The role of nominalization in Northern Paiute embedding

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1 Introduction

• Northern Paiute (Numic, Uto-Aztecan: western United States) has two constructions—both involving the suffix

– The first is described by previous authors as an externally-headed relative clause (Snapp et al. 1982:85, Thones 2003:432–439):

(1) Isu tsiadami =pisabî-na wadzi-mia-hu.

DEM NOM girl 1SG.GEN=like-NMZ hide-go-PUNC

The girl that I like ran away.’ (elicitation, MS, BP32-4-s40)

– The second, which to my knowledge has not been mentioned in previous descriptions of the language, has the profile of an internally-headed relative clause:

(2) Kai nii ka i=bia kammi saa-na tsia-kwi.

NEG 1SG.NOM DEF.ACC 1SG.GEN=mother rabbit cook-NMZ eat-IRR

‘I won’t eat the rabbit my mother cooked.’ (elicitation, EM, BP32-4-s78)

• A seemingly identical suffix also derives nonsubject event participant and event nominalizations, as Thones (2010) observes:

(3) a. I=naa’a saa-na ne-hu.

1SG.GEN=father cook-NMZ burn-PUNC

‘What my father was cooking burned.’ (elicitation, EM, BP32-9-s18)

b. Su nana, ka toogga u=batsa-na i=naa’a.

DEF.NOM man DEF.ACC dog 1SG.GEN=like-NMZ yesterday

‘My older brother is lying over there.’ (elicitation, MS, BP32-4-s54)

⇒ I will explore how the analysis for nonsubject nominalizations that I propose elsewhere (Toosarvandani, submitted) can be extended to the relative clauses in (1–2).

• I set aside subject nominalizations and relative clauses, which are formed with a different suffix:

(4) Nii ka kammi o’o aatua-di punni.

1SG.NOM DEF.ACC rabbit there SIL.PL-NMZ see-DUR

‘I see the rabbits that are sitting over there.’ (elicitation, EM, BP32-4-s68)

2 Structure of nonsubject nominalizations

• I have argued elsewhere (Toosarvandani, submitted) for the following structure for nominalizations with -na:

(5) Ni ika kutsu patsa-di yadu’i.

1SG.NOM DEF.ACC cow kill-NMZ talk.DUR

‘I am talking to the cow killer.’ (elicitation, EM, BP32-4-s83)

nominalization

• In the rest of this talk, I will:

1. lay out my proposal for the structure of nonsubject nominalizations in Northern Paiute
2. show how this naturally extends to internally-headed relative clauses
3. try to understand how nominalization creates externally-headed relative clause structures

• This is very similar to the structure of gerunds in English, except that these nominalizations can describe nonsubject event participants, in addition to events themselves.

• The nominalizer -na is the overt realization of the functional head, n, which introduces possessors in its specifier.

• Like a possessor, the agent of a nominalization is introduced in Spec-nP, where it receives genitive case from D.

• What evidence is there that the agent occurs in the same structural position as possessors?

1. When the agent in Spec-nP is pronominal, it receives the same morphological realization as a possessor:

(6) I=naa’a saa-na ne-hu.

1SG.GEN=father cook-NMZ burn-PUNC

‘What my father was cooking burned.’ (elicitation, EM, BP32-9-s18)

(7)

• What evidence is there that the agent occurs in the same structural position as possessors?

1. When the agent in Spec-nP is pronominal, it receives the same morphological realization as a possessor:

(8) a. I=babi’i oo habi-nimi.

1SG.GEN=older.brother there lie-around

‘My older brother is lying over there.’ (elicitation, MS, BP32-4-s54)

b. Essaa-na ne-hu.

1SG.GEN=cook-NMZ burn-PUNC

‘What I was cooking burned.’ (elicitation, EM, BP32-9-s15)
2. When the agent DP contains an attributive adjective (10), this adjective receives the same variable case realization as adjectives contained within possessors (9):

short-NOM man son lie-PUNC
‘The short man’s son fell down.’ (elicitation, EM, BP32-3-s18)

1SG.NOM PL=two-ACC women children like.DUR
‘I like the two women’s children.’ (elicitation, EM, BP32-9-2, 1)

PL=two-NOM women cook-NMZ good taste
‘The two women’s cooking tastes good.’ (elicitation, EM, BP32-8-s4)

1SG.NOM DEF.ACC two-ACC women cook-NMZ like.DUR
‘I like the two women’s cooking.’ (elicitation, EM, BP32-8-s9)

3. The agent can be the anaphor n=, which otherwise only occurs as the possessor in a possessive description:

(11) Su naatsi’i, bino’o ka ti=d’oogga haani kuyaa o=dda-yaggwime’e-hu
DEF-NOM boy PTC DEF.ACC REFL=dog scold far 3SG.ACC=IP.foot-kick-PUNC
look like
‘The boy is scolding his dog, and then he kicks him to go away.’ (prompted narrative, MS, BP24-1-t3, 41)

(12) Oo uu ka ti=t=ia-patsa-na usu idza, pii owi manai’i ci̡aisi
there thus DEF.ACC REFL=NSP-kill.SG-NMZ DEM.NOM coyote 3SG there do then
u-ma koggw=i-u. that-LOC take.away-PUNC
‘So it was his kill, that Coyote, he took it over then and took it away.’ (narrative, Thornes 2003:484)

4. Finally, agents and possessors never cooccur (in a corpus of about 600 nominalizations), a complementary distribution that follows if they are introduced in the specifier of the same head.

• The gap in nonsubject position is created by a null resumptive pronoun, which is sometimes overt—for instance, when the nominalization describes an argument that is projected as the complement of a postposition:

(13) Usu pi-kuba u=kati-čai-na yaisi oo-tu patsa-u.
DEM.NOM PRO-LOC 3SG.GEN=si=t=IMP-LOC-NMZ PTC there-LOC kill-PUNC
‘The one he was riding, (Porcupine) killed there.’ (narrative, Thornes 2003:478)

• The correct meaning for these nominalizations arises through abstraction over the variable introduced by this resumptive pronoun:

(14) I=naa’a saa-na ne-hu.
1SG.GEN=father cook-NMZ burn-PUNC
‘What my father was cooking burned.’ (elicitation, EM, BP32-9-s18)

3 Internally-headed relative clauses

• This account of nonsubject nominalizations extends straightforwardly to internally-headed relative clauses:

(15) DP
   \[\text{DP} \rightarrow \text{nP} \rightarrow n \rightarrow \lambda x \rightarrow \nu P \rightarrow \nu P \rightarrow \nu \rightarrow \text{sa}\]

• The entire nominalization in (14) ends up referring to the patient of a cooking event by the speaker’s father (see appendix for details).

(16) Kai ni ka i=bia kammi saa-na ti=k-wi.
NEG 1SG.NOM DEF.ACC 1SG.GEN=mother rabbit cook-NMZ eat-IRR
‘I won’t eat the rabbit my mother cooked.’ (elicitation, EM, BP32-4-s78)

(17) DP
   \[\text{DP} \rightarrow \text{nP} \rightarrow n \rightarrow \lambda \nu P \rightarrow \nu \rightarrow \nu \rightarrow \lambda x \rightarrow \nu P \rightarrow \nu P \rightarrow \nu \rightarrow \text{sa}\]

• These internally-headed relative clauses are nominalizations where the object is not a resumptive pronoun but an indefinite noun phrase (an indefiniteness restriction is also found in Lakhota and Mojave; see Basilico 1996).

• The appropriate meaning arises because the indefinite object introduces a restricted free variable that can be abstracted over (e.g. Basilico 1996):
There is, however, a distinct externally-headed relative clause construction that involves the juxtaposition of two DPs: the head noun and a nonsubject nominalization.

1. The entire nominalization is marked with the case corresponding to the grammatical relation that the head noun could be parsed as inside the nominalization, as with the internally-headed relative clauses?

2. The agent DP of these externally-headed relative clauses is a pronominal clitic pronoun.

3. Moreover, the agent DP of these nominalizations behaves just like a possessor with respect to the realization of adjectives:

4. But, when the agent is a full DP, the nominalization can contain its own overt determiner:

5. When the gap in the relative clause is complement of a postposition, it is filled by the same pronominal element.

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7. But, in (23), since the agent is realized as a genitive pronoun pronominal proclitic on the verb, the head noun could be parsed as inside the nominalization.

8. There is, however, a distinct externally-headed relative clause construction that involves the juxtaposition of two DPs: the head noun and a nonsubject nominalization.

9. In possessive descriptions, when the possessor is a genitive pronoun pronominal, no overt determiner is possible (Cardinaletti 1998):

10. But when the agent of the nominalization component of these externally-headed relative clauses is a pronominal proclitic, there is no overt determiner, e.g. (23) or (24).

⇒ Internally-headed relative clauses in Northern Paiute are nominalizations in which a nonsubject argument position is filled by an indefinite noun phrase.

4 Externally-headed relative clauses

The externally-headed relative clauses resemble nominalizations with a gap in nonsubject position:

⇒ The agent of the nominalization can be realized as a genitive pronoun pronominal proclitic, e.g. (23).

When the gap in the relative clause is complement of a postposition, it is filled by the same pronominal element.

But, in (23), since the agent is realized as a genitive pronoun pronominal proclitic on the verb, the head noun could be parsed as inside the nominalization.

But when the agent of the nominalization component of these externally-headed relative clauses is a pronominal pronominal proclitic, there is no overt determiner, e.g. (23) or (24).

⇒ But when the agent is a full DP, the nominalization can contain its own overt determiner:

Under my account, this determiner marks the left-edge of the nominalization: How could the head noun be located inside the nominalization, as with the internally-headed relative clauses?

⇒ As we would expect, each of these DPs can have its own genitive-case-licensed possessor:
5 Conclusion

Northern Paiute has two relativization strategies: one internally-headed and one externally-headed.

Both are built on nonsubject nominalizations, which occur elsewhere in the language as arguments.

These relativization strategies use nominalization in two different ways, though:

- Internally-headed relative clauses are nonsubject nominalizations with an indefinite object, rather than a resumptive pronoun.
- Externally-headed relative clauses juxtapose the head noun to a nonsubject nominalization, in some way that is yet to be determined.

Data and abbreviations

Northern Paiute is comprised of several closely related dialects (Babel et al., to appear). Much of the data presented here comes from my own fieldwork on the Mono Lake variety, spoken at Mono Lake in eastern California and immediately to the north in Bridgeport and Coleville, California and Sweetwater, Nevada. Additional data comes from the Burns, Oregon variety (Thornes 2003), and to a lesser extent the McDermitt, Nevada variety (Snapp et al. 1982) and the Bannock variety spoken at Fort Hall, Idaho (Liljeblad 1966). For all dialects of Northern Paiute, there are probably no more than 300 fluent speakers today (Golla, to appear), and for the Mono Lake dialect, there are around 5 speakers. I thank Grace Dick, Leona Dick, Morris Jack, Elaine Lundy, Edith McCann, and Madeline Stevens for teaching me about their language.

I use the following abbreviations in this paper: ACC = accusative, ADV = adverbial suffix, APPL = applicative, CAUS = causative, DEF = definite, DEM = demonstrative, DIM = diminutive, DL = dual, DOM = domain widener (with indefinite pronouns equivalent to English wh-ever), DUR = durative, EMPH = emphatic particle, EXCL = exclusive, F = feminine, GEN = genitive, IMPF = imperfective, INCH = inchoative, INCL = inclusive, INSTR = instrumentalizer, IP = instrumental prefix, IRR = irrealis, LOC = locativum postposition, M = masculine, MOD = modal particle, MOT = motion suffix, NEG = negation, NOM = nominative, NMZ = nominalizer, NSP = nonspecific object, PASS = passive, PERF = perfect, PL = plural, PRO = resumptive pronoun, PLUR = pluractional, PTC = discourse particle, QUOT = quotative, REFL = possessive anaphor, SEQ = sequential marker, SG = singular, STAT = stative aspect.

Appendix: The interpretation of nonsubject nominalizations

How is it possible for all possessors to be introduced in the specifier of the same functional projection, Spec-nP? The possession relation — the relation between the possessor and the possessee — is notoriously variable, depending on what the possessee is as well as on contextual factors. For inherently relational nouns, such as mother or birthday, the possession relation is usually determined by the head noun itself: e.g. in an out-of-the-blue context, Mary’s birthday refers to the day on which Mary was born. For nonrelational nouns, such as cloud or female, the possession relation is entirely pragmatically determined. Mary’s cloud can describe the cloud Mary picked out, or (somewhat unrealistically) the cloud she owns, etc.

Despite this variability, possessive descriptions can, as Barker (to appear) suggests (p. 7), be given a uniform syntactic treatment. The functional head n would introduce a free variable over two-place relations that would get its meaning from the context and that would relate the possessor in Spec-nP with the possessee:

\[ n = x(y(x) \land R(x)(y)) \]

In other words, n would take a property — denoted by the NP — and an individual-type argument — the possessor in Spec-nP — to yield the set of individuals that have that property and stand in some contextually salient relation to the possessor. Nonrelational nouns, of course, already denote properties, but relational nouns, as their name suggests, denote two-place relations. We must assume, as Barker does, that, unless it is saturated, one of the relational noun’s two arguments is existentially bound by a type-shifting operator called ex, defined as follows:

\[ ex = \lambda Rx.\exists y(R(x)(y)) \]

This type-shifting operator takes a relation between individuals and existentially binds the second argument, yielding a property. As an illustration, take the relational noun tuw ‘son’ in (33). The entire possessive description it is contained within has the semantic derivation in (34).

(32) ex : (e, r) = (e, r) \land (e, r)

The man’s son ran away.’ (elicitation, MS, BP32-2-s6)
The nominalizer’s first argument is a property. This will be the property derived from abstracting over the resumptive pronoun. Identifications combines two predicates of events by abstracting over each of their event arguments.

The second argument of the relational noun ma ‘son’ is existentially bound. As a property, then, it can combine with n, which returns a relation between individuals. The first of this relation’s arguments is saturated by the possessor DP. The possession relation here is given by the free variable R, whose meaning comes from the context. The preference, though, for the intrinsic possession relation—the man is the genetic father of the son—arises because the most salient relation in any context will be that encoded by the noun ma ‘son’ itself.

The meaning for na, which projects a specifier, is identical to the meaning that n has in possessive descriptions:  

The nominalizer’s first argument is a property. This will be the property derived from abstracting over the resumptive pronoun, which we can take to introduce a free variable that must be bound. Note that, in order to account for the composition of the verb phrase, I need to adopt Kratzer’s (1996) neo-Davidsonian event semantics for v. In this approach, both V and v denote relations between individuals and events. R represents individual-type internal arguments to an event. Once all of the verb’s internal arguments have been saturated, the VP denotes a set of events. Then, v, which relates the individual-type external argument to an event, combines with VP through the rule of event identification (Kratzer 1996:122). Event identification takes one function of type (e, (e, t), t) (a function from functions to events from truth values) and another function of type ((e, t), t) (a function from events to truth values) and returns a function of type (e, (e, t), t)). In essence, event combinations two predicats of events by abstracting over each of their event arguments.

The interpretation of (14), then, can be given in the following position:

(36) \[ \langle \lambda (\lambda z ((\text{cook}(z)(e) \land \text{agent}(y)(e)) \land R(z)(\text{my-father})) : e) : V \rangle : e \]

The VP denotes a function from events to truth values, and v a relation between individuals and events. The two are, following Kratzer, combined by event identification to produce another relation between individuals and events. As we saw above, there is nothing in the specifier of v, so the agent argument stays unsaturated, though the event argument does not. In (16), the Davidsonian event semantics, the meaning of a sentence is always an existential statement. The event variable introduced by the verb must be existentially bound (by an operation 3-closure) in order to produce a truth value. In this case, binding the event variable in this way actually produces the property of being the agent of cooking something. The free variable introduced by the resumptive pronoun must be abstracted over, yielding a relation between individuals. This relation cannot combine with n as it is, just like relational nouns. The second of these individual-type arguments is existentially bound by the type-shifting operation en to produce a property—the property of being what my father cooked. Once the nominalizer has combined with this property and the possessor DP has been folded in, the nP denotes a property that can serve as the argument for the determiner.

References


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