

Chapter 1

Restructuring and nominalization size

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This paper addresses the interaction between restructuring and nominalization in Washo (isolate, USA). An overview of the basics of restructuring in Washo is provided, and then two types of thematic nominalizations – subject and object – are compared with respect to their underlying structure and the availability of restructuring. Particular attention is paid to predictions determining the availability of both functional and lexical restructuring; with specific regard to the latter, the Washo data offer preliminary evidence that the height of the nominalization must contain at least VoiceP to facilitate agent sharing (Wurmbrand & Shimamura 2017).


1 Introduction

This paper addresses the interaction between restructuring and nominalization size in Washo (isolate, USA). While Washo allows for restructuring in some nominalizations, it is shown that sufficient structure must be projected. I demonstrate this with a comparison between two types of thematic nominalizations in the language, subject and object, which differ in their underlying structure. The interaction between restructuring and nominalization is not well-studied, but offers an exciting venue for future research. The modest aim of this paper is therefore to offer some discussion of the basics of restructuring in Washo (§2), and to highlight some questions regarding the relationship between nominalization height and the availability of restructuring, based on currently available data (§3–§4).

2 Restructuring in Washo

The term *restructuring* refers to constructions in which an “embedded predicate is transparent for properties which are otherwise clause-bound” (Wurmbrand



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2015: 248). For example, one common diagnostic for restructuring comes from the availability of clitic climbing, as shown with the Italian contrast in (1a–1b) (Wurmbrand 2004: 991–992):

(1) Italian

- a. Lo volevo [vedere t_{cl} subito].
him I-wanted see immediately
'I wanted to see him immediately.' *Restructuring*
- b. *Lo detesto [vedere t_{cl} in quello stato].
him I-detest see in that state
Intended: 'I detest seeing him in that state' *Non-restructuring*

While restructuring phenomena have largely been studied in analytic-type languages, agglutinative-type languages likewise display restructuring effects. This is illustrated for example in (2) with Japanese, in which the restructuring verb *wasure* 'forget' occurs as an affix on the non-finite verb *tabe* 'eat' within the same predicate. Such predicates instantiate restructuring in that they exhibit monoclausal effects; see Shimamura & Wurmbrand 2014 for more details.

(2) Japanese

- John-wa subete-no ringo-o tabe-wasure-ta.
John-TOP all-GEN apple-ACC eat-forget-PST
'John forgot to eat all the apples.' (Shimamura & Wurmbrand 2014: 2)

In Washo, a head-final language like Japanese, restructuring verbs are likewise affixed onto a non-finite (tenseless) verb to form a complex predicate (3).¹

(3) Washo

- l-éšim-dugá:gu-yi
1-sing-not.know.how-IND
'I don't know how to sing.'²

Here, clause-bound transparency is revealed by the presence of a single agreement morpheme at the left periphery (prefixal agreement is only for person).

¹Washo (iso: was) is an endangered isolate spoken in several communities of California and Nevada surrounding Lake Tahoe. Some typologists group Washo within the Hokan family, see e.g., Campbell (1997) and Mithun (1999) for discussion. Orthography is adapted from Jacobsen (1964); non-IPA symbols in this paper are L [l], š [ʃ], and y [j]. Stress is represented with an acute accent. Unless otherwise stated, the Washo data come from the author's fieldwork.

²Some verbs in Washo are inherently negative, as is the case with *dugá:gu* 'not know how'.

Agreement morphology may not appear on both verbs, which I take as evidence for the reduced and non-finite status of the embedded verbal domain. In the same vein, just one set of TAM marking is observed at the right periphery; negation must likewise be clause-peripheral, and may not intervene between the verbs.

This strategy stands in contrast for example to finite embedding in the language, which comes in the form of either a clausal nominalization (4) or a bare (non-nominalized) clause (5), depending on the embedding predicate (Hanink & Bochnak 2018). Independent tense and mood marking are permitted in both of these clause types.³ Clausal nominalizations further provide evidence for a CP-layer in that they exhibit switch reference morphology (see Arregi & Hanink 2018). The upshot is that both of these embedding strategies involve finite clauses.

- (4) Finite embedding of a clausal nominalization (nominalized CP)
 Adele [*pro* daláʔak ʔ-i:gi-yi-Ø-ge] hámpup'a-yé:s-i
 Adele [*pro* mountain 3/3-see-IND-SS-NM.ACC] 3/3.forget-NEG-IND
 'Adele remembers that she saw the mountain.'⁴

- (5) Finite embedding of a bare clause (MoodP)
pro [*pro* di-yé-iʔiš-aʔ] di-gum-suʔúʔuš-iʔ-i
pro [*pro* 1-fly-forward-DEP] 1-REFL-dream-ATTR-IND
 'I dreamt that I was flying.' Washo Archive

2.1 Restructuring in Washo

Restructuring in Washo is found with a range of aspectual suffixes (6), as well as with modal 'know how to' (7) and desiderative 'want' (8) (which can also mean 'like'). Below I have classified a subset of these verbs (a term used loosely here, see §2.2) based on Grano's (2012: 16) sorting of Landau's (2000) classes; Grano draws from the set of restructuring verbs in Wurmbrand (2001: 342). The examples in (9) list some verbs in Washo that do not fall clearly into any of these categories.

- (6) Aspectual
- a. zí:gin l-éʔw-gáŋa-leg-i
 chicken 1/3-eat-start-REC.PST-IND
 'I started to eat the chicken.' Washo Archive
 - b. mí:lé:we di-dulé:k'il-mámaʔ-ášaʔ-i
 2.PRO-for 1-cook-finish-PROSP-IND
 'I'll finish cooking for you.'

³Washo is an optional tense language (Bochnak 2016), and tense marking often does not appear.

⁴'Remember' in Washo can only be expressed by negating 'forget'.

- c. háʔaš-dúweʔ-i
3.rain-be.about.to-IND
'It's about to rain.'
- d. t'é:liwhu bánkuš-íweʔ-i
man 3.smoke-stop-IND
'The man stopped smoking.'

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- (7) Modal
t'é:liwhu bašáʔ-dugá:gu-yi
man 3.write-not.know.how-IND
'The man doesn't know how to write.'

- (8) Desiderative
- a. di-gé:gel-gaʔlám-i
1-sit-want-IND
'I want to sit.'
- b. l-éšim-gaʔlám-i
1-sing-like-IND
'I like to sing.'

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- (9) Other
- a. di-bamušéʔeš-tamugáyʔliʔ-i
1-read-be.tired.of-IND
'I'm tired of reading.'
- b. l-éšim-duwéʔweʔ-ášaʔ-i
1-sing-try-PROSP-IND
'I'm going to try to sing.'⁵
- c. di-gum-yá:gim-ḡáḡa-hu-yaʔ
1-REFL-smoke-pretend-PL.INCL-DEP
'Let's pretend to smoke one another.'

Bear and Deer Story

2.2 Lexical vs. functional restructuring

Wurmbrand (2001) argues for a distinction between *lexical* and *functional* restructuring (see also Wurmbrand 2004; cf. Cinque 2001, 2004, Grano 2012), which depends on whether the restructuring element is a lexical verb or a functional head, e.g., Asp or Mod. I show in this section that this distinction, which will come up in the discussion of nominalizations, appears to be motivated in Washo.

⁵The verb 'try' is the reduplicated form of the aspectual verb 'be about to' (6c). This is an unusual instance of reduplication, which generally indicates plurality in Washo (see Yu 2005, 2012).

Wurmbrand (2004) lays out several diagnostics for lexical vs. functional restructuring. For example, only lexical restructuring verbs show flexibility in selection. In Washo, this is observed in that lexical verbs may select for a nominal argument (10a); this is however not possible in functional restructuring (10b).

(10) Variation in selection

- a. [di-mók'o] di-*tamugáyʔliʔ*-i
[1-shoe] 1/3-*be.tired.of*-IND
'I'm tired of my shoes.'
- b. * [ʔitbamušéʔeš] di-*gáŋaʔ*-i
[book] 1/3-*start*-IND
Intended: 'I started the book.'

Second, functional restructuring is compatible with weather subjects (11b), while lexical restructuring is not (11a):

(11) Weather verbs

- a. * baŋáya wa-métuʔ-*tamugáyʔliʔ*-i
outside STAT-*be.cold-be.tired.of*-IND
Intended: 'It's tired of being cold outside.'
- b. baŋáya wa-métuʔ-*iweʔ*-i
outside STAT-*be.cold-stop*-IND
'It stopped being cold outside.'

Additionally, Washo exhibits cross-linguistically rare object control in restructuring (cf. Cinque 2001), exemplified in (12) with the verb *méwil* ('ask (someone) to do something'). Such examples pose a problem for accounts in which restructuring is limited entirely to functional heads, as such heads are predicted not to be able to select for internal arguments.

(12) Adele l-é:biʔ-*méwil*-i

Adele 1/3-come-*ask*-IND
'I asked Adele to come.'

Finally, variation is observed in possible orderings of the causative morpheme. In cases of lexical restructuring, the causative morpheme may appear as a suffix on the lower verb (13a), or at the periphery of both verbs (13b).⁶ In cases of functional restructuring, it may only appear in a right-peripheral position (14).⁷

⁶This may in fact be a diagnostic for the optionality of lexical restructuring.

⁷The position of the causative morpheme in Washo is sensitive to phonological factors, see e.g., Jacobsen 1973, Benz 2018, but that is not what is driving the contrast here.

(13) Position of the causative in lexical restructuring

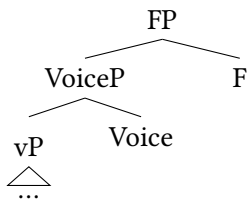
- a. díme? di-yák'aš-*ha*-ga?lám-i
water 1/3-be.warm-*CAUS*-want-IND
'I want to warm the water up.'
- b. díme? di-yák'aš-ga?lám-*ha*-yi
water 1/3-be.warm-want-*CAUS*-IND
'I want to warm up the water.'

(14) Position of the causative in functional restructuring

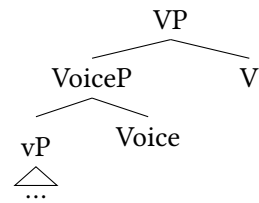
- a. díme? di-yák'aš-gáŋa-*ha*-yi
water 1/3-be.warm-start-*CAUS*-IND
'I'm starting to warm the water up.'
- b. * díme? di-yák'aš-*ha*-gáŋa?-i
water 1/3-be.warm-*CAUS*-start-IND
Intended: 'I'm starting to warm the water up.'

While a precise analysis explaining the range of such effects awaits future research, moving forward I follow Wurmbrand (2001, et seq.) in treating functional restructuring as involving functional heads in the clausal spine such as Asp/Mod (Cinque 2001, 2004, Grano 2012), represented in (15) below as “F”, but lexical restructuring as involving lexical verbs that select for an embedded VoiceP (16), in a way to be made more precise in the next subsection.

(15) Functional restructuring



(16) Lexical restructuring



2.3 Lexical restructuring involves agent sharing

Relevant for the discussion of nominalizations moving forward is the proposal that lexical restructuring involves the selection of VoiceP by a restructuring verb (Wurmbrand 2015, Wurmbrand & Shimamura 2017), rather than the selection of a bare VP (e.g., Wurmbrand 2001, 2004). This proposal is motivated by languages

that show a variety of effects of Voice in restructuring environments.⁸ I briefly summarize their approach and show how it extends to Washo.

Adopting the proposal that (causative) *v* co-occurs with Voice within a split-voice domain (i.a. Bowers 2002, Folli & Harley 2005, Alexiadou et al. 2006, Marantz 2008), Wurmbrand & Shimamura (2017) offer the following derivation of a matrix clause with active voice (Figure 1). In this structure, the Voice head introduces the agent and bears both agent and accusative case features, while *v* carries transitivity information. The valuation of interpretable ϕ -features as well as feature sharing between the DP argument and Voice corresponds to theta-assignment.

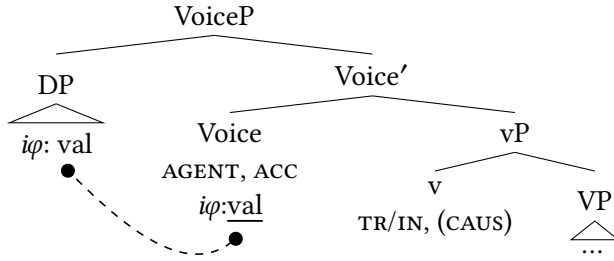


Figure 1: Feature sharing between DP and Voice (Wurmbrand & Shimamura 2017)

Wurmbrand & Shimamura (2017) adopt moreover a valuation approach to Agree (Pesetsky & Torrego 2007), formulated in (17) as Reverse Agree, which accounts for the downward valuation of the agent's features onto Voice.

(17) Reverse Agree (Wurmbrand 2014)

A feature $F: _$ on α is valued by a feature $F: \text{val}$ on β iff

- a. β c-commands α and
- b. α is *accessible to* β
- c. α does not value {a feature of β }/{a feature F of β }

In restructuring configurations (see below), the restructuring verb selects for VoiceP. Crucially, matrix Voice agrees with the DP subject in its specifier before valuing *iφ* on the lower Voice head (see Wurmbrand 2015, Wurmbrand & Shimamura 2017 for distinctions between voice matching and default voice languages). No embedded subject is projected; this proposal therefore accounts for the fact

⁸While voice distinctions play a large role here, Washo lacks a passive (Jacobsen 1979).

that an overt subject is not allowed in the embedded VoiceP. Instead, feature sharing results in agent sharing between Voice heads.

Evidence for the presence of embedded VoiceP in Washo comes from the appearance of the causative morpheme *-ha* between the lower and higher verbs, indicating that the complement of the restructuring verb is larger than VP. Adopting Wurmbrand & Shimamura’s (2017) proposal for Washo, the structure for an example such as (18) is then as in Figure 2 (schematized without head movement). No embedded subject is projected, instead embedded Voice enters into a dependency with the higher Voice head, whose features it then shares.

- (18) *díme? di-yák’aš-ha-tamugáy?li?-i*
 water 1/3-be.warm-CAUS-be.tired.of-IND
 ‘I’m tired of warming up the water.’

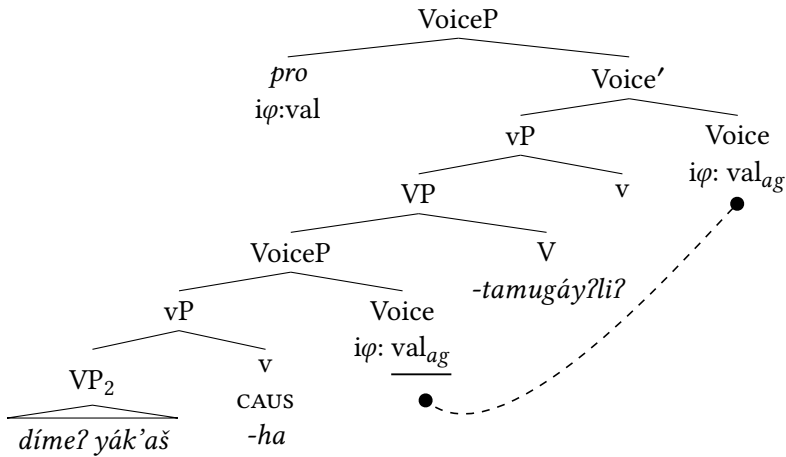


Figure 2: General schematic for restructuring in Washo

3 Restructuring in nominalizations

I now turn to the interaction between restructuring and nominalization. Beyond the sentential level, restructuring is also observed in certain nominalizations; by contrasting subject and object nominalizations, I show below that the height of the nominalization determines whether restructuring is possible. Functional restructuring requires higher aspectual heads to be present in order to obtain, while

the proposal put forward in §2.3 predicts that the projection of at least VoiceP within the nominalization is required for lexical restructuring.

3.1 Thematic subject nominalizations

The first nominalization type I discuss is thematic subject nominalizations, characterized in Washo by a lack of TAM marking as well as the presence of the phonologically conditioned prefix $t'-/d^e$ - (Jacobsen 1964):

(19) Thematic subject nominalizations

a. $da\text{-}mt'\acute{a}?\eta a?$

3.UN-hunt

'hunter'

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b. $d\acute{e}:gu\acute{s} t'\acute{i}:k'e?$

potato 3.UN-grind

'potato grinder' (*man's name*)

(Jacobsen 1964: 354)

Much focus in the literature on subject nominalizations has focused on *-er* nominals (Hovav & Levin 1992, Baker & Vinokurova 2009, Alexiadou & Schäfer 2010), which are generally limited to external arguments cross-linguistically (though see Alexiadou & Schäfer 2008, 2010), exemplified in (20):

(20) a dazzled [admir-*er* of Washington]

(Hovav & Levin 1992)

Baker & Vinokurova (2009) argue that other subject nominalizations are distinguishable from *-er* nominals by the availability of: (i) direct objects and (ii) unaccusative subjects. In their analysis, deverbal *-er* nominals do not project beyond VP (cf. Alexiadou & Schäfer 2010), precluding accusative case licensing as well as external arguments in this nominalization type (*-er* is a nominal Voice head (cf. Kratzer 1996), explaining the restriction to external arguments).

On the first point, (21) shows that accusative direct objects are licensed in Washo $t'-/d^e$ - nominalizations ($t'\acute{a}nu$ 'people'; note that accusative is unmarked on nouns), while the presence of *v* and Voice is diagnosed by the availability of the causative suffix *-ha*. On the second point, unaccusative subjects are also possible (22), consistent with the fact that the nominalizer does not take the place of an agentive subject, as on Baker & Vinokurova's 2009 analysis.⁹

⁹Unaccusativity is diagnosed by the ability to undergo the inchoative/causative alternation.

- (21) t'ánu t'-íši-w-ha
person 3.UN-get.well-CAUS
'person healer' (Lit. 'one who heals people')
- (22) da-góta?
3.UN-break
'something that is broken'

Relatedly, evidence for a syntactically-projected subject in VoiceP (beyond accusative licensing) comes from the availability of reflexives (23), for which PRO serves as a licit antecedent (cf. Baker & Vinokurova 2009 on Gikũyũ (Bantu)).

- (23) Ramona de-gum-dí?ye? L-é?-i
Ramona 3.UN-REFL-call 1-be-IND
'My name is Ramona.' (Lit. 'one who calls herself Ramona')

Subject nominalizations in Washo are therefore not of the *-er* type, and, based on the above behaviors from complementation and subject flexibility, can be taken to contain at least VoicePs (cf. Bochnak et al. 2011). I note moreover that they are in fact even larger, as there is preliminary evidence that aspectual suffixes are also permitted, as in (24), which contains the progressive suffix *-giš*:

- (24) t'ánu da-báŋkuš-i-giš k'-é?-i
person 3.UN-tobacco-ATTR-*PROG* 3-be-IND
'People are always smoking.' (Lit. 'ones who are continually with tobacco')

I now turn to the predictions for restructuring. Beginning with functional restructuring, the prediction is that at least AspP/ModP must be projected for restructuring to obtain. We saw in (24) that there is in fact evidence for an AspP layer in these nominalizations, leading to the prediction that functional restructuring should be possible. (25) shows that this prediction is borne out: functional restructuring with e.g., aspectual *-íwe* 'stop' is permitted:

- (25) Functional restructuring in subject nominalizations
t'-íšim-íwe-yé:s
3.UN-sing-*stop*-NEG
'one who doesn't stop singing'

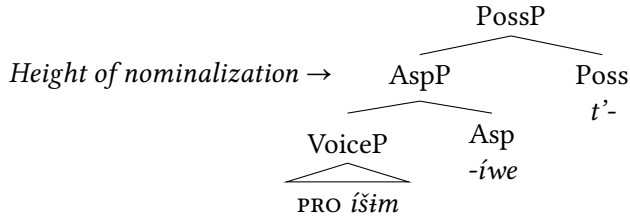


Figure 3: Functional restructuring in subject nominalizations

The availability of functional restructuring follows straightforwardly from the fact these nominalizations may contain functional layers such as AspP. This is schematized in Figure 3 for the example in (25) (shown without negation):¹⁰

Turning to lexical restructuring, the prediction is specific to VoiceP. On the account presented in §2.3, lexical restructuring requires agent sharing across Voice heads; the height of nominalization must therefore be at least VoiceP. We saw above that subject nominalizations do involve VoiceP as well as a projected subject, leading to the prediction that restructuring should be possible. This is again borne out, as demonstrated in (26) with the lexical verb *-gaʔlám* ‘like’:

(26) Lexical restructuring in subject nominalizations

t'-ém̩lu-gaʔlám-é:s

3.UN-eat-like-NEG

‘one who doesn’t like to eat’

Washo Archive

Unlike functional restructuring, lexical restructuring relies on agent sharing. As the nominalization targets (at least) VoiceP, this is possible because the φ -features on embedded Voice can be valued by the higher Voice head (see Figure 4, cp. Figure 2).

In sum, that thematic subject nominalizations in Washo support both functional and lexical restructuring is consistent with the fact that their structure is quite large. Note that if Baker & Vinokurova (2009) are correct that agent nominalizations contain only VP, then restructuring should not be possible in *-er*-nominals cross-linguistically, as higher functional heads will not be present, nor will agent sharing be possible. Restructuring thus provides a further diagnostic to distinguish between different types of subject nominalizations.

¹⁰Note that the presence of PossP in these structures is due to the fact that the prefix *t’-/dʰ-* is not an invariant nominalizer, but in fact a form of possessor agreement that appears with covert third person possessors. I do not go into this any further here due, but see Hanink (2020).

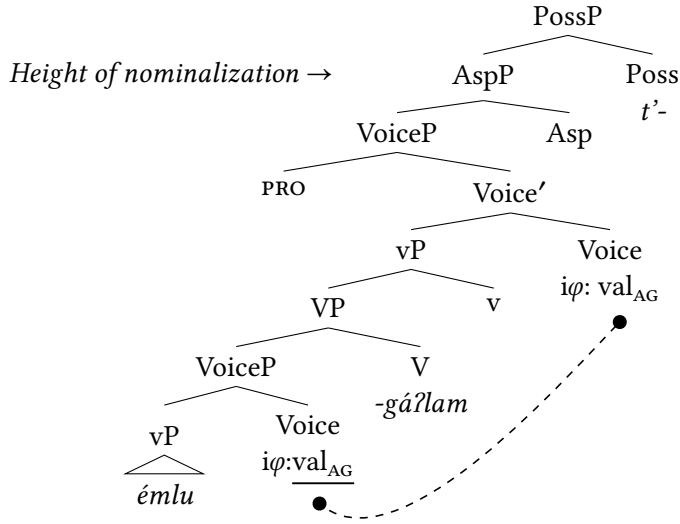


Figure 4: Lexical restructuring in subject nominalizations

3.2 Unexpressed theme nominalizations

I now move on from subject nominalizations to a type of *object* nominalization in Washo, which I term *unexpressed theme nominalizations*. This class of nominalizations is characterized by the invariant nominalizing prefix *d-*, as in (27):

(27) Unexpressed theme nominalizations

- a. *d-íšim*
NMLZ-sing
'song'
- b. *d-á:mu?*
NMLZ-wear.dress
'dress'

This type of nominalization refers to an unexpressed internal argument (essentially a cognate object, cf. Barker (1998) on *-ee* nominalizations), and can only apply to unergative verbs, not transitives or unaccusatives; Washo distinguishes between transitive/intransitive variants for several of these verbs (28), even with object drop (28c) but only the intransitive form may be nominalized by *d-* (29).

(28) Intransitive vs. transitive ‘eat’

a. m-émlu-yi

2-eat.IN-IND

‘You’re eating.’

b. t’á:daš m-íʔw-i

meat 2/3-eat.TR-IND

‘You’re eating meat.’

c. m-íʔw-i

2/3-eat.TR-IND

‘You’re eating it.’

(Jacobsen 1979: 149)

(29) Nominalization of intransitive vs. transitive ‘eat’

a. d-émlu

NMLZ-eat.IN

‘food’

b. *d-íʔw

NMLZ-eat.TR

Intended: ‘food’

It is crucial here that unexpressed theme nominalizations differ from subject nominalizations in that they are deficient in verbal structure and do not license overt arguments. With this in mind, one way of deriving the meaning for this nominalization type is to treat *d-* as a root-selecting nominalizer that also introduces a theme (30b). This would rule out categorization of transitive and unaccusative roots by *d-*, as they are lexically specified as having a theme and are therefore of type $\langle e, \langle v, t \rangle \rangle$. The resulting meaning for the nominalization is then the set of individuals that are the themes of generic eating events, i.e., *food*.

(30) a. $\llbracket \sqrt{emlu} \rrbracket: \lambda e_v [\text{eat}(e)]$

b. $\llbracket d- \rrbracket: \lambda P_{\langle v, t \rangle} \lambda x_e. \text{Gen } e [P(e) \ \& \ \text{THEME}(x)(e)]$

c. $\llbracket d- \rrbracket (\llbracket \sqrt{emlu} \rrbracket): \lambda x_e. \text{Gen } e [\text{eat}(e) \ \& \ \text{THEME}(x)(e)]$

The treatment of *d*-nominalizations as root nominalizations rather than nominalizations of some verbal structure is further corroborated by Marantz’s (2001) diagnostics distinguishing *root-cycle* vs. *outer-cycle* attachment. For example, merger with a root is not only consistent with idiosyncratic meanings (31), but also implies that the resulting meaning depends on the semantics of the root itself, rather than on argument structure. Given that the argument structure of

unergative verbs does not entail a syntactically projected internal argument, the semantics of this nominalization must be sensitive to the meaning of the root instead.

- (31) *d-ime?*
NMLZ-drink
 ‘water’ (*not* ‘(a) drink’)

I therefore propose that the nominalizations in (27) have the structure in Figure 5.

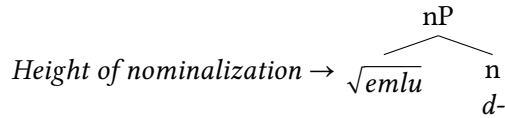


Figure 5: Unexpressed theme nominalizations

Relevant for our purposes is that neither functional nor lexical restructuring is ever possible in this type of nominalization (32), unlike in the deverbal nominalizations described in the previous subsections. This fact is immediately obvious if *d*-nominalizations are root nominalizations, and therefore do not in fact project any verbal structure (Figure 5) despite their superficially deverbal appearance.

- (32) No restructuring in unexpressed theme nominalizations
- a. **d-émlu-ga?lám*
NMLZ-eat.IN-like
 Intended: ‘food that is liked/wanted’
 - b. **d-émlu-máma?*
NMLZ-eat-finish
 Intended: ‘finished food’

To summarize, unexpressed theme nominalizations do not permit restructuring, which is immediately predicted due to their lack of verbal structure. This is of course not surprising, given that they turn out to be root nominalizations. While both subject and object nominalizations superficially appear to be deverbal, the availability of restructuring in the former but not the latter corroborates independently observed differences in the amount of structure they project.

4 Other nominalizations in Washo

We have seen in the previous section that subject nominalizations in Washo are large enough to allow for restructuring, while object nominalizations are not. Before concluding, I turn briefly to two further types of nominalizations in Washo – gerunds and instrumental nominalizations – that lead to predictions about the availability of restructuring, but for which relevant data is lacking at this time.

4.1 Gerunds

Gerunds in Washo, like subject nominalizations, lack TAM marking and do not make use of an overt nominalizer. Unlike subject nominalizations however, gerunds allow overt subjects and therefore show normal prefixal agreement, which I again treat as possessor agreement resulting from the presence of Poss (I return to this below).¹¹ One environment that gerunds occur in is as the subject of the underspecified modal *éʔ* (33a), which is otherwise a copula (Bochnak 2015a,b). Another is as the complement of certain verbs, e.g., ‘want’ (33b).

(33) Gerunds

- a. [hútiweʔ lem-íʃil] kʼ-éʔ-i
 [something 2/1-give] 3-be-IND
 ‘You have to give me something.’
 (Lit. ‘Your giving me something is necessary.’)
- b. [l-élšim] di-gaʔlám-i
 [1-sleep] 1/3-want-IND
 ‘I want to sleep.’ (Lit. ‘I want my sleeping.’)

Based on this distribution, I treat this construction as a type of *-ing* nominalization. Within the domain of *ing*-nominalizations, Kratzer (1996) distinguishes between ‘poss’-*ing* and ‘of’-*ing* constructions (see also Abney 1987, Alexiadou 2005, Harley 2009), which differ for example in whether the complement of the verb is introduced as a direct object (34a), or by the preposition *of* (34b).

(34) *-ing*-nominalizations

- a. We remember his building the barn.
- b. His rebuilding of the barn took five months. (Kratzer 1996: 126–127)

¹¹Washo exhibits portmanteau agreement marking for subject/object (Jacobsen 1964), which in this case can be understood as possessor/possessum.

Kratzer argues that ‘poss’-*ing* nominalizations must include at least a VoiceP layer, as accusative case is licensed on the direct object. This is the case in Washo gerunds, as shown by the availability of the accusative pronoun *gé:* in (35):

- (35) Eddy ʔwáʔ ʔ-éʔ-é:s-i-š-ŋa [*gé:* l-í:gi] k’-éʔ-i
 Eddy here 3-be-NEG-IND-DS-but 3.PRO.ACC 1/3-see 3-be-IND
 ‘Eddy isn’t here but I need to see him.’ [=‘My seeing him is necessary’]

Further, as with subject nominalizations, there is again evidence that AspP is also present in such structures, as suggested by examples such as in (36), which contains the progressive morpheme *-giš:*

- (36) ʔum-lóʔc’iw-giš k’-éʔ-i
 2-run-PROG 3-be-IND
 ‘You need to keep running.’ (Lit. ‘Your continuing to run is necessary.’)

Based on these characteristics, I adopt the structure in Figure 6 for gerunds in Washo, building on Kratzer (1996).¹²

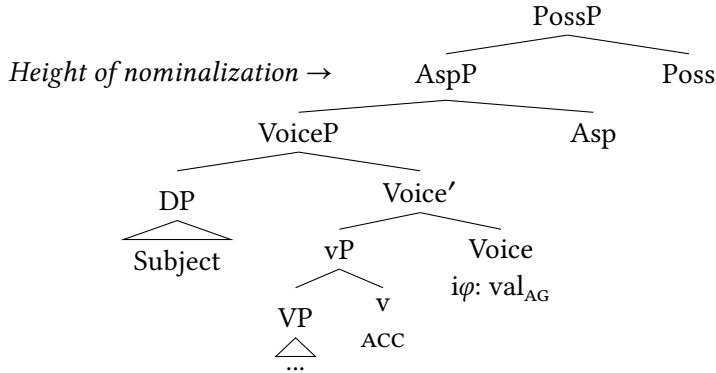


Figure 6: General schematic for gerunds in Washo

The presence of AspP in the structure again predicts that functional restructuring should be possible in gerunds. This prediction is borne out, as shown with the aspectual suffixes ‘start’ and ‘finish’ in (37a–37b), respectively:

¹²I assume again here that these nominalizations involve PossP, on the assumption that the agreement is in fact a form of agreement triggered by Poss, rather than T. Possessor agreement and verbal agreement are identical in almost all cases; I unfortunately do not have available the relevant data that might distinguish them. Note also that the case of the possessor is nominative/unmarked; the absence of case marking on the gerund’s subject is therefore not surprising. See e.g., Pires (2007) for tests distinguishing clausal gerunds (treated as TPs) from *poss-ing* nominalizations (see also Chomsky 1970, Abney 1987). Fieldwork/research is ongoing.

(37) Gerunds with restructuring

- a. [mé:hu šáwlamhu wagay-áŋa-gáŋa?] k-é?-i
 [boy girl 3.talk-APPL-start] 3-be-IND
 ‘The boy should start talking to the girl.’
 (Lit. ‘The boy’s starting to talk to the girl should be.’)
- b. [di-bamušé?eš-máma?] di-ga?lám-i
 [1-read-finish] 1/3-want-IND
 ‘I want to finish reading.’ (Lit. ‘I want my finishing to read.’)

Regarding lexical restructuring, the presence of VoiceP in gerunds likewise predicts agent sharing to be possible (barring semantic anomaly), leading to the availability of lexical restructuring in gerunds. I unfortunately do not have data to test this prediction at present, and so I must leave this question to future work.

4.2 Instrumental nominalizations

Another nominalization type for which restructuring remains to be tested are instrumental nominalizations, formed by the prefix *?it-* (38). As demonstrated through the availability of direct objects (38a), the causative morpheme (38a–38b), and reflexive marking (38b), such nominalizations target at least VoiceP.

(38) Instrumental nominalizations

- a. pú:t’e? ?it-yúli-ha
 fly INST-to.die-CAUS
 ‘fly swatter’ (Lit. ‘something to kill flies with’) Washo Archive
- b. ?it-gum-p’á?lu-šóšonj-ha
 INST-REFL-on.cheeks-be.red-CAUS
 ‘rouge’ (Lit. ‘something to make one’s cheeks red with’) Washo Archive

Due to the presence of VoiceP, it is predicted that lexical restructuring should be possible; functional restructuring is predicted to be allowed should it turn out that aspectual suffixes are also permitted. Here again I must test these predictions in future work. I note as well that an interesting case would be a type of nominalization with an intermediate size, smaller than VoiceP but larger than a root nominalization. I am unfortunately unaware of any such nominalizations in Washo, but this points to an open empirical question for cross-linguistic research.

5 Conclusion

Susi Wurmbrand's rich work over the years has opened to the door to many fascinating questions about the way that restructuring manifests cross-linguistically. While I have only scratched the surface of this topic, I hope to have demonstrated that examining the interaction between restructuring and nominalization cross-linguistically is a useful tool for understanding both of these constructions.

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Abbreviations

ACC	accusative	NM	clausal nominalizer
ATTR	attributive	NMLZ	nominalizer
APPL	applicative	PL	plural
CAUS	causative	PROG	progressive
DEP	dependent mood	PROSP	prospective aspect
DS	different subject (switch reference)	REC.PST	recent past
IN	intransitive	REFL	reflexive
INCL	inclusive	SS	same subject
IND	independent mood	STAT	static
INST	instrumental nominalizer	TR	transitive
NEG	negation	UN	unexpressed possessor agreement

References

- Abney, Steven Paul. 1987. *The English noun phrase in its sentential aspect*. Cambridge: Massachusetts Institute of Technology. (Doctoral dissertation).
- Alexiadou, Artemis. 2005. Gerund types, the present participle and patterns of derivation. In Claudia Maienborn & Angelika Wöllstein-Leisten (eds.), *Event arguments in syntax, semantics and discourse*, 139–152. Tübingen: Niemeyer.

- Alexiadou, Artemis, Elena Anagnostopoulou & Florian Schäfer. 2006. The properties of anticausatives cross-linguistically. In Mara Frascarelli (ed.), *Phases of interpretation*, 187–211. Berlin: Mouton de Gruyter.
- Alexiadou, Artemis & Florian Schäfer. 2008. Instrumental *-er* nominals revisited. In Kevin Ryan (ed.), *Online proceedings of the 27th west coast conference on formal linguistics*, 10–19. Cascadilla Press.
- Alexiadou, Artemis & Florian Schäfer. 2010. On the syntax of episodic vs. dispositional *-er* nominals. In *The syntax of nominalizations across languages and frameworks*, 9–38. de Gruyter.
- Arregi, Karlos & Emily A. Hanink. 2018. Switch reference in Washo as multiple subject agreement. In Sherry Hucklebridge & Max Nelson (eds.), *Proceedings of the North East Linguistic Society 48*, vol. 1, 39–48. Amherst, MA: GLSA Publications.
- Baker, Mark C. & Nadya Vinokurova. 2009. On agent nominalizations and why they are not like event nominalizations. *Language* 85(3). 517–556.
- Barker, Chris. 1998. Episodic *-ee* in English: A thematic role constraint on new word formation. *Language* 74(4). 695–727.
- Benz, Johanna. 2018. Affix order and the availability of phonological information. Poster presented at the 41st GLOW Conference, Budapest.
- Bochnak, M. Ryan. 2015a. Underspecified modality in Washo. In Natalie Weber & Sihwei Chen (eds.), *Proceedings of the workshop on structure and constituency in the languages of the Americas 18/19*, 1–17.
- Bochnak, M. Ryan. 2015b. Variable force modality in Washo. In Thuy Bui & Deniz Özyıldız (eds.), *Proceedings of North East Linguistic Society 45*, vol. 1, 105–114. Amherst: UMass Graduate Linguistics Student Association (GLSA).
- Bochnak, M. Ryan. 2016. Past time reference in a language with optional tense. *Linguistics and Philosophy* 39(4). 247–294.
- Bochnak, M. Ryan, Timothy Grinsell & Alan Yu. 2011. Copula agreement and the stage-level/individual-level distinction in Washo. In Meagan Louie & Alexis Black (eds.), *The proceedings of the 16th workshop on the structure and constituency in the languages of the Americas*. The University of British Columbia.
- Bowers, John. 2002. Transitivity. *Linguistic Inquiry* 33(2). 183–224.
- Campbell, Lyle. 1997. *American Indian languages: The historical linguistics of Native America*. Oxford University Press.
- Chomsky, Noam. 1970. Remarks on nominalization. In Roderick A. Jacobs & Peter S. Rosenbaum (eds.), *Readings in English transformational grammar*, 84–221. Ginn.

- Cinque, Guglielmo. 2001. "Restructuring" and functional structure. In Laura Brugè (ed.), *University of Venice Working Papers in Linguistics*, 45–127. Venice: University of Venice.
- Cinque, Guglielmo. 2004. "Restructuring" and functional structure. In Adriana Belletti (ed.), *Structures and beyond: The cartography of syntactic structures*, 132–191. Oxford: Oxford University Press.
- Folli, Raffaella & Heidi Harley. 2005. Flavors of *v*. In Paula Kempchinsky & Roumyana Slabakova (eds.), *Aspectual inquiries* (Studies in Natural Language and Linguistic Theory), 95–120. Dordrecht: Springer.
- Grano, Thomas. 2012. *Control and restructuring at the syntax-semantics interface*. University of Chicago. (Doctoral dissertation).
- Hanink, Emily A. 2020. Subject nominalizations and possessor agreement in Washo. Handout from the 43rd GLOW conference, Special workshop on Remarks: The legacy. HU Berlin (virtual).
- Hanink, Emily A. & M. Ryan Bochnak. 2018. Factivity and two types of embedded clauses in Washo. In A. Lamont & K. Tetzlof (eds.), *Proceedings of the North East Linguistic Society* 47, 65–78. GLSA Publications.
- Harley, Heidi. 2009. The morphology of nominalizations and the syntax of *vP*. In Monika Rathert & Anastasia Giannankidou (eds.), *Quantification, definiteness and nominalization*, 320–342. Oxford: Oxford University Press.
- Hovav, Malka Rappaport & Beth Levin. 1992. *-er* nominals: Implications for a theory of argument structure. In Timothy Stowell & Eric Wehrli (eds.), *Syntax and the lexicon*, vol. 26 (Syntax and Semantics), 127–153. Academic Press.
- Jacobsen, William. 1964. *A grammar of the Washo language*. UC Berkeley. (Doctoral dissertation).
- Jacobsen, William. 1973. A rhythmic principle in Washo morphotactics. Paper presented at the Symposium on California Indian linguistics, Southwestern Anthropological Association, San Francisco.
- Jacobsen, William. 1979. Why does Washo lack a passive? In Frans Plank (ed.), *Ergativity: Towards a theory of grammatical relations*. London: Academic Press.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In Johan Rooryck & Laurie Zaring (eds.), *Phrase structure and the lexicon*, 109–137. Dordrecht: Kluwer Academic Publishers.
- Landau, Idan. 2000. *Elements of control: Structure and meaning in infinitival constructions* (Studies in Natural Language and Linguistic Theory). Kluwer Academic Publishers.
- Marantz, Alec. 2001. Words and things. Handout, MIT.

- Marantz, Alec. 2008. Phases and words. In Sook-Hee Choe, Yang-Soon Kim, Sung-Hun Kim & Alec Marantz (eds.), *Phases in the theory of grammar*, 191–220. Seoul: Dong In Publisher.
- Mithun, Marianne. 1999. *The languages of North America*. New York: Cambridge University Press.
- Pesetsky, David & Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In Simin Karimi, Vida Samiian & Wendy K. Wilkins (eds.), *Phrasal and clausal architecture*, 262–294. Amsterdam: John Benjamins.
- Pires, Acrisio. 2007. The derivation of clausal gerunds. *Syntax* 10.2. 165–203.
- Shimamura, Koji & Susi Wurmbrand. 2014. Two types of restructuring in Japanese: Evidence from scope and binding. In Shigeto Kawahara & Mika Igarashi (eds.), *Proceedings of FAJL 7: Formal approaches to Japanese linguistics*, 203–214. MIT Working Papers in Linguistics.
- Wurmbrand, Susi. 2001. *Infinitives: Restructuring and clause structure* (Studies in Generative Grammar [SGG] 55). Berlin/New York: De Gruyter Mouton.
- Wurmbrand, Susi. 2004. Two types of restructuring: Lexical vs functional. *Lingua* 114(8). 991–1014.
- Wurmbrand, Susi. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45. 403–447.
- Wurmbrand, Susi. 2015. Restructuring cross-linguistically. In Thuy Bui & Deniz Özyıldız (eds.), *Proceedings of the 45th meeting of North Eastern Linguistics Society*, 227–240. Amherst: University of Massachusetts, GLSA.
- Wurmbrand, Susi & Koji Shimamura. 2017. The features of the voice domain: Actives, passives, and restructuring. In Roberta D'Alessandro, Irene Franco & Ángel Gallego (eds.), *The verbal domain*, 179–204. Oxford: Oxford University Press.
- Yu, Alan C. L. 2005. Quantity, stress, and reduplication in Washo. *Phonology* 22(3). 437–475.
- Yu, Alan C. L. 2012. Two patterns of reduplication in Washo. In Sarah Berson et al. (ed.), *The proceedings of the 34th annual meeting of the Berkeley Linguistics Society*, 341–352. Berkeley, CA: Berkeley Linguistics Society.

