terms were entirely different phenomena: Goddard meant a classification of **verbs** on the basis of morphological elements in question, whereas Boas had in mind **noun** classification. The latter view has no relevance for Athabaskan, but it appears that it was Boas’ term “classifier” that directly affected the now generally accepted Athabaskan terminology. As Krauss has noted, it is ironic that the term “classifier” was abandoned in later Tlingit studies (see e.g. Story 1972) where “it was at least in part appropriate, and remains in use by students of Athapaskan and Eyak where it is a complete misnomer, except as it corresponds to what in Tlingit were once (1917-1965) called classifiers, now extensors.” (Krauss 1968:201)

Probably the earliest publications on Athabaskan where the term “classifier” was used are Li (1930a,b) on Mattole and Sarcee. Li (1930b:70) uses this term without explanation; his analysis also implies division of verbs into classes: “zero-class,” “*l*-class” etc. In Li 1930a he makes only a brief note: “to distinguish them [stem-preceding prefixes - A.K.] from the other ‘modal’ prefixes we shall call them classifiers” (p. 4-5). After these works by Li, the whole body of later Athabaskan work, with very few exceptions, took the term “classifier” for granted, even though noting sometimes its inappropriateness (see above). The important early works after Li (1930a,b) include Li (1933), Hoijer (1938), Young and Morgan (1943), Hoijer (1946, 1948), and Reichard (1951). Hoijer’s usage is very definite and includes no hint of an explanation for the term “classifier” (see e.g. Hoijer 1938:74-6). Young and Morgan’s terminology is distinctive in their consistent usage of the collocation “stem classifier” (1943g:45-6). Reichard is the co-author of an extremely unusual, in the context of Athabaskan studies, short monograph (Reichard and Bitanny 1940). In this work Reichard abandoned the “classifier” terminology and proposed renaming the morphemes of the class in question in semantic terms. She called the *l*-element “causative,” *d*- “agentive,”<sup>8</sup> and *l*- “passive causative.” These characterizations are of course essentially correct (see below and Kibrik 1993).

As mentioned above, the term “classifier” has been used in all major grammars of Athabaskan languages in the recent decades. A number of studies devoted specifically to “classifiers” have also appeared (Krauss 1969, Higgins 1974, Collins 1979, Thompson 1989a: Ch.7).

The pervasive usage of the term “classifier” is sometimes erroneously attributed to Sapir. All that was said above probably shows that it is not Sapir who is responsible for this term. It originates from the work of Goddard and Boas, and was firmly established in tradition by Li and Hoijer. This may be one of the cases where an occasional and perhaps oral usage by Sapir was later interpreted as the only true terminology licensed by the major Athabaskan authority.

The inadequacy of the term “classifier” is well-known, and it is one of the points of this paper. Here I could mention only one unfortunate consequence of this usage. Bybee (1985), in her highly accurate study of the typology of grammatical categories, correctly indicated that valence markers cross-linguistically are the most closely tied with the stem, both semantically and formally. Furthermore, in her extensive language sample Bybee found only a handful of languages that do not have any valence markers. And among those was Navajo — in reality, an unrivalled example of a valence-sensitive language. The reason for this oversight can be only the misleading term “classifier”.

### 3. Propositional derivations

In Navajo, all transitivity decreasing PDs are reflected in a TI shift:  $\emptyset$ - > d-; 1- > 1-. Since transitivity decrease can occur for various reasons, there can be more than one such source in a given verb form. If a verb already displays, say, a 1- TI for independent reasons, and a transitivity decreasing derivation occurs, it is not reflected any more in any TI shift: 1- > 1-.

#### 3.1.

##### **Passive and formally similar phenomena**

In this section I discuss Navajo passives and a family of phenomena that formally resemble passive (and for this reason have not been distinguished before) but indeed are semantically and morphologically different.

##### **3.1.1. Passive per se<sup>9</sup>**

###### **A. Basic features**

Passives are those verb forms in Navajo that result from the propositional derivation of Actor suppression. Under passive, the Actor is removed from the PS and the corresponding form both referentially and morphosyntactically, with Undergoer remaining the only core argument of the verb. There is no way to mention any Actor overtly in passive clauses. However, typically an Actor is presumed to exist, that is semantically Actor remains in the PS (which is not the case with another PD, anticausative, see 3.1.3 below). This is the reason why I prefer to speak of Actor suppression (using the term from Givón 1981, 1990), rather than elimination, in



connection with the Navajo passive. Usually Undergoer in the passives is inanimate, though not infrequently it can be non-human animate (Young and Morgan 1987g:141). Also, Thompson (1989a) has shown that the Athabaskan (including Navajo) passive, unlike some other languages, does not assign high topicality to the Undergoer. Therefore, the major function of passive is to remove the Actor referent from the situation.

Here are some very simple examples of the passive.<sup>10</sup>

- (2) a. *ʔasdzáá chidí tánéízgiz*  
       *ʔasdzáá chidí tá- né- í- Ø- z- Ø- giz*  
       woman car Pref- Pref-3/ Acc-3/ Nom-Md-TI=-wring:Pf  
       ‘The woman washed the car’  
   b. *chidí tánásgiz*  
       *chidí tá- ná- Ø- s- d- giz*  
       car Pref-Pref-3/ Acc-Md-TT~wring:Pf  
       ‘The car has been washed [by someone]’

In (2) the TI shift from Ø- to *d-* is reflected in the voicing of the *s*-perfective affix *s-*: *s* > *z* / \_\_STEM in (2a) where the TI is zero but voicing is blocked by the intervening invisible *d-* in (2b).

- (3) a. *jool nayííneʔ<sup>11</sup>*  
       *jool na- yíí- l- neʔ*  
       ball Pref-3/ Acc:3/ Nom:Md-TT~SRO.move:Pf<sup>12</sup>  
       ‘He dropped the ball’  
   b. *jool naalneʔ*  
       *jool naa- l- neʔ*  
       ball Pref:3/ Nom:Md-TT~SRO.move:Pf  
       ‘The ball was dropped [by someone]’

Morphologically, the structure of passives is very simple. The inflectional morphemes that passives can have include: a) an Accusative (sic! see below) pronoun (in the great majority of cases neutral zero third person; indefinite and areal pronouns are also possible); b) mode prefix, if any; c) TI d) choice of a stem alternant.

#### B. The interpretational controversy

The term “passive” should be applied to Navajo material with some reservations. Passive, as well as voice in general, most commonly is defined in terms of a change in syntactic relations (Xolodovič 1970, Perlmutter and Postal 1977, Shibatani 1985, Noonan 1994): passive is a result of the syntactic process of subject demotion and, frequently, the parallel promotion of object into subject position.<sup>13</sup> However, as stated above, Navajo grammar

does not provide evidence for the necessity of syntactic relations. In order to define passive-type constructions, the levels of semantic macroroles (Actor, Undergoer) and verbally-marked cases (Nominative, Accusative), suffice and no level of syntactic relations is needed. I believe that diathesis can be more universally defined as mapping of semantic (macro)roles onto morphosyntactic positions, be the latter syntactic relations (as e.g., in English) or not. Thus, though speaking of the given class of forms as of passives one should bear in mind that no syntactic relations like subject are involved.

Moreover, the Navajo passive in fact involves only Actor suppression and the concurring elimination of the Nominative position on the verb, the Undergoer still being coded in the Accusative position. This analysis of passive forms is not easy to arrive at, because usually only third person referents (which have the non-distinguishable zero morphological marking for Nominative and Accusative) are the only core arguments of passives, and there is no way to tell which slot they really occupy.

Sapir and Hoijer (1967:92) indicated that passive verbs lack the "object" prefix position, thus implying that the only argument occupies the "subject" (Nominative) position. Young and Morgan (1987g:142) were probably the first to suggest that the non-zero pronominal core arguments of passives — indefinite in *ʔi-* and areal in *hwi-*<sup>14</sup> — remain in the Accusative slot. Consider an example of the Undergoer areal pronoun:

- (4) a. *ʔashkii hooghan yinaagóó haldééh*  
*ʔashkii hooghan yi- naa -góó ha- Ø- l- dééh*  
 boy hogan 3/ Obl-around-at Ar/ Acc-3/ Nom-TT~PIO.move:Impf  
 'The boy is cleaning up around the hogan'

- b. *haldééh*  
*ha- l- dééh*  
 Ar/ Nom-Acc-TT~ -PIO.move:Impf  
 'Area is being cleaned up'

(Young and Morgan 1987g:142)

The suggestion that *ha-* (an allomorph of *hwi-*) in example (4b) takes the Accusative position is, however, purely intuitive since the indefinite pronoun in *ʔi-* and the areal pronoun in *hwi-* do not distinguish their Nominative and Accusative forms.

There is, however, one piece of evidence of decisive importance. There is a class of verbs in Navajo, sometimes called "transitivized" that have a non-zero third person Undergoer marker for all person values of Actor (it is *bi-* for all person values of Actor except the third, when it is *yi-*). These verbs are a very intricate issue in themselves, but they shed light on the structure of the passive. For instance:



- (5) a. hayiilyeed  
 ha- yii- l- l- yeed<sup>15</sup>  
 Pref-3/ Acc:Pref-TI-TI~ -flex:Impf  
 'He is running him? it up out'
- b. habiilyeed  
 ha- bii- l- l- yeed  
 Pref-3/ Acc-TI~ -TI~ -flex:Impf  
 'It is being run up out'

(Young and Morgan 1987d:373)

Examples of this type, with a non-zero Undergoer marker, probably demonstrate 16 that under passive the Nominative slot disappears, but the Undergoer marker in the Accusative slot remains intact. This kind of passive is attested in many languages, e.g. Polish. In Polish, in addition to regular passive with an Undergoer marked by nominative, there is a passive with an accusative Undergoer, where no nominative (subject) NP is possible (verb receives a dummy neuter agreement):

- (6) skradziono mu zegarnik  
 steal:Passive:Neuter him watch(Acc)  
 'He has been stolen a watch', lit. 'It is stolen him watch'

This kind of passive is not foreign to other Athabaskan languages too. In Hupa (Golla 1970:182) and Sarcee (Thompson 1989a:169, quoting from Cook 1984) there are passive forms unequivocally preserving the Undergoer pronoun in the Accusative position (with the Nominative position eliminated). (See also Givón 1990:581 for comparable forms in Ute.)<sup>16</sup>

To summarize, the passive diathesis in Navajo amounts to: 1) preserving the mapping of the Undergoer onto the Accusative position in the verb, and 2) removing the Nominative position from the verb, thus leaving the Actor morphosyntactically unexpressed.

### C. Further examples

Here is an example of a verb that originally has the 1- TI, which is also retained in the passive (the reasons why this grammatically transitive verb originally has a 1- TI are irrelevant for us here, though this fact probably has a functional explanation):

- (7) a. ?atsi? yoolghal  
 ?atsi? yoo- l- ghal  
 meat 3/Acc:3/Nom:Md-TI~ -eat.meat:Pf  
 'He ate the meat'

- b. yilghal  
 Ø- yi- l- ghal  
 3/Acc-Peg-TI~ -eat.meat:Pf  
 'The meat was eaten'

The following examples demonstrate how a non-core argument present in the initial transitive PS is retained in the passive:

- (8) a. tsé biih-yíʔá<sup>17</sup>  
 tsé b- iih- Ø- yí- Ø- Ø- ʔá  
 rock 3/ Obl-into-3/ Acc-Md-1Sg/ Nom-TI=-handle.SRO:Pf  
 'I put the rock into it'
- b. tsé biih-yit'á.  
 tsé b- iih- Ø- yi- d- ʔá  
 rock 3/ Obl-into-3/A-Md-TI~ -handle.SRO:Pf  
 'The rock was put into it'

(In the latter example a morphophonological change occurs: **d + ʔ > t'**.)

The following group of examples demonstrates that the passive in Navajo, unlike some other languages, does not necessarily designate a state but can also designate a passive process:

- (9) a. tsídii yitin  
 tsídii Ø- yi- Ø- tin<sup>18</sup>  
 bird 3/ Nom-Peg-TI=-freeze:Impf  
 'The bird is freezing'
- b. ʔasdzáá tsídii yiltin  
 ʔasdzáá tsídii yi- Ø- l- tin  
 woman bird 3/ Acc-3/ Nom-TI~ -freeze:Impf  
 'The woman is freezing the bird (chicken)'
- c. tsídii yiltin  
 tsídii Ø- yi- l- tin  
 bird 3/ Acc-Peg-TI~ -freeze:Impf  
 'The chicken is being frozen [by somebody]'

The consultant (Lillie Lane) explicitly indicated here, as well as in many other instances, that this passive clause implies the existence of somebody (that is, a human being) acting on the bird. The contrast between the intransitive in (9a) and the passive from causative from this intransitive in (9c) demonstrates the corresponding semantic difference: while the former means a spontaneous process not controlled by any agent, the latter means a process controlled by an indefinite agent (for a discussion of a similar example see Haile 1942:132).



this connection, a sentence like (11b) implies “treating a child like an object rather than a human being” and thus does not sound good to her. This ability of Navajo to play with the normal classification of referents, in particular representing humans as objects, was actually discovered by Sapir (1932). Thus, since a metaphorical reinterpretation is at work here, such marginal examples do not contradict the generalization that Navajo passives do not allow human Undergoers.<sup>19</sup>

**3.1.2. Historical passives** There are a number of verbs in Navajo that look like passives but cannot be considered true passives because they do not have correlating active transitives from which they could be considered derived. Such pseudopassives are usually drawn as evidence that TIs in Navajo are no longer a living mechanism and have a mostly lexical distribution. One such verb is illustrated by the following example:

- (12) jool naalts'id  
       jool naa-                    l-            ts'id  
       ball Pref:3/ Acc:Md-TI~-SRO.move:Pf  
       ‘The ball came dropping down’

The semantic difference between this example, and, say, the passive in (3b) above, is that here the object is meant to fall by itself, without any implied agent (this was confirmed by two of my consultants). No doubt, historical, or deponent passives (if we use a term from Latin grammar) like in (12) at some point in the past had the same derivation as synchronic passives like in (3b) (or synchronic anticausatives, see 3.1.3 below). Thus, once an initial active base ceases to exist, and the passive is retained in the language, it is reinterpreted as a non-derived intransitive verb having no corresponding transitive; however, this transitive base is quite reconstructable for a speaker. See the following artificial transitive, theoretically underlying the historical passive in (12):

- (13) \*jool nayífts'id  
       jool na- yíí-                    l-    ts'id  
       ball Pref-3/ Acc:3/ Nom:Md-TI~-SRO.move:Pf

My consultant (Nicole Horseherder) remarked that this verb is “clear but grammatically incorrect;” its meaning would be ‘he dropped the ball’. The remark that (13) is clear is extremely important for our understanding of how TIs synchronically function in Navajo. Given that in the lexicon there is a verb theme **-l-ts'id** meaning ‘SRO moved’, even if the theme **-l-ts'id** is not attested at all, it still is stored somewhere and somehow in the speaker’s linguistic competence or predicted by it, and a native speaker can easily comprehend and recover it. Furthermore, the meaning of the stem

**-ts'id** 'SSO moved' is also available to a speaker, and the only attested theme **-l-ts'id** is analyzable into **-l-** and **-ts'id**.

Though this claim may seem strange, I would argue that the synchronic non-existence of a linguistic form is a matter of degree. For example, according to Hoijer (1974) and Young and Morgan (1987) the stem **-k'ééz** 'SSO flew, fell' occurs always with the Ø-TI, cf.:

- (14) tsin náák'ééz  
       tsin náá-                      Ø- k'ééz  
       stick Pref:3/ Nom:Md-TI=-SSO.move:Pf  
       'The stick fell down'

The causative of this verb is not documented, the corresponding meaning rendered by an unrelated theme **-l-t'e?** 'dropped SSO'. However, I recorded the following example, spontaneously translated from English by my consultant (Irene Silentman) and later confidently confirmed by her:

- (15) ?tsin náálk'ééz  
       tsin náá-                      l- k'ééz  
       stick Pref:3/ Acc:Md:1Sg/Nom-TI'-SSO.move:Pf  
       'I dropped the stick'

Irene Silentman remarked that this sentence is equivalent to the following one (which is attested in lexicographic sources):

- (16) tsin náált'e?  
       tsin náá-                      l- t'e?  
       stick Pref:3/ Acc:Md:1Sg/ Nom-TI' -SSO.move:Pf  
       'I dropped the stick'

She also provided the further passive form from the **-l-k'ééz** verb:

- (17) ?tsin naalk'ééz  
       tsin naa-                      l- k'ééz  
       stick Pref:3/ Acc:Md-TI~-SSO.move:Pf  
       'The stick was dropped'

Two other consultants rejected both of the examples (15), (17), saying "it does not sound right" or "I don't like it for some reason" and thus supported the lexicographic sources cited above. However, I would not be satisfied with a hypothesis that the evidence received from Irene Silentman is simply an accidental slip of the tongue. It is quite possible that these forms exist in Irene's dialect (idiolect), or that the pressure of the system makes it possible to analogically construct forms that are out of general use.

**3.1.3. Anticausative** Like the passive, the anticausative is a PD associated with Actor suppression. The difference is that in the passive the Actor is referentially indefinite but semantically implied, while under anticausative the Actor is entirely excluded from the situation (see Nedjalkov and Sil'nickij 1969, Haspelmath and Mueller-Bardey 1991). Therefore the anticausative is an extreme case of Actor suppression: elimination. Cf. the difference between the English phrases (a) John lost the sheep; (b) The sheep was lost; and (c) The sheep got lost. While (b) (passive) simply conceals the existing agent, (c) (anticausative) implies an agentless event, and excludes the agent altogether. The term "anticausative" implies that a process opposite to the causative takes place: the causing agent is removed from the original PS of a verb. Anticausative is a derivation applicable only to originally transitive agentive verbs.

I was able to find only few anticausatives in the Navajo lexicon (many seeming anticausatives prove to be passives or historical passives). Consider the following examples where (18b, c) are two intransitive personal forms of the same base which is not identical with the base exemplified by a transitive form in (18a): the latter requires "S-perfective" but the former "Y-perfective".

(18) a. néʔííʔ

Ø né- Ø- ʔííʔ  
3 Acc:Pref:Md:1Sg/ Nom-TI=-conceal:Pf  
'I have stolen it/him'

b. noot'ííʔ

Ø- noo- d- ʔííʔ  
3/ Nom-Pref:Md-TI~-conceal:Pf  
'He sneaked, slunk, stole'

c. neesht'ííʔ

nee- sh- d- ʔííʔ  
Pref:Md-1Sg/ Nom-TI~-conceal:Pf  
'I sneaked, slunk, stole'

(Young and Morgan 1992:253)

The verbal root -ʔííʔ (perfective allomorph) is originally transitive and means 'conceal', 'steal', or 'hide' (note that these meanings are indistinguishable in many languages). The relation between (18b, c), on one hand, and (18a), on the other, is analogical to that between the English examples (c) and (a) cited above. In (18 b, c) the original agent is removed and these sentences literally mean 'he (resp. I) got concealed'. Perhaps one could argue for an alternative interpretation of (18b,c) as a case of a "middle" diathesis: 'he (resp. I) concealed him- (my-) self'. Consider another example where the only remaining participant of the derived PS can be inanimate, and, therefore, the middle interpretation is ruled out: **dah hidii-loʔ** 'I

weighed it/him' > **dah hide/-dlo?** 'it/he weighed so and so' (Young and Morgan 1992:388, 390).

From a morphological point of view, Navajo anticausatives, unlike passives, are full-fledged lexical items, with a full personal paradigm (that is, having first, second, and fourth person forms, if allowed by the verb semantics). Their personal pronouns clearly appear in the Nominative slot — see (18c) above. Therefore, the anticausative implies a more radical change of diathesis than the passive: the Undergoer pronoun is relocated from the Accusative to the Nominative position. Anticausatives usually do need to display a direct derivational relationship to a transitive verb. For example, anticausatives in (18 b, c) are personal forms of a base which is not identical with the base exemplified by a transitive form in (18a): the latter require "S-perfective" whilst the former "Y-perfective." Anticausative is a case of lexeme formation (unlike passive which is a case of inflection).

Some of the "historical passives" discussed above (3.1.2) might ascend historically to anticausatives rather than passives; this distinction, though, probably cannot be traced any more in "historical passives."

#### 3.1.4. Potential: half-way between passive and anticausative

There are verb bases in Navajo that resemble anticausatives in being inflected for person, but semantically imply an Actor, like passives. One example is the verb 'be visible'; consider its third and first singular forms:

- (19) a. yit'í  
           Ø-       yi- d- ʔí  
           3/ Nom-Md-TT-see:Impf  
           'He/it is seen [by the speaker/hearer], is visible'
- b. yisht'í  
           yi- sh-       d- ʔí  
           Md-1Sg/ Nom-TT-see:Impf  
           'I'm seen'

Hoiyer (Sapir and Hoiyer 1967:92, Hoiyer 1974:27) described this verb as a passive from an active transitive verb **yishʔí** (1Sg Impf) 'to see'. Young and Morgan (1987d:791) also indicate a relationship between these verbs.<sup>20</sup> **Yishʔí** is a "neuter" verb, that is, it has only one mode paradigm,<sup>21</sup> and **yisht'í** could be considered a normal passive derived from it, if it were not for the person inflection. Probably **yisht'í** historically is a reinterpreted passive, but it cannot be said to be a passive synchronically. My suggestion is that this verb is what can be called potential, semantically and morphologically between passive and anticausative.

Semantically, potentials resemble passives in preserving the idea of an indefinite Actor (see translation of [19a] above), but like anticausatives they imply that the event is controlled by the properties of the Undergoer rather

than Actor; hence the potential meaning (like 'be visible' instead of just 'be seen') and the naturalness of combination with the adverbs like in (20) below:

- (20)    ʔayóo yit'í  
           ʔayóo Ø-       yi- d- ʔí  
           easily 3/ Nom-Md-TT-see:Impf  
           'It is easily seen'

Morphologically, the potential resembles the anticausative in being unproductive and lexical (that is, not formed from the active according to a regular inflectional pattern), and also in having the full personal paradigm represented by the Nominative pronouns. On the other hand, the potential is like the passive in preserving a clear formal link with the corresponding transitive verb (having the same set of derivational prefixes etc.). Therefore, it is not quite clear whether potential should be considered lexeme formation or inflection.

There are some other (though scanty) examples of potentials. For instance:

- (21) a. naniséʔaʔ  
           na- ni-       sé-               l- ʔaʔ  
           Pref-2Sg/ Acc-Md:1Sg/ Nom-TI ^-send:Pf  
           'I sent you around, on errands'

- b. nasíníʔaʔ  
           na-       síní-       l- ʔaʔ  
           Pref-Md:2Sg/Nom-TI~ send:Pf

(Young and Morgan 1987d:597)<sup>22</sup>

### 3.2. Semipassive

#### A. Basic features

In (22b) below is given an example of a form we are going to look at in this section:

- (22) a. ʔasdzáá ʔashkii tánéízgiz  
           ʔasdzáá ʔashkii tá- né- í-       Ø-       z- Ø- giz  
           woman boy   Pref-Pref-3/ Acc-3/ Nom-Pf-TI=-wring:Pf  
           'The woman washed the boy'



- b. ʔashkii táábíʔdísgiz  
 ʔashkii táá- bí- ʔ- dí- s- d- giz  
 boy Pref-3/ Acc-Ind/ Nom-TD-Md-TI ~-wring:Pf  
 'The boy was washed'

Forms like **táábíʔdísgiz** above have been termed "agentive passive", "passive II", "passive B" and "impersonal (passive)" in the literature. Here we abandon all of these terms for reasons that will become clear later. A working term that we accept here (and will explain below) will be "semi-passive: Semipassives are translated into English by passive forms but do not fit into the cross-linguistic limits of the notion of passive.

Semipassives are characterized by the following features:

- they are an absolutely productive and regular inflectional form;
- the Nominative slot is invariably occupied by the indefinite pronoun ʔi-;
- the Undergoer is always animate and is coded by pronominal affixes accordingly; the only peculiarity is that the third person pronoun is always **bi-** (and never **Ø-**);
- semipassives always display transitivity decrease by respective TIs;<sup>23</sup>
- there is an additional morpheme **di-** usually appearing after the Actor pronoun; its nature is generally considered unclear.

Therefore, the semipassive suppresses the Actor argument (but to a lesser degree than the plain passive, see below), and the only full-fledged argument remaining is Undergoer marked in the Accusative slot. Below we will look at the morphological and semantic features of the semipassive more closely.

#### B. Another passive?

Probably the first author to suggest the existence of two passives in Navajo was Sapir:

Passive I is the simple passive, passive II the one with -'di- prefixes. Both have **d-** form of stem. I'm not quite certain about their distribution. Passive I is used with 3d person, indef. 3d person, and place object (passive "subject"), apparently not with S1,2, D-P [duoplural - A.K.] 1-2 object. How about 4th person object? Can one say **nòhóltè·h** "this one is being set down there"? I felt not when I drew up this table but perhaps I am wrong <...> Further, I have not entered forms for Passive II with 3d indef. and place objects

(**nì·ì·dè·ltè·h**; **nòhò·dè·t'·à·h**) but am not sure I am right in excluding them <...> As to the difference of meaning between Pass. I and II, if my suggested distribution of forms is correct, it is only with 3d obj that the question arises. My theory is that **nì·ltè·h** means "he is being set down" simply (without reference to some agent) but that **nìbì·de·ltè·h** means "he is being set down by somebody". Here too I am not certain that I am right. (Sapir 1938)

Sapir was certainly correct in suggesting that the second "passive" has a more explicit reference to the Actor of the event in question. However, his caution in proposing this hypothesis appears to be well justified: there is not much semantic difference between the two constructions in this particular respect (see below). I will try to outline below the major semantic differences between the two forms.

To my knowledge, all authors after Sapir followed him in distinguishing two passives (though they varied as to how they labelled these two forms). Indeed, there are reasons for such a view. First, the (plain) passive and the semipassive in Navajo appear to be in a semantic complementary distribution: semipassive is used primarily with human Undergoers (including all occurrences of 1, 2, 4 person, and human 3 person), while plain passive appears with non-human Undergoers. Second, functional features cross-linguistically common for passives are found in the Navajo semipassives. For example, all three functional domains claimed to be a universal prototype of passive by Givón (1981) — patient (Undergoer) topicalization (to some extent, see below), agent (Actor) suppression (partial), and stativization (not necessary, though) — are shared by the semipassive.

However, the semipassives lack a structural property that has to be recognized as a central property of passives, if one wishes to have a working cross-linguistic notion of passive and to delimit passive from a family of related phenomena. What I mean is the property of **diathesis change** (see e.g. Xolodovič 1970), that is the change of a correspondence between the semantic roles and morphosyntactic positions (as in the English passive, where the Undergoer assumes the morphosyntactic coding normally belonging to the Actor, simultaneously displacing the latter; or in the Navajo plain passive, where the Actor simply is not represented in the morphosyntactic structure). In the semipassives, the Actor keeps being coded as Nominative, and Undergoer as Accusative.

This is why I chose not to speak of the form in question as passive and use the term "semipassive" (for lack of a better word).

## C. Indefinite Actor

No doubt, the element *ʔi-* occurring in the Nominative slot of the semipassive verbs is identical with the indefinite pronoun *ʔi-* (variously surfacing as *ʔi-*, *ʔa-*, *ʔe-*, *ʔo-*, and *ʔ-*, cf. footnote 14) that generally designates an indefinite participant ('someone', 'something') of any kind. Consider its use in some intransitive verbs:

- (23) *bił-haʔalyeed*  
*bi- ɬ - ha- ʔa- l- yeed*  
 3/ Obl-with-Pref-Ind/ Nom-TI~flex:Impf  
 'Something runs up with him' = 'He goes up in an elevator'
- (24) *ʔálah ʔaleeh*  
*ʔálah ʔa- Ø- leeh*  
 together Ind/ Nom-TI=-become:Impf  
 'Someone comes together' = 'A meeting convenes'  
 (Young and Morgan 1987g:75)

Likewise it can be used in the Accusative slot. However, in the semipassive constructions Nominative *ʔi-* always refers to an **animate** indefinite Actor. The reason for this is not in the nature of the indefinite pronoun itself but in the overall semantics of the semipassive construction, see 3.2.G below.

Unlike the passive forms, where the Actor is absent morphologically, in the semipassive constructions the indefinite Actor is explicitly mentioned in the verb form. In terms of European grammars, what we call semipassive is more like constructions with indefinite **they** in English, French **on** or German **man** rather than passive. (There is however, a crucial difference: these constructions in European languages do not have formal marking of transitivity decrease on the verb, and the Navajo semipassive does.) Despite the fact that an Actor is semantically present in a semipassive clause, and even marked morphologically, this is a referentially **suppressed** (in the sense of Givón 1981, 1990) Actor. Indefinite Actors generally are referentially suppressed since the prototypical Actor is specific and definite. In the context of a passive construction, Actor's indefiniteness is a step on the way to the total Actor elimination.

It seems reasonable to suggest that the indefinite Actor must be recognized as the central defining feature of the semipassive, since there is nothing else that could be responsible for transitivity decrease and the appearance of the *di-* prefix. This would be especially convincing if transitive verbs could not produce forms with indefinite Actor other than semipassives, as was claimed by Kari (1976:24). However, as will be discussed in detail in section 3.3 below, plain indefinite Actor transitive forms (without other features of the semipassive) appear to exist. But the case is that these forms imply (even though not unconditionally) a

detransitivization with a TI shift; therefore they are not counterevidence to the suggestion that in the semipassive it is the indefinite Actor that is responsible for detransitivization.

Hopper and Thompson's (1980) list of the parameters of semantic transitivity includes a requirement toward the Undergoer (patient), that is "individuation of O," which is a complex parameter in its turn (1980:253) but has referential components in it. However, Hopper and Thompson's list lacks any referential parameter, like individuation, definiteness, or specificity, for Actor (agent), though phenomena very similar to what is found in the Navajo semipassive are cross-linguistically common and are referred to in some papers in Hopper and Thompson 1982, e.g., Givón 1982. Hopper and Thompson list only one feature of Actor, and it belongs to the domain of role semantics: this is high potency agency. Though the high correlation between the semantic and referential properties of arguments is very well known, apparently the list of transitivity parameters should be supplemented with the requirement of Actor individuation/definiteness/specificity (the choice of one of these notions or search for a more precise one is open for further discussion). Many languages (e.g. Ute, Givón 1982; Lithuanian, Geniušienė 1974) have indefinite Actor constructions (without diathesis change) that are treated by morphosyntax as transitivity decreasing. Therefore this referential parameter applied to Actor correlates with the overall clause transitivity in the same way as other parameters of semantic transitivity.

Here we can return to the terminological issue. The terms "agentive passive" and "impersonal" are not satisfactory names for the forms in question since they are two wrong extremes in representing the role of the Actor in semipassives. "Agentive passive" (opposed to the agentless plain passive) emphasizes the fact that the Actor pronoun is present in the forms in question; such an emphasis is strange for a referentially suppressed degree of presence. "Impersonal", on the other hand, suggests that there is no Actor person at all, which is not the case either: there is a personal, usually human, Actor implied and even morphologically mentioned in the semipassives even though it is an indefinite suppressed Actor.<sup>24</sup>

#### D. Animate Undergoer

Most commonly the Undergoer in semipassives is human. The semipassive does not allow an inanimate Undergoer. Compare the examples in (22) with the following:

- (25) a. ʔasdzáá chidí tánéízgiz  
 ʔasdzáá chidí tá- né- í- Ø- z- Ø- giz  
 woman car Pref-Pref-3/ Acc-3/ Nom-Pf-TI=-wring:Pf  
 'The woman washed the car'

- b. \*chidí táábíʔdísgiz  
 chidí táá- bí- ? - dí- s- d- giz  
 car Pref-3/ Acc-Ind/ Nom-TD-Md-TT~wring:Pf

A human Undergoer can of course be not only third but also first, second, or fourth person, for instance:

- (26) a. lééchaaʔí nishhash  
 lééchaaʔí ni- Ø- sh- l- hash  
 dog 2Sg/ Acc-3/ Nom-Md -TI~-bite:Pf  
 'The dog bit you'  
 b. níʔ dishghash  
 ni- ? - di- sh- l- ghash  
 2Sg/ Acc-Ind/ Nom-TD-Md -TI~-bite:Pf  
 'You have been bitten'

(In (26a) the following morphophonological change occurs: **gh** > **h** / **l**\_\_\_\_.)  
 The Undergoer can be not only human but also non-human animate:

- (27) a. yidiniłtsóód  
 yi- Ø- di- ni- l- tsóód  
 3/ Acc-3/ Nom-Pref-Md-TI~-grab:Impf<sup>25</sup>  
 'He's grabbing him? it'  
 b. híʔ biʔdiniłtsóód  
 híʔ bi- ? - di- ni- l- tsóód  
 horse 3/ Acc-Ind/ Nom-Pref-TD-Md-TI~-grab:Impf  
 '[Right now] the horse is being grabbed'

(For the status of the **di-** prefix in this last example see below.)

#### E. The enigmatic **di-**

As was stated above, **di-** is an obligatory morpheme appearing in all semipassive forms; it is found in a position immediately after **ʔi-**. However, under certain phonological conditions these two morphemes undergo metathesis (see Young and Morgan 1987g:143), for example:

- (28) bidiʔnılʔí  
 bi- di- ʔ- ní- l- ʔí  
 3/ Acc-TD-Ind/ Nom-Pref-TT~-see:Impf  
 'She's looked at'<sup>26</sup>

Young and Morgan (1987g:143, 1992:880) for some reason attribute to the **di-** prefix the meaning 'person'. My suggestion is that this **di-** is

historically identical to the transitivity decreasing indicator **d-**. The Navajo **d-** TI is represented in some other Athabaskan languages as **di-** (see Thompson 1989a: Ch. 7), and is reconstructed for Proto-Athabaskan as **di-** or **də** (Krauss 1969). I assume that this was a transitivity decreasing morpheme at an early stage of Athabaskan. It was used in various morphological positions, and its usage as a pre-stem transitivity decrease morpheme later got grammaticalized into a member of the TI paradigm, reducing in Navajo into mono-consonantal **d-** (cf. Thompson's (1989a: 171ff.) suggestion that the **di-** in semipassives is related to **di-** found in Navajo and other Athabaskan reflexives).

It is quite common in Athabaskan polysynthesis that materially one and the same morpheme appears in different morphological slots (and gets interpreted sometimes as a set of homophonous morphemes). Note for instance a comment of Young and Morgan about the prefix **ni-** of what they call "adverbial-thematic position VIb":

**ni**<sup>1</sup> - ~-n-: terminative. Describes verbal action of a type that is inherently terminal - a concept that it shares with **ni-Ib(2)**: cessative-terminative, and with **ni-VII**: a modal prefix. All three, along with **ni?**, earth, ground, may be cognates (Young and Morgan 1992:853)

Some more direct evidence for the suggestion that the **di-** in question is related to the **d-** TI comes from Hupa (where the morphemes historically and distributionally corresponding to these two Navajo morphemes have the same shape **di-**, though they appear in two distinct morphological positions). The fact is that in Hupa the reflexive form in **?a-...di-** (directly cognate to the respective Navajo prefix pair) does not entail a TI shift (Golla 1970:108). This seems extremely odd provided that otherwise Hupa is nearly as sensitive to transitivity decrease as Navajo. In my opinion, the only way to explain this fact is to assume that in Hupa the **di-** TI and the **di-** morpheme in reflexives is one and the same morpheme — a transitivity decrease marker. It is not tightly bound to one morphological position and can float between the pre-stem TI position and position number 7 (in Golla's right-to-left numeration). If this morpheme occurs in position 7, there is no need for having it in the pre-stem position.<sup>27</sup>

On the other hand, in Navajo the transitivity decrease morpheme **di-** occurring five positions to the left from the stem, and the pre-stem **d-** TI have ceased to be associated with each other, and the TI has extended its usage to the forms where another decrease morpheme is used. Thus, **di-** in the Navajo semipassive forms is an extra marker of transitivity decrease ("TD" in the glosses), doubled by a **d-** or **l-** TI.

Another intriguing fact about the **di-** marker in Navajo semipassives is that it triggers haplology. Besides the transitivity-related **di-**, there is a

whole set of other homophonous morphemes of the shape **di-** in Navajo, and almost all of them occur in Young and Morgan's (1987) "adverbial-thematic" position VIa (qualifier 4C position in Kari's 1989:444 right-to-left numeration), that immediately follows the semipassive **di-**. Young and Morgan (1992:851-2) distinguish 14 **di-** prefixes in this position with different, sometime vague, meanings, and all of them with one exception are lexical, that is they pertain to verbal lexeme formation rather than inflection. In the semipassive forms from such verbs where a sequence of **di-di-** could be expected only one **di-** really occurs, and the other one is elided. In all examples with lexical **di-** that I was able to elicit haplology takes place. For instance (see also ex. (27) above):

(29) a. *hastiin ?ashkii néidííne?*

hastiin ?ashkii né- i- Ø- díí- l- ne?  
 man boy Pref-3/ Acc-3/ Nom-Pref:Md-TT~SRO.move:Pf  
 'The man hit the boy'

b. *?ashkii nábi?doolne?*

?ashkii ná- bi- ? - doo- l- ne?  
 boy Pref-3/ Acc-Ind/ Nom-Pref-TD:Md-TT~SRO.move:Pf  
 'The boy was hit'

In (29b) it is unclear how to gloss the **di-** prefix (here appearing in a portmanteau combination with a mode prefix), so I indicate both alternatives. It is not certain, however, whether all types of lexical **di-** undergo haplology. There are some contradictions in the data of Young and Morgan on this issue. For instance, from the data presented in Young and Morgan (1987d:337, 334) it follows that the third person imperfective semipassive from the verb 'to burn something' (it contains an instance of **di-** with the general meaning 'fire') should be:

(30) a. *bidi?didlid*

bi- di- ? - di- d- lid  
 3/ Acc-TD-Ind/ Nom-Pref-TT~burn:Impf  
 'He's (being) burnt (by somebody)'

(Note a metathesis of **?i-** and semipassive **di-** in this form.) On the other hand, in Young and Morgan (1992:371) another form is cited:

(30) b. *bí?didlid*

bi- ? - di- d- lid  
 3/ Acc-Ind/ Nom-Pref-TD-TT~burn:Impf  
 'He's (being) burnt (by somebody)'



(31) a. *bidi?dilbaas*

(Young and Morgan 1987d:331,330)

b. biʔdilbaas

(Young and Morgan 1943d:22)

(32) a. didiıldəzh

b. *bidi?diildəzh*

(Young and Morgan 1987d:316, 315)

As we have seen above (31b), lexical inceptive **di-** triggers haplogy. Young and Morgan (1992:852) suggest that this very inceptive prefix occurs in an inflectional function in the future forms (that are, morphologically, progressive mode forms plus **di-**). Interestingly, future **di-**, be it identical to lexical inceptive or not, according to my data does not trigger haplogy when combined with the semipassive **di-**, and even does not cause metathesis:



- (33) a. lééchaaʔí nidoolhash  
 lééchaaʔí ni- Ø- doo- ɪ- hash  
 dog 2Sg/ Acc-3/ Nom-Fut:Md-TT-bite:Prog  
 'The dog will bite you'
- b. niʔ didoolghash  
 ni- ʔ - di- doo- ɪ- ghash  
 2Sg/ Acc-Ind/ Nom-TD-Fut:Md-TT~-bite:Prog  
 'You'll be bitten'

Young and Morgan, however, cite the metathesized prefix complex **bidíʔdoo-** (third person Accusative) for this paradigm (1987d:775) and their dictionary contains some examples of haplology in the future forms (1987d:770).

It is an open question whether the **di**-haplology in Navajo has some semantic basis (historical identity of the transitivity decrease **di**- and lexical **di**-ʔ), or whether it is an automatic phonological simplification **ʔi-di-di** > **diʔdi** > **ʔdi**- (an alternative order of rules implying no metathesis is also plausible: **ʔi-di-di** > **ʔidi** > **ʔdi**-).

#### F. Third person reference

Another morphological phenomenon relevant for the semipassive is connected with the third person Accusative marker. It is always **bi**- instead of the expected **Ø**- appearing normally with non-third person Nominative. This is by no means an arbitrary phenomenon, and is probably related to the semantic peculiarities of the semipassive. To explain this **bi**- one has to take into account another group of facts — those related to the so-called **yi**- / **bi**- alternation.

The puzzle of the alternation between **yi**- and **bi**- Accusative ('object') third person pronouns (to some extent connected with the order of full NPs in the clause) is probably the most widely known issue in Navajo grammar (see e.g. Hale 1973, Foley and Van Valin 1977, Shayne 1982 inter alia). The alternation is relevant when the Nominative pronoun is third person also, since in most cases when Actor is non-third person the third person Undergoer marker is zero. Consider some examples:

- (34) a. ʔasdzáá ʔashkii tánéíʔgiz  
 ʔasdzáá ʔashkii tá- né- í- Ø- z- Ø- giz  
 woman boy Pref-Pref-3/ Acc-3/ Nom-Md-TI=-wring:Pf  
 'The woman washed the boy'
- b. ʔashkii ʔasdzáá tánábíʔgiz  
 ʔashkii ʔasdzáá tá- ná- bí- Ø- z- Ø- giz  
 boy woman Pref-Pref-3/ Acc-3/ Nom-Md-TI=-wring:Pf  
 'The boy was washed by the woman; the woman washed the boy'

- (Young and Morgan 1992:903)

There is no room here to enter into all the intricacies of this complex phenomenon, except for one aspect of it — the functioning of the **bi**-pronoun. The transitive construction with **bi**- was called “topicalized Undergoer” construction in Kibrik 1988: Ch. 2. Here we will use a working definition of it as an “inverse” construction following Thompson (1989a) and Sandoval and Jelinek (1989); in many languages inverse constructions are those in which a lower inherent animacy activity referent acts upon a higher referent. (The difference between the passive and inverse constructions is discussed in Sandoval and Jelinek 1989, Thompson 1989a and Givón 1994.) As was indicated by Frishberg (1972) and Witherspoon (1980), in this class of occurrences **bi**- cannot refer to inanimate referents at all and refers to animate non-human referents with certain limitations; mostly it refers to human referents.

Another usage of **bi-** — that in the semipassive forms — apparently shares with the inverse usage a semantic restriction: it can be applied only to human/animate referents. Moreover, these two classes of occurrences of the

Undergoer pronoun **bi-** have another feature in common: the referent of **bi-** in both of them is more topical/important than the Actor. For a discussion of these discourse features for the Navajo inverse construction see Kibrik 1988: Ch. 2 and Thompson 1989a:149ff. In the semipassive, the higher relative topicality/importance of Undergoer is quite obvious, since the Actor is completely indefinite. As for absolute topicality/importance of the Undergoer in the semipassive, it is discussed by Thompson (1989a:149ff.), whose text counts results are somewhat ambiguous: the referential distance measurement for the semipassive Undergoer is between those for direct transitive Actor and Undergoer; according to the persistence measurement and the global "topic quotient", the semipassive Undergoer ranks surprisingly high, as do other "promoted" arguments.<sup>27</sup>

Therefore, it seems quite justified to argue that the occurrences of **bi-** in the semipassive forms and in the inverse forms constitute a single submeaning of this third person pronoun.

Moreover, it could be argued that the semipassive is simply a subcase of a more general inverse construction. Under such treatment the semipassive is an inverse form of a transitive construction with the indefinite Actor and regular Undergoer marked by the Ø- prefix (such constructions are discussed in section 3.3 below). It is not a problem for this analysis that a "direct" construction probably not always exists — this is also the case when the Actor is inanimate and the Undergoer is human and therefore the inverse construction is obligatory — see (35) above. But there are two other problems with this analysis.

First, the regular inverse constructions are most likely to occur when the Actor is inanimate while the semipassive implies at least an animate (usually human) indefinite Actor.

Second, unlike the regular inverse construction the semipassive has significant additional peculiarities — namely, a double marking of transitivity decrease by means of TI and the **di-** prefix. Therefore, even if the two constructions are related it is not their commonality (loosely, topicalization of the Undergoer) that is responsible for the detransitivization in semi-passives since in regular inverse construction there is no transitivity decrease.

The tendency of **bi-** in the semipassive constructions to be animate is so strong that it can sometimes signal reinterpretation of the verb stem semantics. The stem **-ne?** 'SRO moved', already discussed above, is a classificatory stem normally applying to inanimate roundish patients:

- (36) a. jool nayííne?  
           jool na- yíí-                            ɬ- ne?  
           ball Pref-3/ Acc:3/ Nom:Md-TI-SRO.move:Pf  
           'He dropped the ball'

Naturally, a semipassive from this verb cannot be expected:

- (36) b. \*jool nabi?doolne?  
           jool na- bi-     ? -       doo-   l-   ne?  
           ball Pref-3/ Acc-Ind/ Nom-TD:Md-TT~-SRO.move:Pf

However, when the Undergoer was not mentioned overtly by an NP my consultant (Irene Silentman) said this verb/sentence made sense to her:

- (36) c. nabi?doolne?  
           na- bi-     ? -       doo-   l-   ne?  
           Pref-3/ Acc-Ind/ Nom-TD:Md-TT~-SRO.move:Pf  
           ‘Something (e.g. smth. animate in a box) was dropped’

That is, the usage of the necessarily animate semipassive **bi-** led her to attribute a modified meaning to the stem, which in its turn led her to the recognition of a form that was supposed to be semantically ruled out.

In sum, the necessarily animate **bi-** pronoun of the semipassive constructions constitutes a separate submeaning of the general **bi-** found also in the inverse constructions.

#### G. Passive vs. semipassive : A functional explanation

An important general question is what is the motivation behind the distinction of the passive and semipassive in Navajo<sup>28</sup> and to what extent does their morphological form reflect their semantics?

Both of these constructions have in common that they imply an animate, usually human, indefinite Actor (though the passive does not represent it in the morphological structure while the semipassive does). So cases where the Actor is inanimate are totally excluded from the domain of the passive and semipassive. This is probably because in Navajo transitive situations with an inanimate Actor are not typical at all, and so the further complication of passivizing such clauses is not a relevant function in the language.

The passive and semipassive are in a complementary semantic distribution, the former used with inanimate Undergoers, the latter with human Undergoers; animate non-human Undergoers (animals) can appear in both constructions (their intermediate status is a general feature of Navajo semantics represented also in the activity hierarchy, see Hale 1973, Creamer 1974, Witherspoon 1980):

- (37) a. híí? táábí?dís-giz  
           híí? táá- bí-     ? -       dí- s- d- giz  
           horse Pref-3/ Acc-Ind/ Nom-TD-Md-TT-wring:Pf  
           ‘The horse was washed’

- b. *hííʔ tánásgiz*  
*hííʔ tá- ná- Ø- s- d- giz*  
 horse Pref-Pref-3/ Acc-Md-TT~ -wring: Pf  
 'The horse was washed'

It is very likely that occurrences like (37a) involve viewing the horse as a rational human-like being while (37b) reflects interpreting it rather as an object. Compare another pair of examples showing a striking difference between the two forms as concerns animacy.<sup>29</sup>

- (38) a. *dibé yoolghal*  
*dibé yoo- l- ghal*  
 sheep 3/ Acc:3/ Nom:Md-TT~ -eat.meat: Pf  
 'He/it ate the sheep'  
 b. *dibé doolghal*  
*dibé Ø- doo- l- ghal*  
 sheep 3/ Acc-Fut:Md-TT~ -eat.meat: Prog  
 'The sheep will be eaten'  
 c. *dibé biʔdoolghal*  
*dibé bi- ? - doo- l- ghal*  
 sheep 3/Acc-Ind/ Nom-TD:Md-TT~ -eat.meat: Pf  
 'The sheep was eaten'

Here my consultant (Irene Silentman) commented that the example in (38c) implies that the sheep is still alive, e.g. a wolf ate a part of its leg, unlike (38b) where the sheep is going to be all eaten up and hence will be dead.<sup>30</sup>

So, in the simplest form the distribution between the passive and semi-passive is that the former applies to inanimate Undergoers and the latter to humans. The literature on the noun hierarchy in Navajo shows convincingly that the distinction between the world of people and the world of things is a fundamental one in Navajo philosophy, culture, semantics, and therefore grammar. Also, cf. Thompson's (1989a:149ff.) discourse counts results, according to which the semipassive Undergoer is many times more topical/important than the passive Undergoer. Probably two different types of intransitive situations are represented by the passive and semipassive.

The Navajo passive is a simpler construction, involving basically the referential and morphological elimination of the Actor. Semipassive is apparently a more complex phenomenon; it requires invoking the notion of control — the notion that was used by Witherspoon (1980) to describe the Navajo *yi-/ bi-* alternation. Witherspoon suggested that it is not thinkable in the Navajo worldview that animals, and particularly inanimate objects and abstract entities, act upon human beings. Real world situations are conceptualized in Navajo so that control is attributed to humans:

What happens at any given moment in the Navajo world is determined by who can control what or who can act upon whom <...> In the Navajo view of the world horses cannot take it upon themselves to kick men, for men are more intelligent than horses <...> If a man gets kicked by a horse, it is his own damn fault for not using the intelligence with which he was born. Horses kick men because men allow themselves to be kicked by being in the wrong places <...> It is the man who, in the ultimate sense, caused the horse to kick him. (Witherspoon 1980:8-9)

My guess is that the motivation behind the semipassive is that an indefinite Actor is treated in Navajo in a way like inanimate Actor — control cannot be attributed to it and belongs to the Undergoer, if the latter is animate (which is the case in semipassives). Passives do not possess a good candidate for having control at all, since one participant is suppressed, and the other is inanimate.

This interpretation accords with the suggestion above that there is a relationship between the semipassive and the inverse construction. For both of these constructions, the underlying conceptual structure is such that control belongs not to the Actor but to the Undergoer.

Finally, it could be argued that the passive and semipassive differ in the degree of Actor suppression, since in the semipassive the indefinite Actor is iconically represented in the Nominative slot while in the passive it is morphosyntactically absent altogether (cf. Sapir's analysis quoted in 3.2.B). However, this difference should not be overestimated in its semantic aspect. As was noted in section 3.1.1, passive forms also presuppose the existence of an Actor. One can distinguish between referential, morphosyntactic, and semantic suppression. The first is found in both passive and semipassive, the second only in the passive. Semantically, Actor is suppressed in neither passive or semipassive, since an indefinite Actor is implied in both forms. All three ways of suppression are found, however, in the anticausative. This is the ultimate case of Actor suppression: elimination.

### **3.3. Indefinite Actor**

The indefinite Actor pronoun is one of the features of the Navajo semipassive. However, this pronoun *ʔi-* can occur in transitive (as well as intransitive (see ex. [23], [24] above) verbs in the non-semipassive forms. Krauss (1969:82-83) noticed that in the verb paradigms in Young and Morgan (1943g:77-110) in many cases an indefinite Actor pronoun causes the TI shift, namely detransitivization.

Unfortunately I did not have a chance to collect new data on such forms, and the paradigms in Young and Morgan (1943) still remain the only

published source of evidence on them. Consider some minimal pairs from this monograph:

(39) a. *néísho?*

*né- í- Ø- ɬ- zho?*  
Md-3/ Acc-3/ Nom-TI<sup>^</sup>-hunt:It  
'He repeatedly hunts it'

b. *náʔálzho?*

*ná- Ø ʔá- ɬ- zho?*  
Md-3/ Acc-Ind/ Nom-TI<sup>~</sup>-hunt:It  
'Someone repeatedly hunts it'

c. *nábiʔdilzho?*

*ná- bi- ʔ - di- ɬ- zho?*  
Md-3/ Acc-Ind/ Nom-TD-TI<sup>~</sup>-hunt:It  
'It is being repeatedly hunted [by someone]'

(40) a. *yiniɬbááz*

*yi- Ø- ní- ɬ- bááz*  
3/ Acc-3/ Nom-Md-TI<sup>^</sup>-roll:Pf  
'He rolled it along'

b. *ʔiɬbááz*

*Ø- ʔí- ɬ- bááz*  
3/ Acc-Ind/ Nom:Md-TI<sup>~</sup>-roll:Pf  
'Someone? something rolled it along'

c. *biʔdeɬbááz*

*bi- ʔ - dee- ɬ- bááz*  
3/ Acc-Ind/ Nom-TD:Md-TI<sup>~</sup>-roll:Pf  
'It was rolled along [by someone]'

(Young and Morgan 1943:102)

Morphologically, semipassive forms in the (c) examples differ from the plain indefinite Actor forms in the (b) examples precisely in the addition of two extra items: the non-zero third person pronoun *bi-* (a necessary accessory of the semipassive), and the transitivity decrease morpheme *di-*.

However, not infrequently plain indefinite Actor forms do not include a TI shift (unlike the semipassive where it is obligatory). For example:

(41) a. *yidiɬbaaɬ*

*yi- Ø- di- ɬ- baaɬ*  
3/ Acc-3/ Nom-Pref-TI<sup>^</sup>-hang:Impf  
'He is hanging it'

b. *ʔadiɬbaaɬ*

*Ø- ʔa- di- ɬ- baaɬ*  
3/ Acc-Ind/ Nom-Pref-TI<sup>^</sup>-hang:Impf  
'Someone is hanging it'



- c. biʔdilbaaʔ  
 bi- ʔ - di- l- baaʔ  
 3/ Acc-Ind/ Nom-Pref-TD-TI<sup>~</sup>-hang:Impf  
 'It is being hung [by someone]'  
 (Young and Morgan 1943g:79)
- (42) a. yidoolbaš  
 yi- Ø - doo- ʔ- baš  
 3/ Acc-3/ Nom-Fut:Md-TI<sup>~</sup>-roll:Prog  
 'He will roll it along'
- b. ʔadoolbaš  
 Ø - ʔa- doo- ʔ- baš  
 3/ Acc-Ind/ Nom-Fut:Md-TI<sup>~</sup>-roll:Prog  
 'Someone? something will roll it along'
- c. bidiʔdoolbaš  
 bi- di-ʔ- doo- l- baš  
 3/ Acc-TD-Ind/ Nom-Fut:Md-TI<sup>~</sup>-roll:Prog  
 'It will be rolled along [by someone]'  
 (Young and Morgan 1943g:98)

The comparison of the examples in (40) and (42) that are different modes of the same verb base demonstrates that the TI shift in the plain indefinite Actor forms seems optional: it is registered in the perfective in (40b), and is not in the future in (42b), which can be a matter of mere chance. The conclusion by Krauss that "there is perhaps much free variation and/or confusion" in these forms (1969:83) seems quite reasonable.

As was discussed in 3.2.C above, some referential property of Actor — like definiteness or some other — should be included in the list of transitivity parameters. There is no other way to account for detransitivization in the indefinite Actor construction.

Krauss (1969:82) after Young and Morgan (1943), and Young and Morgan (1987g:75) cited some examples where grammatically intransitive one-place verbs with the indefinite single argument get detransitivized, that is, undergo a TI shift. Given the gradual nature of semantic transitivity (recognized in this study following Hopper and Thompson 1980) there is nothing surprising in the fact that a low transitivity (grammatically intransitive) verbs can get further detransitivized. But what is the nature of this detransitivization, which is not as readily conceivable as in the case of the grammatically transitive verbs above? Consider an example:

- (43) a. naazneʔ  
 naa- Ø- z- Ø- neʔ  
 Pref-3/ Nom-Md-TI=-play:Pf  
 'He played'



- b. naʔas'ne?  
 na- ʔa- s- d- ne?  
 Pref-Ind/ Nom-Md-TI-play:Pf  
 'Someone played'

(Young and Morgan 1943g:91)

(In the latter example a morphophonological process takes place: **d** + **n** > 'n.) The same example with the verb 'play', in the imperfective mode, is repeated in Young and Morgan (1987g): "naʔa'né play, playing (lit. someone plays)" (p. 75). I found it impossible to directly elicit this kind of forms through translation from English — my consultant (Lillie Lane), when presented English phrases like 'someone is playing', kept translating them with the plain third person or fourth person forms. When I gave her the form naʔa'né she did not reject it but suggested the following context where this verb is overtly nominalized with the enclitic **-go**:

- (43) c. naʔa'néego hoł-hoshqoh le?  
 na- ʔa- d- née- go  
 Pref-Ind/ Nom-TI-play:Impf-Nmzr  
 ho- ł- ho- shqoh le?  
 4/ Obl-with-Ar/ Nom-TI:good:Impf Ptc  
 'Playing makes one happy'

A similar form from the verb 'be' means 'being, state of being'. Probably this kind of translation implies that indefinite Actor forms from the grammatically intransitive verbs, at least when TI shift is there, semantically are partly deverbalized, or nominalized. This phenomenon is related not so much to Actor suppression (examined in this article) but rather to another type of detransitivization: the verb's loss of its finite properties.<sup>32</sup>

### 3.4. Actor depersonalization

I have a single instance of still another phenomenon attributable to the category of Actor-affecting PDs. Consider the following examples:

- (44) shidiniłtsóód  
 shi- Ø- di- ni- ł- tsóód  
 1Sg/ Acc-3/ Nom-Pref-Md-TI-grab:Impf  
 'He's grabbing me'<sup>33</sup>
- (45) tēʔēʔí shidiniłtsóód  
 tēʔ ēʔí shi- Ø- di- ni- i- l- tsóód  
 poverty 1Sg/ Acc-3/ Nom-Pref-Pref-Pref-TI~grab:Impf  
 'Poverty is gonna hold me [e.g. for the next months]'

The verb in (45) represents the original meaning of this stem, implying physical grabbing, seizing. The verb in (46) is translated as 'S grabs O and hangs on, O becomes addicted to S' by Young and Morgan (1992:616). This latter verb has a specialized meaning and implies an impersonal force as an Actor — like poverty, alcohol etc. No animate Actor is possible with this verb. As was discussed above, it is not at all typical of the Navajo worldview that inanimate and/or abstract things acted on humans (Witherspoon 1980). However, this is apparently such a case, and a TI shift occurs here. It is not clear whether transitivity decrease is unrelated to the **di-** morpheme in (46) (it can well be that it is a different **di-** from that in [45]).

The third person Undergoer in this verb is always **bi-**:

- (46)    *té? é? í bidiniiltsóód*  
           *té? é? í bi-      Ø-      di-    ni-    i-    l-    tsóód*  
           poverty 3/ Acc-3/ Nom-Pref-Pref-Pref-TI~ -grab:Impf  
           'Poverty is gonna hold him'

This could lead to the hypothesis that these examples are inverse constructions. But this is unlikely since, first, no corresponding normal (direct) construction is attested (the verb in [44] has a different set of lexical prefixes, having no (y)i- prefix, and probably no ni- lexical prefix), and, second, the inverse construction has never been observed to involve a TI shift.

Of course a consistent search for similar phenomena in the Navajo lexicon is needed in order to be able to assert that this is a non-unique case of Actor depersonalization treated as transitivity decrease in Navajo. If this type of transitivity decrease is real, it can be accounted for by one of Hopper and Thompson's transitivity parameters, that is, Actor's agency/potency, if this is interpreted as an inherent feature of referents rather than simply a semantic role played in a clause.

#### 4. Conclusion

This article is part of a larger study intended to survey as many transitivity decreasing phenomena in Athabaskan languages as possible. Here we have looked only at the Actor-affecting phenomena, including passive (along with morphologically similar forms), and semipassive.

Actor-affecting PDs (as well as other transitivity decreasing PDs) always involve in Navajo and other Athabaskan languages the transitivity indicator shift: from Ø- to **d-**, from **l-** to **l-** (though there are some special cases when the original form already has, for independent reasons, a **d-** or **l-** TI, and then no shift is possible).

Passive (traditionally labeled "simple passive" in Athabaskan linguistics) can be characterized as a form implying the referential and morphosyntactic elimination of Actor from the situation and the verb (while semantically the Actor is presupposed). Undergoer becomes the only marked core argument of the verb, and supposedly remains in the Accusative slot. Passives require non-human Undergoers.

The Navajo lexicon contains quite a number of historical passives that have lost the corresponding active bases and thus historically can be treated as non-derived verbs. However, the active forms are reconstructable for the speakers, though they cannot be considered correct.

Morphologically similar (though not identical) to passives, but functionally different, are examples of anticausatives (entire semantic elimination of the Actor and the promotion of the Undergoer into the Nominative slot) and potentials (only referential suppression of the Actor along with the promotion of the Undergoer into the Nominative slot).

Semipassive (traditionally termed "agentive passive," "Passive B," etc.) is in a near-complementary distribution with the passive in that it favors human Undergoers (but also allows other animate Undergoers). Morphologically the semipassive preserves the active diathesis, the Nominative slot being occupied by an indefinite pronoun. Besides regular TI shift, the semipassive requires an extra transitivity decrease morpheme *di-*, with which a number of interesting morphophonological phenomena are connected.

A preliminary account of a rare phenomenon called Actor depersonalization was also provided in this article.<sup>34</sup>

Is there any invariant function in the TIs? (For one account of this see Tenenbaum 1978, cited in Rice 1989:465.) In principle the answer is yes, but with two reservations. First, it would be naive to deny that not **every** instance of a TI can be explained synchronically — this is probably not the case for any formal category in any human language. Some examples where a possible explanation would be very deeply historical were mentioned above and in Kibrik (1993a). However, as I try to show in this paper and Kibrik (1993a), TIs are much more of a functional and alive mechanism than arbitrary and dead morphology.

Second, although having a clear semantic function, TIs cannot be ascribed any invariable **meaning**, like 'transitive', 'intransitive' etc. Hoijer argued against the hypothesis "that the intransitive base has a zero classifier and the transitive base a *l-* classifier" (Sapir and Hoijer 1967:92). His argument was correct (for example, 30% of "Ø-class verbs" are transitive). But the hypothesis about the TI functions is not the right one, so the argument misses the point. The fact is that the Ø- TI is a mark of no change in the initial propositional structure, and this latter can equally be intransitive or transitive. Other TIs have a clearly **derivational** function; they deal not with a certain degree of transitivity but with a **shift** from one degree to

another (cf. Cook 1984:163). The **d-** TI is the mark of transitivity decrease, as compared to the original PS, **l-** the mark of increase, and **l-** of further decrease. TIs are semantic, and also probably cognitive signals of the derivations having occurred in the verbs. An interesting fact is that the difference between verb inflection and verb lexeme formation is irrelevant for the TIs. All possible verb derivations are the proper domain for the TIs' operation.

For the forthcoming part of this research remain the Undergoer-affecting phenomena, including "mediopassive," reflexive, and reciprocal, and the whole set of phenomena connected with the other semantic components of transitivity, such as aspect, realis etc. One very interesting phenomenon is very regular transitivity decrease marking triggered by the addition of a Non-core-argument with the preverb ("postposition") **-gha-** 'from X' to a verb. Some transitivity decrease phenomena that are not found in Navajo will be illustrated in forthcoming study by examples from Hupa (potential and gerund), Slave (split action), and other Athabaskan languages.

Also I will discuss a number of theoretical issues related to Athabaskan transitivity shifts, including lexical distribution of TIs across Navajo verb lexemes, connection between the phonological and semantic dissolution of the TIs, competing motivation in the choice of a TI, and some other features.

A student of Navajo is lucky: even if he does not have a chance of field work, there is always a source of information: Navajo dictionaries by Young and Morgan. The remarkable array of data in these dictionaries makes them a virtually inexhaustible source.

## NOTES

1. I would like to express my double gratitude to Eloise Jelinek for her invaluable help in organizing my fieldwork on Navajo, and for many insightful comments on an earlier version of this paper. Of course I am very grateful to my Navajo consultants; it is worth noting that all of them represented different areas of Navajoland (potentially different dialects, see Saville-Troike 1972): Lillie Lane from the Colorado River area, Nicole Horseherder from Big Mountain (both Arizona), and Irene Silentman from New Mexico. Where relevant, I indicate from which of my consultants a given example was elicited. I am thankful to Robert Young for an extremely interesting discussion of some issues in Navajo grammar in UNM in February 1992, and to Sally Midgette for her very useful comments (esp. on section 3.1.3). I am very grateful to Victor Golla for his generous assistance with Sapir's manuscripts and for providing me with important data on Hupa. Of course, I alone am responsible for all evidence and interpretations presented in this article.

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2. The notion of PS is not totally foreign to the semantic aspect of Kari's (1979) notion of verb theme.
3. One difference between this treatment and most previous ones should be emphasized: zero TI is claimed here to mark **any** original PS, whether intransitive or transitive, while **l-** marks not a transitive but a **transitivized** occurrence, etc.
4. Perhaps the nice symmetric four-element system of the TIs emerged in Athabaskan relatively late. There are grounds to suspect that in the place of one "TI" category there used to be several categories associated with several successive morphological positions — at least Krauss' (1969) reconstruction substantiates this view. There are important traces of this earlier system in Hupa where TI doubling is very common (Golla 1970). For example, the sequence of two TIs **l-di-** can be a result of causativization (that is, transitivity) of a **di-** verb, as well as iterative (that is, detransitivization) of a **l-** verb. In Tlingit, more than one (actually three) positions of "extensors" (correlates of Athabaskan TIs) can be easily isolated (see Story 1972: 63ff.).
5. This understanding of "theme" is more narrow than for example in Kari (1979) but it suffices for the purposes of this paper.
6. This section can be skipped by a reader not particularly interested in the history of Athabaskan linguistics, without any damage to the intelligibility of the later material.
7. Krauss indicated that Swanton, the predecessor of Boas in Tlingit studies, used the same "third modal" terminology as Goddard (Krauss 1968:200). So perhaps Boas's terms may implicitly refer to another of Goddard's usages.
8. This term, that seems very odd at first glance, implies that "the subject of the verb in the active voice becomes the agent of the verb in the passive voice" (Reichard and Bitanny 1940:19), that is the functions of agent and subject become separated.
9. Usually three types of passives — simple, agentive, and mediopassive are distinguished for Navajo (Sapir and Hoijer 1967:92-3, Young and Morgan 1987g:141-3). Here the term "passive" is reserved only for "simple passive"; agentive passive will be reinterpreted and retermed below (see section 3.2), and "mediopassive" will be considered in the forthcoming part of this study.
10. Conventions in glosses:
 

Sg - singular Pl - plural 1, 2, 3, 4 - persons Ind[efinite] Ar[eal] Nom[inative] Acc[usative] Obl[ique] TI= - no change TI (Ø-) TI <sup>+</sup> - increasing TI (l-) TI <sup>-</sup> - decreasing TI (d-) TI <sup>~</sup> - increase-decreasing TI (l-) TD - transitivity decrease morpheme Nmzr - nominalizer Ptc - particle	Impf - imperfective Pf - perfective Prog[ressive] Fut[ure] It[erative] Md - mode (not further specified) Peg - peg element of no meaning Pref - a prefix of irrelevant nature Patient classes: SRO - solid roundish object SFO - slender flexible object SSO - slender stiff object PIO - plural objects AnO - animate object
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**Hyphen** breaks words into morphemes in the second line in each example. I do not reconstruct the original morphophonemic shape of the morphemes; they appear as allomorphs. The only exception is made for the TIs that are indicated overtly even when they are not segmentally represented in the phonemic sequence (the first line).

**Slash** (in the third line of each example) connects a referential feature of a pronominal element (number, person, indefinite etc.) and its case feature, e.g. "2Sg/Acc" means '2 singular pronoun in the Accusative slot'.

**Colon** connects elements of the glosses (in the third line in each example) that correspond to phonologically indivisible Navajo morphemes, and could be separated only under a deep morphophonological analysis that I do not attempt here; e.g. "wring:PF" corresponds to the perfective variant of the given stem; "3/Acc:3/Nom:Md" refers to a portmanteau combination of three inflectional morphemes.

**Period** connects two elements of glosses that correspond to a semantically indivisible Navajo morpheme, e.g. "move.SRO" is a single concept (classificatory verb stem) in Navajo, unlike its counterpart in English-based metalanguage. The order of the "verb part" and "patient type part" in the glosses of classificatory verb stems represents the original semantics of the stems as intransitive/transitive, say "SRO.moves" glosses an inherently intransitive (agentless) stem, while "move.SRO" — an inherently transitive stem.

**Tilde** connects two alternative interpretations of one and the same morpheme, e.g. "Pref-TD" means that I am not certain whether the morpheme in question should be treated as a transitivity decrease marker or as some other prefix.

11. According to my consultants, in this latter verb form the *f* vowel is short: [na(y)flne?]; in this example I however put it in accordance with Young and Morgan's (1987g:148) rules, with the *yff*- prefix complex ("3o person Yi-perfective").

12. The verb theme **-i-ne?** in (3) is semantically transitive and morphologically looks like a causative. However, the underlying intransitive theme **-Ø-ne?** that would mean 'SRO moved' is not preserved in Navajo. Still it is convenient to postulate the intransitive meaning for the stem **-ne?**, always occurring only in the causative context.

13. Here I mean only the "structural" definitions of the passive; cf. another, "functionalist", tradition discussed e.g., in Givón 1990:563 that relies only on semantic and pragmatic parameters and thus allows including an unbounded range of linguistic phenomena under the label "passive".

14. These two pronominal morphemes have been referred to as **?a-** and **ho-** respectively by most authors, cf. however Kari 1976:24. Though these latter forms really occur quite frequently, the underlying forms are no doubt **?i-** and **hwi-**. There is no place here for an extensive morphophonological argument, but I could simply note that other surface variants can be derived from **?i-** and **hwi-** according to standard morphophonological rules, but not vice versa.

15. This verb represents a case of a double TI: the theme **-i-yeed** 'run (intrans.)' has itself a very complex derivational history which is in this case irrelevant. In this example this complex theme gets causativized which is represented by the addition of the **i-** TI; thus the underlying structure of the causativized theme in this case is **-i-i-yeed**.

16. I realize that this evidence still can leave some doubts: in some languages the morphosyntactic position of causee is different from plain Undergoer/direct object, and this could be just such a case. To clarify this issue an additional study of "transitivized" verbs is required.

17. Here and below I use the hyphen to connect the preverbal Oblique marker ("postposition") with the rest of the verb form; for a discussion of the integration of Oblique markers into verb see Young and Morgan 1987g:27ff, Kibrik 1990.

18. Young and Morgan (1992:509) qualify this verb as having a **d-** TI; they derive this treatment from the first person singular S-perfective form, where a difference between **Ø-** and **d-** is visible (non-detransitivized verbs with the **Ø-/i-** TI begin in **sé-** while detransitivized verbs with the **d-/i-** TI begin in **si-s-**, see e.g. Young and Morgan 1987g:152, 154). However, my consultant (Lillie Lane) clearly indicated that the perfective is formed according to the non-detransitivized paradigm: **sétin** 'I froze', but



not ??*sistin*. Interestingly, when a repetitive morpheme *náá-* was added (which is one of the detransitivizing factors of a moderate force) she recognized easily both *náásétin* (with Ø-) and *náásistin* (with *d-*). The treatment of the form in (9a) as having the Ø-TI also better accords with the other facts belonging to this derivational nexus; see (9b, c).

19. There can also be an additional reason why the sentence in (11b) is still acceptable for some speakers. In principle, Navajo does not favor a situation when a human referent is controlled and manipulated by an unknown force (see section 3.2.G below and Witherspoon 1980). However, washing is an action which is a manipulation by definition, so perhaps here the general tendency is overridden by the particular verb's semantics.

20. However, they for some reason interpret the forms like in (19) above, as "medio-passives" (Young and Morgan 1987d:791, 1992:250) — the term otherwise employed to describe an Undergoer-related transitivity decreasing process similar to reflexive or Undergoer incorporation (for examples see Young and Morgan 1987g:124-6, 143).

21. This verb base is controversial and irregular in many respects. The stem alternant it employs is like the imperfective allomorph of other verbs derived from the same stem. Its mode-person inflection is like perfective in 2Sg (*yínf-*), progressive in the third person (*yoo-*), and imperfective in 2Pl (*woh-*).

22. In the 1987 dictionary Young and Morgan (1987d:597) interpret the form in (21b) as a "passive construction." However, in the grammar portion of the book (1987g:143 and also 1992:10) it exemplifies "mediopassive," like the verb 'be seen' considered above.

23. I am aware of one case of anomalous semipassive where no TI change takes place. This is in the forms meaning 'X was born' derived from the stem =*chí* 'was born' (Pf). This stem, quite normally, is intransitive and has a Ø-TI in the following kind of intransitive forms (Haile 1941:110):

- (i) a.    *ʔawééʔ yizhchí*  
           *ʔawééʔ yi- Ø-    zh- Ø- chí*  
           baby    Peg-3/Nom-Md- TI=-be.born:Pf  
           'The baby was born'

This verb theme can be transitivized into the following:

- (i) b.    *ʔawééʔ yishchí*  
           *ʔawééʔ yi- Ø-    sh- l- chí*  
           baby    3/Acc-3/Nom-Md-TI'-be.born:Pf  
           'She gave birth to a baby'

The following kind of forms are irregular:

- (i) c.    *shiʔdizhchí*  
           *shi-    ʔ-            di- zh- Ø- chí*  
           1Sg/Acc-Ind/Nom-TD-Md-TI=-be.born:Pf  
           'I was born'

The voiced mode marker *zh-* in (ic) betrays the Ø-TI instead of expected *l-*. Apparently what happened here is that the relationship between (ia) and (ib), originally intransitive-causative, was reanalyzed by the language as if (ib) were the original transitive theme and (ia) a passive from it, despite the clear counterevidence in the TIs. Further, analogously to the fake passive in (ia), a fake semipassive as in (ic) was formed, not displaying the expected TI shift.



24. Impersonals are constructions where no Actor person is implied, that is Actor is a natural force. Some languages, for instance Russian, explicitly distinguish between indefinite personal Actor and impersonal Actor constructions, cf. **ego ubi-l-i** (him kill-Past-Pl) 'they (indef.) killed him' vs. **ego ubi-l-o** (him kill-Past-Sg.Neuter) 'he got killed (by an unspecified force)'. Cf. also section 3.4 below.

25. This verb base is not registered in Young and Morgan (1987, 1992) (though the stem is of course there); it was provided to me by Lillie Lane. I am not quite sure whether **ni-** is a lexical prefix; on the basis of some indirect evidence I believe it is rather a N-perfective marker.

26. Note that the **di-** morpheme, apparently identical to the reflexive **di-**, also occurs in Hupa in a form described by Golla as a passive, directly correlating to the Navajo semipassive (Golla 1970:109-110; Golla p.c.). This Hupa form has a very peculiar structure and is not readily interpretable but deserves a brief mention. It is a lexically restricted form and is attested only in several verb themes. The Undergoer pronoun appears in this form in the Nominative position while the indefinite pronoun **k'i-** (cognate to the Navajo **?i-**) referring to the Actor ("actual semantic subject," in Golla's terms) appears in the Accusative (morphological object) position, followed by the transitivity decrease **di-** prefix. This structure would be like the passive of many languages, except the demoted Actor is marked here not as an Oblique but as an original Undergoer (which normally does not happen in human languages, see e.g. Xolodovič 1974, Perlmutter and Postal 1977):

- (i) a. **xoniwh?e:n**  
 xo-            ni- wh-            l- ?e:n  
 3.human/Acc- Pref-1Sg/Nom- TT'-look:Impf  
 'I am looking at him'
- b. **ch'iwhini?ing**  
 ch'i-            whi-            ni- l- ?ing  
 3.human/Nom-1Sg/Acc-Pref-TT'-look:Impf  
 'He is looking at me'
- c. **k'idiniwh?e:n**  
 k'i-            di- ni- wh-            l- ?e:n  
 Ind/Acc(??)-TD-Pref-1Sg/Nom-TT'-look:Impf  
 'I am looked at (by people), someone is looking at me'

The distribution of the indefinite Actor and first person Undergoer in (ic) at the morphemic case slots is a mirror-image to that in the equivalent Navajo form:

- (ii) **shi?dini?i**  
 shi-            ?-            di- ní- l- ?i  
 1Sg/Acc-Ind/Nom-TD-Pref-TT'-see:Impf  
 'I am looked at (by people), someone is looking at me'

Golla actually treats the two elements **k'i-di-** as a single morpheme, an idiosyncratic marker of this passive construction thus assuming that the Actor is not referred to in this form at all. However, at least diachronically, there is little doubt that the functions of **k'i-** and **di-** are as stated above. The only explanation for the emergence of this kind of structure that I can think of is the following. Perhaps this is a case of the typologically common permissive causative with a "passive meaning" (attested in Turkic, Manchu-Tungus, Chinese and other languages, see e.g. Nedjalkov and Sil'nickij 1969:38-40). Such kind of form is structurally a causative derived from certain transitive verbs, and it means the causer's permission (or non-prevention) of the causee's doing something to the

causer. For example, a form literally meaning 'I caused him to catch' has also (or exclusively) the idiosyncratic meanings 'I allowed him to catch me', or 'I did not prevent him from catching me', and ultimately 'I was caught by him'.

There are a number of problems remaining with this analysis of this Hupa passive, including in the area of TIs, but this analysis seems to conform to the scanty examples of this archaic form.

27. It should be noted that Thompson counted within one category semipassives with the third person (**bi-**) and fourth person (**hwi-**) Undergoers, so the high results can be in part due to the fourth person instances.

28. For a somewhat similar coexistence of passive and impersonal passive in Irish see Noonan 1994.

29. There is an additional difference between the passive in (38b) and semipassive in (38c) below in mode — the former is future and the latter perfective, but this is irrelevant to the problem we are interested in here.

30. She also made another comment perhaps attributable to the tense difference: that in (38c) a specific sheep is pointed at, while reference in (38b) is "more general."

31. Translations of the examples in this section are not provided in the source; I constructed them myself.

32. As was again noticed by Krauss (1969), Young and Morgan's 1943 paradigms contain several instances of transitivity decrease in the forms with the areal Actor pronoun **hwi-**. Since information about this phenomenon is extremely scanty, I cannot discuss it further.

33. See fn. 25 above.

34. One more kind of Actor-related phenomenon formally marked in Athabaskan by a transitivity decreasing TI shift is first person plural Actor forms (see Story 1989). As is well known, the first person plural Actor pronoun in a number of Athabaskan languages contains an element **d-**, at least formally identical to the **d-** TI. For instance, in Navajo the underlying form of the first person plural Actor pronoun is **iid-**. First and second person Actor pronouns take the morphological slot directly adjacent to the TIs, so it can be argued that the first person plural pronoun is **ii-**, and **d-** is the regular TI (in particular, turning **l-** into **l-**). Krauss (1969:65) discussed this issue at some length suggesting that historically the detransitivization in the first person plural form indeed was not occasional. Krauss drew an analogy with the Alaskan Athabaskan languages where the first person plural morpheme is derived from the indefinite morpheme, and with French where the pronoun **on** is both an indefinite and (secondarily) first person plural pronoun. So probably there are grounds to believe that historically Navajo **iid-** is decomposable into the first person plural Actor pronoun **ii-** per se, somehow incurring detransitivization, and the regular **d-** TI required accordingly. Synchronically, though, this kind of analysis would be too bold, and we should better assume that the first person plural pronoun is unanalyzable but the change in the TI or stem initial is purely morphophonologically triggered by its final **d-**. Of relevance is also the fact from Hupa (emphasized by Krauss 1969:65) where the **d-**-containing first person plural pronoun does not merge with the TI but still invokes the change of **l-** into **l-**; this could mean that the TI shift in first person plural is (was) not a purely phonological but rather a functionally based phenomenon.

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