1 Introduction

Deverbal nominalization is a productive process in the Numic languages. Every language in the family has an inventory of NOMINALIZER SUFFIXES.

(1) nəx=–nna
   dream-NOM
   ‘dream’ (elicited, BP06-2)
(2) Ka=kutes, [%=sa–nna], su=nana tika-ka-ka.
   OJ=eat 1SG.POSS=cook-NOM SUBJ young man eat-PUNC-IRR
   ‘The man is going to eat the meat I cooked.’ (elicited, BP11-5) [Northern Paitne]

While the total range of functions the nominalizers have does not vary significantly across Numic, the functions that an individual suffix has in each language does.

(3) nə–xanasses=ppi
   RED-dream-NOM
   ‘What is dreamt, dreams’ (S 588) [Southern Paitne]
   we pimento-ORJ eat DEM-VIS-PL.POSS cook-NOM-ORJ
   ‘We’re eating the pimentos they cooked.’ (Dh-363) [Timpisa Shoshone]

My purpose here is to understand how and why deverbal nominalizers change their function. To this end, I have two more concrete goals:

⇒ To argue for the following reconstructed inventory of subject/Agent nominalizers in Proto-Numic:

(5) PROTO-NUMIC NOMINALIZER INVENTORY
   *=ti subject and event nominalizer
   *=pi habitual Agent nominalizer
   *=ppi Patient and event nominalizer
   *=ppi perfect aspect Patient nominalizer
   *=nna event and Patient nominalizer

⇒ To show that nominalizers which serve a pragmatic purpose are more likely to change than nominalizers which serve a purely syntactic purpose.

2 Background

2.1 The Numic languages

Numic is a family of several closely related languages comprising the northernmost branch of the Uto-Aztecan language family. Kroeger (1907) was the first to propose that the Numic languages formed a single family with three coordinate branches each comprised of one language with a limited geographical distribution and one or more other languages covering a wider swath of territory.

- Western Numic
  - Mono (Mo)
  - Northern Paitne (NP)
- Central Numic
  - Timpisa Shoshone (TSh; also known as Panamint)
  - Western Shoshone (WSh)
  - Comanche (Co)
- Southern Numic
  - Kawaiisu (Ks)
  - Southern Paitne (SP)
2.2 Final features

The Numic languages are famous for their final features, a phonological phenomenon in which the realization of the initial consonant of a morpheme is conditioned by a lexically-specified property of the preceding morpheme. Three final features can be securely reconstructed for Proto-Numic: prenasalization, fortition (also called ‘gemination’), lenition.

(6) kana ‘house’ → kana-gai ‘to have a house’

(7) timpi-nnac ‘stone clothes’ → timpi-nnac-gkai ‘to have stone clothes’

(8) kana ‘fire’ → kana-kkai ‘to have fire’

All three have survived intact in Central Numic and Southern Paiute. The other languages have undergone a number of changes that has resulted in confusing variety of orthographies being used.

<table>
<thead>
<tr>
<th>Proto-Numic</th>
<th>Ka</th>
<th>SP</th>
<th>TSb</th>
<th>WSb</th>
<th>Co</th>
<th>WMo</th>
<th>MLNP</th>
<th>ONP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lenis</td>
<td>*p/</td>
<td>p</td>
<td>k</td>
<td>t</td>
<td>k</td>
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<td>t</td>
<td>t</td>
<td>t</td>
<td>d</td>
<td>d</td>
<td>d</td>
<td>d</td>
</tr>
<tr>
<td>*k/ [k]</td>
<td>g</td>
<td>k</td>
<td>k</td>
<td>k</td>
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<td>k</td>
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<td>k</td>
</tr>
<tr>
<td>Pre-nasaliz</td>
<td>/mp/</td>
<td>/bb/</td>
<td>mp</td>
<td>mp</td>
<td>p</td>
<td>p</td>
<td>p</td>
<td>p</td>
</tr>
<tr>
<td></td>
<td>*nt/</td>
<td>/nt/</td>
<td>nt</td>
<td>nt</td>
<td>t</td>
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<td>t</td>
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</tr>
<tr>
<td></td>
<td>*tk/</td>
<td>/tk/</td>
<td>tk</td>
<td>tk</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>Fortis</td>
<td>*pp/</td>
<td>p</td>
<td>pp</td>
<td>pp</td>
<td>pp</td>
<td>t</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
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<td>*tt/</td>
<td>/tk/</td>
<td>tk</td>
<td>tk</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
</tr>
</tbody>
</table>

Table 1: Plosive series across Numic; MLNP = Mono Lake NP; ONP = Oregon NP; WMo = Western Mo

3 Southern Numic

3.1 Kawaiisu (Ka)

(9) Kawaiisu Nominalizer Inventory

-ri/-di subject and event nominalizer

-ri Patient nominalizer

-ri/-di has two main functions, deriving subject nominals from verbs on the one hand and event nominals on the other.

(10) a. tugawa-ri
    tell a story-NOM
    ‘storyteller’ (ZBM 286)

b. yeci-di
    fly-NOM
    ‘airplane’ (ZBM 297)

(11) piha-gama-di
    sweet taste-NOM
    ‘candy’ (ZBM 253)

It can also appear suffixed to static predicates, such as the postposition -ra′a′-at’ (12a) or an adjective (12b), in which case the derived nominal refers to the sole argument of these predicates.

(12) a. tugawa-ra′a′-ra′a′-at’
    sky-surface-at-NOM
    ‘God’ (ZBM 286)

b. wa′a′-da-bi-re′-ra′a′-at’
    California juniper-NOM-like-NOM
    ‘Pute cypress’ (ZBM 288)

It is significant that the function of -ri/-di cannot be characterized in terms of semantic roles such as Agent, Patient, etc., but only in terms of a grammatical relation, subject.

In its other function, -ri/-di derives event nominals, or names for eventualities.

(13) a. wnw-ri
    rain-NOM
    ‘rain’ (ZBM 195)

b. na-vaka-di
    REFL-bathe-NOM
    ‘bath’ (ZBM 238)

The form of the subject/event nominalizer varies between -ri and -di, an alternation that can be ascribed to the final feature of the preceding morpheme. But there are a number of derived nominals formed with what appears to be a fortis version of the nominalizer, -di. It only occurs in the presence of the negative be/have verbalizer, -na or a restricted class of adjectives.

(14) wawi-aa-di
    apron-be/have.NEG-NOM
    ‘one who is naked’ (ZBM 239)

(15) aww-di
    be.much-NOM
    ‘be much, many’ (ZBM 187)

It doesn’t seem as if the -di variant occurs productively because of the fortis final feature of the preceding morpheme; instead, its distribution is lexically conditioned by a set number of morphemes.

3.2 Southern Paiute (SP)

(16) Southern Paiute Nominalizer Inventory

-ri/-niti subject and event nominalizer

-ri habitual Agent nominalizer

-ppi perfect aspect Patient nominalizer

-ppi Patient and event nominalizer

-na event and Patient nominalizer

3.2.1 ri/-niti

Like Ka, SP derives both subject and event nominals with -ri/-niti. The referents of the subject nominals again can be the Agent or Patient of the base verb.
SP has a fortis version of the nominalizer, -tii, which is restricted in its distribution. It is not conditioned by the preceding morpheme’s final feature, e.g. paga ‘arrive’ which bears a fortis final feature.

Instead it occurs with various stative predicates, and importantly in negative contexts: i.e. after the negative be/have verbalizer -i as well as the present tense negative suffix -quai.

3.2.2 -ri

SP has an additional nominalizer whose function overlaps to some degree with that of -ri/-niti, -ri, which derives only Agent nominals.

4 Central Numic

4.1 Tümpsä Shoshone (TSh)

Nichols (1974) proposes that the nominalizer and absolutive suffixes be reconstructed for Proto-Uto-Aztecan as a single set of suffixes with unified functions. But a shift from a semantically empty formative (the absolutive suffix) to a contentful one (the nominalizer) can hardly be natural.

The habitual Agent nominalizer *ps must be part of the Proto-Nunic inventory. Further evidence for this hypothesis comes from Central Numic.

(17) a. mwa-ri
   spy-NOM
   ‘spy’ (S 593)

b. na-yago-ka-niti
   REFL-have.sexual.intercourse-PERFV-NOM
   ‘one who copulated’ (S 726) [Agent]

(18) pi/-pi/-tii
   RED-arrive-NOM
   ‘he who arrives’ (S 614) [Patient of unaccusative]

(19) a. tika-ri
   eat-NOM
   ‘eating, one who eats’ (S 679)

b. nia-ri
   blow-NOM
   ‘blowing, wind’ (S 585) [event]

Sapir says that nominals derived with -en, ‘are used to refer only to permanent (quasi-occupational) activities. Temporary or casual agents are expressed by means of active participles [i.e. nominals derived with -ri/-niti] (124).

The habitual interpretation of nominals derived with -en is included explicitly in the gloss only in (23b), but they are frequently translated as English -er derived nominals. Very few nominals derived with -ri/-niti are glossed with an -er derived nominal.

3.3 Summary

Both Ka and SP have a subject nominalizer that is the reflex of *-ti, but only SP has a habitual Agent nominalizer, -en.

⇒ Is the habitual Agent nominalizer an innovation of SP or is it inherited from Proto-Nunic and Ka has lost it?

If -en was innovated in SP then it must be a reanalysis of the formally identical ABSOLUTIVE SUFFIX. The absolutive suffixes are semantically empty suffixes that appear obligatorily on most nouns, except when they are possessed or when they appear in combination with another stem.

(24) a. maa-ri
   father-NOM
   ‘(somebody’s) father’

b. maa-mi
   father-mu
   ‘my father’ (S 111) [SP]

Nichols (1974) proposes that the nominalizer and absolutive suffixes be reconstructed for Proto-Uto-Aztecan as a single set of suffixes with unified functions. But a shift from a semantically empty formative (the absolutive suffix) to a contentful one (the nominalizer) can hardly be natural.

The habitual Agent nominalizer *ps must be part of the Proto-Nunic inventory. Further evidence for this hypothesis comes from Central Numic.

5

(25) TÜMPSÄ SHOSHONE NOMINALIZER INVENTORY
   -ri/-niti subject and event nominalizer
   -ti habitual Agent nominalizer
   -ppi perfect aspect Patient nominalizer
   -ppi Patient and event nominalizer (unproductive)
   -nia event and Patient nominalizer
4.1.1 *-ti/nti*

The nominalizer suffixes *-ti/nti* displays identical properties to the cогnate forms in the Southern Numic languages. It derives subject nominals:

(26) a. *ti-witlikua-tin*
    APS-spank-NOM
    ‘scorpion; stinging nettle; striker’ (Da 337)

b. *yitsi-tin*
    fly-NOM
    ‘airplane’ (Da 416) \[Agent\]

(27) a. *nappitsaka-nthin*
    bend/get.crooked-NOM
    ‘bent, crooked’ (Da 157)

b. *si-a-tin*
    grow-NOM
    ‘plant (wild)’ (Da 255) \[Patient of unaccusative\]

It also has an event nominalization function:

(28) a. *paa okwe-tin*
    water flow-NOM
    ‘river’ (Da 175)

b. *tukwanni tikka-tin*
    night eat-NOM
    ‘dinner’ (Da 308)

4.1.2 *-ti*

TSh also has a habitual Agent nominalizer *-ti:*

(29) a. *hiks-ti*
    drink-NOM
    ‘drinker, drunkard’ (Da 26)

b. *niki-ti*
    dance-NOM
    ‘dancer’ (Da 165)

c. *pugsu-to-e-ti*
    horse-go.on-NOM
    ‘rider, horseman’ (Db 237)

The source for this nominalizer is the fortis variant of the subject nominalizer in Southern Numic that appears in negative contexts. At first the distribution of *-ti* was conditioned by the preceding negative be/have verbalizer suffix which bore a fortis final feature. This is the situation in Kawaiisu today.

(30) *hims-a-ti*
    parent-NEG-NOM
    ‘orphan’ (ZBM 205) \[Ka\]

The range of application of *-ti* was extended to other negative environments, including the nominalization of non-derived verbs bearing negation, as in SP today.

(31) *Nt kena yuruwa-ywa’-ti-mi.*
    ISG NEG be.overcome-NEG-NOM?
    ‘I (am) not to be overcome in any way, I (am) very powerful.’ (S 730) \[SP\]

The semantic change that produced *-ti* would have occurred in a pivot construction perhaps not very different from the one above. Here, the derived nominal literally means that the entity predicated of it is generally not overcome (the first of Sapir’s glosses). This implicates that there are certain characteristics of the individual that are responsible for this outcome, namely that he is very powerful (the second of Sapir’s glosses)—an implicature that in the right contexts could have been strengthened to an entailment. The suffix *-ti* would have then been reanalyzed in TSh as deriving positive generic nominals.

As a result of this change, the negative be/have verbalizer was lost in TSh; now, this type of nominal is derived with the positive be/have verbalizer plus ordinary sentential negation:

(32) *kee kahma-ka-tin.*
    NEG husband-be/have-NOM
    ‘not married, old maid’ (Da 51)

4.2 Western Shoshone (WSh)

(33) *-ti/nti* subject and event nominalizer

*waaph* habitual Agent nominalizer

*ppi* perfect aspect Patient nominalizer

*nina* event and Patient nominalizer

The by now familiar nominalizer *-ti/nti* derives subject nominals bearing differing thematic roles, as well as event nominals.

(34) a. *natinu-kau-tin*
    sell-NOM
    ‘merchant, seller’ (CD 274)

b. *nommu’u-tin*
    move-NOM
    ‘mover, person who moves’ (CD 276) \[Agent\]

(35) a. *kwapu-pu-bu-nthin*
    get.crooked-RES-NOM
    ‘crooked, bent’ (CD 270)

b. *toona-bu-bu-nthin*
    get.clouidy-RES-NOM
    ‘cloudy, become overcast’ (CD 289) \[Patient of unaccusative\]

(36) *kupatun-nthin*
    long-NOM
    ‘long, tall’ (CD 268) \[stative\]

(37) a. *nina-tin*
    blow-NOM
    ‘wind’ (CD 274)
b. okwen-tin
   flow-NOM
   'flowing, stream, creek'  (CD 276)

4.2.1 -wopph

WSh has another nominalizer -wopph which seems to be the counterpart in WSh to -tti in TSh.

(38)  a. taikwa-wopph
     talk-NOM
     'speaker, talker'  (CD 62)

b. nikka-wopph
   dance-NOM
   'dancer'  (CD 62)

I hypothesize that -wopph derives from the negative be/have verbalizer, which exists in WSh, plus the fortis variant of the Proto-Nunic nominalizer *-pi. -wu-pph.

(39)  naikwe-wa-ttin
     ear-be/have.NEG-NOM
     'earless'  (CD 274)

4.3 Comanche (Co)

(40)  -ri/-ti  subject, event, and Patient nominalizer
       -wapi  habitual Agent nominalizer
       -pi/-hpi  perfect aspect Patient nominalizer
       -na  event and Patient nominalizer

Given how recently Co and WSh diverged, it is not surprising that their inventories are similar.

4.3.1 -ri/-ti

The nominalizer -ri/-ti is cognate to the subject and event nominalizer -ti/-tti in WSh. It has both of its functions; the subject nominalization function is shown below:

(41)  a. wina-ri
     stand-NOM
     'standing'  (RA 155)

b. waha-bi-sua-ri
     double-NOM/-think-NOM
     'undecided, doubtful'  (RA 144)

[Agent]

(42)  a. oha-hpi-ri  siki-1-kawa-ri
     yellow-NOM sour-taste-NOM
     'lemon'  (RA 71)

[stimulus]

b. po'uwa/-u-ri
   blow.away[NOM]
   'hurtle'  (RA 85)

[Patient of unaccusative]

c. na-ba-ri
   REFLECT-NOM
   'marked'  (RA 50)

[Patient of passive]

(43)  ke-towe-ri
   NEG-proper-NOM
   'deficient'  (RA 27)

[stative]

The nominalizer also has the event nominalization function found elsewhere:

(44)  a. nikka-ri
     dance-NOM
     'powwow, dance'  (RA 67)

b. njiwa-ri
     bury.someone-NOM
     'funeral, burial ceremony'  (RA 69)

4.3.2 -wapi

Co has a nominalizer suffix cognate to the WSh habitual Agent nominalizer:

(45)  a. kabiri'a takkori-wapi
     sheep dominate-NOM
     'shepherd'  (RA 24)

b. ni'akwi-wapi
     order-NOM
     'commander'  (RA 65)

c. turan-wapi
     bear.offspring-NOM
     'hen, laying hen'  (RA 125)

Notice that the form of the habitual Agent nominalizer in Co, while nearly identical to the cognate suffix in WSh, differs in the quality of the first vowel: Co has a while WSh has o. The form of the nominalizer in Co more transparently reflects the origin for the suffix as the fossilized combination of the negative be/have verbalizer -wu plus the fortis version of the proto-Nunic habitual Agent nominalizer *-pi.

4.4 Summary

⇒ The original Proto-Nunic nominalizer *-pi was replaced in each of the Central Nunic languages by a different nominalizer, while it was maintained in SP and lost in Ka.

If this account is correct, we expect there to be correspondences between -ti in TSh and -wopph in WSh:
5 Western Numic

5.1 Mono (Mo)

<table>
<thead>
<tr>
<th>TSht</th>
<th>WSht</th>
<th>Co</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. kps-ti</td>
<td>kps-tin</td>
<td>bik-ti</td>
</tr>
<tr>
<td>drink-NOM</td>
<td>drink-NOM</td>
<td>drink-NOM</td>
</tr>
<tr>
<td>b. nppm-nin</td>
<td>nppm-nin</td>
<td>bik-at</td>
</tr>
<tr>
<td>drunk, drunkard (Da 26)</td>
<td>drunk, drunk (CD 266)</td>
<td>‘drunk person’ (RA 18)</td>
</tr>
<tr>
<td>c. nppm-nin</td>
<td>nppm-nin</td>
<td>bik-at</td>
</tr>
<tr>
<td>be.naked-NOM</td>
<td>be.naked-NOM</td>
<td>‘naked’ (CD 271)</td>
</tr>
<tr>
<td>d. nppm-nin</td>
<td>nppm-nin</td>
<td>bik-at</td>
</tr>
<tr>
<td>‘worker’ (Da 333)</td>
<td>‘worker’ (CD 62)</td>
<td>‘workman’ (RA 137)</td>
</tr>
<tr>
<td>e. nppm-nin</td>
<td>nppm-nin</td>
<td>bik-at</td>
</tr>
<tr>
<td>‘dancer’ (Da 165)</td>
<td>‘dancer’ (CD 62)</td>
<td></td>
</tr>
</tbody>
</table>

5.1.1 -di

By now the subject and event nominalizer -di is familiar.

(47) a. muga-di
go-NOM
‘one who is going, one who went’ (Lb 171)

b. tika-di
eat-NOM
‘one who is eating, one who ate’ (Lb 171) [Agent]

(48) pa-hus-di
water-flow-NOM
‘river, stream’ (La 25) [event]

5.1.2 -ti

-di exists alongside two Agent nominalizers. One is familiar from TSht, -ti, which in Mo has the same function of deriving habitual Agent nominalizers.

(49) a. ti-boo-ti
APS-cut.hair-NOM
‘barber’ (La 59)

b. ti-woo-ti
APS-catch-NOM
‘sheriff’ (La 170)

c. sty-ke-di
be.afraid-NOM
‘one who gets scared customarily, coward’ (La 77)

I argued that the Agent nominalizer -ti was innovated in TSht through the reanalysis of a phonological variant of the regular subject nominalizer. There are two possibilities for why it shows up in Mo:

1. The innovation occurred in a shared ancestor of TSht and Mo.
   - But this requires that Central and Western Numic form a supgroup, the opposite of what has been proposed in the literature (Freeze and Iannucci 1979).
   - We also expect that the other Central and Western Numic languages will show the innovation, but none of the relevant languages show evidence of this.

2. More likely, the nominalizer was borrowed from TSht. A number of other features are known to have diffused across that boundary, including the loss of pluralional reduplication (Houser et al. 2006, Houser 2007), certain innovations in the system of secondary postural verbs (Haynes 2006), and a contrast between /ŋ/ and /ŋ/ (Miller 1986:100).

5.2 Northern Paitae (NP)

NP has a single subject nominalizer:

(50) -di subject and event nominalizer
   -pi Patient nominalizer (unproductive)
   -pi perfect aspect Patient nominalizer
   -ma event and Patient nominalizer

The nominalizer -di derives subject nominals and event nominals.

(51) a. nimi siba-di
person.shave-NOM
‘barber’ (A 5)

b. paga-dika-di
Ponderosa.moth.larva-eat-NOM
‘Owens Valley Paitae’ (lit. Ponderosa moth larvae eaters) (A 62) [Agent]

(52) a. nima-di
be.in.pain-NOM
‘patient’ (A 64)

b. tae-di
die-NOM
‘dead one (BP08-1)’ [stative]

(53) a. na-dzibwus-di
REFL-stir-NOM
‘screw’ (A 79)

b. na-dika-di
nuna
REFL.eat-NOM plant
‘edible plants’ (A 29) [Patient of passive]
6 Conclusions

- Proto-Numic had a subject nominalizer *-ti/*-niti, which derived nominals of any thematic role, and a habitual Agent nominalizer *-pi.

- While the subject nominalizer has been maintained in all the Numic languages, the habitual Agent nominalizer has been lost or replaced in every language except SP.

<table>
<thead>
<tr>
<th>Proto-Numic</th>
<th>KA</th>
<th>SP</th>
<th>TSh</th>
<th>WSh</th>
<th>Co</th>
<th>Mo</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>subject</td>
<td>*-ti</td>
<td>-ti/-niti</td>
<td>-ti/-niti</td>
<td>-ti/-niti</td>
<td>*-ti</td>
<td>-di</td>
<td>-di</td>
</tr>
<tr>
<td>habitual Agent</td>
<td>*-pi</td>
<td>-pi</td>
<td>-pi</td>
<td>-pi</td>
<td>-pi</td>
<td>-pi</td>
<td>-pi</td>
</tr>
</tbody>
</table>

Why should this be the case?

6.1 Looking at the history of another language

Old English (OE) had several suffixes deriving event nominals. Only one has survived to Present Day English (PDE) as an event nominalizer: -ing/-ang. The other event nominalizers were generally replaced by suffixes borrowed from French (data from Kastovsky (1985)).

<table>
<thead>
<tr>
<th>Nominalizer</th>
<th>Old English</th>
<th>Present Day English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-ing/-ang</td>
<td>Minisang ‘blowing’ (Minis ‘to blow’)</td>
<td>drinking, driving, healing, ending</td>
</tr>
<tr>
<td>*-ness</td>
<td>blassness ‘cessation’ (blassan ‘to cease’)</td>
<td>kindness, blindness, roughness</td>
</tr>
<tr>
<td>-(c)d/-t</td>
<td>flood ‘flood’ (flaund ‘to flow’)</td>
<td></td>
</tr>
<tr>
<td>*(e)l/*e</td>
<td>onestl ‘sitting on’ (onestan ‘to sit on’)</td>
<td></td>
</tr>
<tr>
<td>*(e)ls</td>
<td>raclabl ‘counsel’ (raclan ‘to counsel’)</td>
<td></td>
</tr>
<tr>
<td>*-en</td>
<td>bagen ‘taking’ (begon ‘to take’)</td>
<td>trial, reversal, arrival, perusal</td>
</tr>
<tr>
<td>*(e)nce, -ence</td>
<td>acceptance, admittance, dependence</td>
<td></td>
</tr>
<tr>
<td>*(e)tion</td>
<td>identification, christianization</td>
<td></td>
</tr>
<tr>
<td>*-ment</td>
<td>abominishment, embellishment</td>
<td></td>
</tr>
</tbody>
</table>

Why did only -ing/-ang survive into PDE? Kastovsky suggests that this is because the suffixes that were lost [serve[d] the naming function of word-formation rather than the function of syntactic recategorization (253).

(54) a. Jasper hates [Maria’s] being late all the time.
   b. Tristan saw [Oliver’s] eating the cake.

 ⇒ The nominalizer -ing has resisted change relative to the other nominalizers since one of its functions is syntactic, creating nouns from verbs for the purposes of specific syntactic constructions.

6.2 Back to Numic

The subject nominalizer *-ti is used to form subject relative clauses in all the Numic languages:

   this woman cry-PEVF-NOM RED-sit-NOM
   ‘The woman who was crying is sitting.’ (ZBM 193)
   [Ka]

 b. *-ti yapi-ka-di, yapi-maa-ni  
   man- =SUBJ sib-RED-NOM 1SG father-SUBJ 1SG
   ‘The man’s running is my father.’ (Bante 1986:277)
   [SP]

c. Taŋkunn, [ni pishiu-t], tighya-naa kaltānha.  
   man me know-NOM deer-OBJ shoot
   ‘The man who knows me is shooting the deer.’ (Db 358)
   [TSh]

d. Suti hip’otan, [limnusha-niti], pi ‘uqanna kai vumpana’naa.  
   that old lady he,sick-NOM her doing, know not
   ‘The old woman who is sick doesn’t know what she is doing.’ (CD 192)
   [WSh]

e. Puku- u [i-depakwatu-di], Betty-a u-qa.  
   horse-DX 1SG-kick-NOM-DX Betty-DX 3SG-POS
   ‘The horse that kicked me is Betty’s.’ (N 165)
   [Mo]

f. Nh ka=nana,  
   siddusur-ku [ka=puyig became-kati-di].  
   OBJ=young,man know-NOM OBJ=horse sit-NOM
   ‘I know the man who is riding the horse.’ (elicited, BP 6-2)
   [NP]

⇒ We can conclude that *-ti had a syntactic function in Proto-Numic which made it less prone to undergo change than the habitual Agent nominalizer *-pi, which only served a pragmatic function.

A Sources and abbreviations

The sources for each data and the relevant language and source abbreviations are given below:

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The interlinear abbreviations I use are: ANIM, animate; APPL, applicative; APS, antisynthetic; CAUS, causative; COMPL, completive; DEM, demonstrative pronoun; DX, deictic element; DL, dual; EXCL, exclusive; FUT, future; HAB, habitual; INAN, inanimate; INCL, inclusive; INDEF, indefinite subordinate subject pronoun; INV, invisible; IP, instrumental prefix; IR, irrealis; ITER, iterative; MOT, directional suffix; NEG, negation; NOM, nominalizer; MOM, momentaneous; OBJ, object; PERF, perfect; PERFv, perfunctive; PL, plural; POSS, possessive; PREs, present; PUNC, punctual; REAL, realized; RED, reduplication; RELF, reflexive; REP, repetitive; RES, resultantive; SG, singular; SUBJ, subject; TNS, tense; TRANS, transplantive; UBT, untranslatable; VIS, visible.

For language names, I abbreviate Comanche as Co, Kawaiisu as Ka, Moño as Mo, Northern Paiute as NP, Southern Paiute as SP, Túmpis Shoshone as TSh, Western Shoshone as WSh.
B  Another habitual Agent nominalizer

B.1  WSh

Another suffix in WSh exhibits some functional overlap with -wopu1, the phonological form of which is a glottal stop plus a vowel identical in quality to the preceding one.

(56)  a. tipa-tikka-’a
   pine.mnt-eat-NOM
   ‘pine nut eaters’ (CD 66)
   b. akus tikka-’a
   salmon.eat-NOM
   ‘salmon eaters’ (CD 67)
   c. satti tikka-’a
   dog.eat-NOM
   ‘dog eaters’ (CD 67)

(57)  a. na-kwana-’a
   REFL-smell-NOM
   ‘delicacy, favorite food’ (CD 67)
   b. na-kamma-’a
   REFL-taste-NOM

One caveat is in order. The number of forms with -V in my database for WSh are limited to those given above. The productivity of the suffix cannot be ascertained from just these few examples, but, as we will see later, it is extremely productive in Co.

B.2  Co

While the -V nominalizer was of uncertain productivity in WSh, in Co it is extremely productive in deriving Agent nominals:

(58)  a. ta’-si-wou-’
   FP.foot-paw.earth-NOM
   ‘buffalo’ (RA 106)
   b. awo-no-’o-’
   cup-carry-NOM
   ‘armadillo’ (RA 14)

The -V nominalizer is not, however, confined solely to deriving Agent nominals:

(59)  a. eka-yi’gi-ka-’
   red-soften-NOM
   ‘jelly’ (RA 15)
   b. kohtsa-’
   stew-NOM
   ‘cooked cereal, stewed food’ (RA 29)

(60)  a. animui wikitkwe-’a-’
   fly-kill-NOM
   ‘flyswatter’ (RA 12)
   b. huus-’
   trap-NOM
   ‘trap’ (RA 22)

(61)  a. awo-nobi-’
   cup-play-NOM
   ‘dice game’ (RA 13)
   b. nda oks-’
   smooth flow-NOM
   ‘clear stream’ (RA 74)

(62)  a. huu-na-kari-’
   wood-REFL-sit-NOM
   ‘wooden bench’ (RA 21)
   b. naarin-’
   trade-NOM
   ‘town, store’ (RA 58)

From the wide range of thematic roles that derived nominals in -V bear, it is difficult to assign the suffix a unique function. Instead, it seems simply to derive a noun from a verb, with the semantic relationship between the two being part of the conventionalized meaning of the derived nominal.

B.2.1  Mo

Mo also has another way of deriving habitual Agent nominals involving the addition of a glottal stop plus an echo vowel: -V.

(63)  a. noqquq-’a
   steel-NOM
   ‘thief’ (Lb 46)
   b. kwidza-dka-’a
   brine.fly.larvae-eat-NOM
   ‘Mono Lake Painte’ (Lb 87)

Norris (1986) says that the -V suffix is of ‘limited productivity’ in Eastern Mo (53).

B.2.2  NP

NP also has the same habitual Agent nominalizer found in Mo, WSh, and Co: -V, though its productivity seems limited. Thones does say that this nominalizer suffix most often appears in the names for Paiute tribes and in place names:

(64)  a. kodi-dika-’a
   groundhog-eat-NOM
   ‘Surprise Valley Band (Ft. Bidwell, CA)’ (lit. groundhog eaters) (T 122)
b. wada-dika-'a
    weepweed seed-cat-NOM
    ‘Barney Valley Band (Burns, OR)’ (lit. seed eaters) (T 122)

c. yapa-sizia-i
    ipoos-stand.sg-NOM
    ‘wild-carrot-stand (place name)’ (T 122)

d. waa-kongi-i
    juniper-be.around-NOM
    ‘juniper-all-around (place name)’ (T 122)

The origins of this nominalizer are obscure and given that the suffix has little phonological content and many words end in the sequence -V, it is doubtful that one can be found. The nominalizer function of -V may derive from another of its uses in which it marks a noun as a term of address. Nichols (1974:52) reports that the presence of -V on a common noun converts it into the name of a mythical character:

(65) a. idza
    ‘coyote’

b. idza’a
    ‘Coyote (the mythological character)’

Further examination of pairs of nouns like this may reveal how this function of the -V suffix was reanalyzed as habitual Agent nominalization.

References

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