# Nominal head-marking constructions: two case studies from Luiseño

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## 1 Introduction

From the view point of Nichols' (1986) seminal typological study, most work in formal syntax has concentrated on dependent-marking constructions.[1] This kind of construction is illustrated in (1) from Swedish in which the difference in subject vs. object role is expressed exclusively on the dependent nominals while the verb itself does not reflect those dependents.

(1) *Swedish*

a. **Jag** hörde **dem**.
I heard them

b. **De** hörde **mig**.
they heard me

Relatively less work has been done on head-marking constructions of the kind illustrated in (2) from Lakhota (Valin 2001:98). Here the dependents are recorded on the head verb as affixes (in particular, infixes) but the nominal dependents themselves bear no case marking.

(2) *Lakhota*

a. [Miyé]$_i$ [mathó ki hená]$_j$ na-**wíčha**$_j$-**wa**$_i$-xʔų.
1SG bear the those stem-3PL.OBJ-1SG.SUBJ-hear
'I heard those bears.'

b. [Mathó ki hená]$_i$ [miyé]$_j$ na-**má**$_j$-∅$_i$-xʔų.
bear the those 1SG stem-1SG.OBJ-3PL.SUBJ-hear
'Those bears heard me.'

As is common in such constructions, the verb does not require any accompanying phrasal material for a clause to count as saturated. If left unexpressed, the dependents are understood pronominally, as illustrated in (3).

(3) a. Na-**wíčha-wa**-xʔų.
stem-3PL.OBJ-1SG.SUBJ-hear
'I heard them.'

b. Na-**má**$_j$-∅$_i$-xʔų.
stem-1SG.OBJ-3PL.SUBJ-hear
'They heard me.'

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Nichols' distinction does not apply categorically to languages, but instead expresses tendencies. For instance, English employs mostly dependent-marking constructions as illustrated by the possessive construction in (4):

(4) Angela-'s ashes
**dependent**-POSS **head**

Yet English exhibits one phenomenon with head-marking features, namely subject-verb agreement, in which properties of the subject are recorded on the head verb.

In this paper I will investigate two instances of head-marking constructions with nominal heads, which, as far as I am aware, have not received any attention within HPSG.

## 2 Luiseño

The constructions in question are all drawn from Luiseño, an almost extinct Uto-Aztecan language of the Takic branch from the San Diego county area. Like other Uto-Aztecan languages, it exhibits many properties of dependent marking features. For instance, as in English, dependents of a verb are distinguished by means of different case morphology and not on the verb by means of affixes. The example in (5) illustrates the use of nominative vs. accusative case marking on the two dependents of a transitive verb:

(5) a. Heŋéémal nawítmal-um-**i** chaqálaqiquṣ.
boy girl-PL-ACC tickled.
'The boy tickled the girls.'

b. Nawítmal-um heŋéémal-**i** chaqálaqiquṣ.
girl-PL boy-ACC tickled.
'The girls tickled the boy.'

### 2.1 Case

Nominals may distinguish up to six case forms, as shown in (6), from Elliott (1999:21). Aside from the familiar nominative and accusative cases, there are also the oblique cases illative, ablative, locative, and instrumental. Number is generally distinguished in the nonoblique cases, but it is not distinguished among the oblique case forms.[2]

(6)

| | Singular | Plural | Gloss |
|---|---|---|---|
| Nominative | píívanla-sh | píívanla-ch-um | 'sling/slings' |
| Accusative | píívanla-sh | píívanla-sh-m-i | 'sling/slings' |
| Illative | píívanla-yk | | 'to the sling(s)' |
| Ablative | píívanla-ŋay | | 'from the sling(s)' |
| Locative | píívanla-ŋa | | 'at/near the sling(s)' |
| Instrumental | píívanla-tal | | 'with the sling(s)' |

While a rich case system is a typical feature of predominantly dependent-marking languages, Luiseño is strongly head-marking in the expression of possession relations, to which I turn next.

[2]The syncretism between singular nominative and accusative forms is limited to this particular declension of inanimate nouns.

## 2.2 Possessive constructions

Possession is marked directly on the possessed noun by means of a prefix.[3] This is illustrated in (7) for the noun *píívanla* ('sling') and a third person singular possessor.

(7)

| | Singular | Plural | Gloss |
|---|---|---|---|
| Nominative | po-píívanla | po-píívanla-m | 'his/her sling/slings |
| Accusative | po-píívanla-y | po-píívanla-m-i | 'his/her sling/slings |
| Illative | po-píívanla-yk | | 'to his/her sling(s)' |
| Ablative | po-píívanla-ŋay | | 'from his/her sling(s)' |
| Locative | po-píívanla-ŋa | | 'at/near his/her sling(s)' |
| Instrumental | po-píívanla-tal | | 'with his/her sling(s)' |

If possessive-marked nominals occur by themselves, the possessor is understood pronominally, i.e., it must be recoverable from context and/or discourse. Thus, *po-píívanla* by itself means 'his/her sling', where the identity of the possessor is assumed to be known to the speech participants.

The possessor can also be given overtly. In this case, the possessor nominal occurs in nominative case and is usually placed before the possessed noun. The possessor prefix on the head noun has to agree in number and person with the possessor NP, cf. (8):

(8) a. hengéémal$_i$ **po**$_i$-na$_j$
boy 3SG-father
'the boy's father'

b. hengéémal-um$_i$ **pom**$_i$-na$_j$
boys-PL 3PL-father
'the boys' father'

An interesting issue for an analysis from an HPSG-based perspective is to what extent the framework already provides the descriptive means necessary to adequately account for nominal head-marking constructions. Because of the rich morphological system of Luiseño nominals, particular attention will have to be given to the organization of lexical information.

## 2.3 A formal analysis

There are at least two issues that a formal approach to Luiseño possessive constructions has to address. First, what is the relation between the possessor prefix and nominal stem, and second, what is the relation between a possessed noun and an overt possessor?

### 2.3.1 Possessed nouns

As an answer to the first question I propose an analysis that is quite similar to the ones that are familiar from the recent HPSG literature on inflectional morphology (e.g., Sag & Wasow 1999). In particular, I will exploit the distinction between lexemes and words. At the most basic level, a common noun is described as a lexeme, as for instance in (9) for the noun *píívanla*:

[3] In possessed nouns the stem final ("absolutive") morpheme (here: *-sh* and its phonologically conditioned allomorph *-ch*) is usually dropped in the nonoblique cases. As noted by Hyde (1971:73), a number of nouns replace the absolutive morpheme with invariant *-ki* in all possessed forms, including the oblique forms. Since this complication seems entirely morphological rather than syntactic, I will ignore it here.

(9) *píívanla* (‘sling’)

$$\begin{bmatrix} \textit{lexeme} \\ \ldots \mid \text{HEAD } \textit{noun} \\ \ldots \mid \text{CONTENT} \begin{bmatrix} \text{IND } \boxed{1} \\ \text{RESTR } \left\langle \begin{bmatrix} \textit{sling} \\ \text{INST } \boxed{1} \end{bmatrix} \right\rangle \end{bmatrix} \end{bmatrix}$$

A lexeme does not carry information pertaining to its inflectional features or possession status. Information of this kind is “added” by means of various morphological mappings, expressed in HPSG as lexical rules or as word-formation schemata. If we assume lexical rules for expository convenience, a word such as *píívanla-yk* (‘to the sling’) can be described as derived from the stem *píívanla* by means of the illative lexical rule given in (10b). Note in particular that I assume here that the illative case form is semantically potent, i.e., that the illative case contributes a spatial between the noun in question with some other entity, given as “$\boxed{4}$” below. In this I borrow freely from Pollard’s (1999) work on locational prepositions.

(10) *Illative lexical rule*

a.

| | *lexeme* | $\Rightarrow$ | *word* |
|---|---|---|---|
| e.g.: | píívanla | | píívanla-yk |
| | ‘sling’ | | ‘to the sling’ |

b.

$$\begin{bmatrix} \textit{lexeme} \\ \text{PHON } \boxed{1} \\ \ldots \mid \text{HEAD } \textit{noun} \\ \ldots \mid \text{CONT} \begin{bmatrix} \text{IND } \boxed{2} \\ \text{RESTR } \boxed{3} \end{bmatrix} \\ \ldots \mid \text{COXT } \{\textit{inanimate}(\boxed{2})\} \end{bmatrix}$$

$$\Downarrow$$

$$\begin{bmatrix} \textit{word} \\ \text{PHON } F_{ill}(\boxed{1}) \\ \ldots \mid \text{HEAD} \begin{bmatrix} \textit{noun} \\ \text{AGR} \mid \text{CASE } \textit{ill} \end{bmatrix} \\ \ldots \mid \text{CONT} \begin{bmatrix} \text{IND } \boxed{2} \\ \text{RESTR } \boxed{3} \cup \left\langle \begin{bmatrix} \textit{to} \\ \text{ENTITY } \boxed{2} \\ \text{REGION } \boxed{2'} \end{bmatrix}, \begin{bmatrix} \textit{located-at} \\ \text{LOCATED-ENTITY } \boxed{4} \\ \text{LOCATION } \boxed{2'} \end{bmatrix} \right\rangle \end{bmatrix} \end{bmatrix}$$

Finally, the illative lexical rule is restricted to apply only to inanimate nouns. The significance of this restriction will become apparent below in Section 3.2.

Turning now to possessed nouns, I assume that the addition of the possessor prefix is the result of another lexical mapping, but this time one that relates a lexeme to another lexeme. I list the relations in schematic form in (11a), and spell out a preliminary version of the lexical rule in more detail in (11b).

(11) *Possessive lexical rule (preliminary version)*

a.

| | | | |
|---|---|---|---|
| | *lexeme* | ⇒ | *lexeme* |
| e.g.: | píivanla | | po-píivanla |
| | 'sling' | | 'his/her sling' |

b.

$$\begin{bmatrix} \textit{lexeme} \\ \text{PHON } \boxed{1} \\ \ldots \mid \text{HEAD } \textit{noun} \\ \ldots \mid \text{CONT } \begin{bmatrix} \text{IND } \boxed{2} \\ \text{RESTR } \boxed{3} \end{bmatrix} \end{bmatrix}$$

$$\Downarrow$$

$$\begin{bmatrix} \textit{lexeme} \\ \text{PHON } F_{poss}(\boxed{1}, \boxed{4}) \\ \ldots \mid \text{ARG-ST } \left\langle \text{NP}[\textit{nom}]_{\boxed{4}} \right\rangle \\ \ldots \mid \text{CONT } \begin{bmatrix} \text{IND } \boxed{2} \\ \text{RESTR } \boxed{3} \cup \left\langle \begin{bmatrix} \textit{possession} \\ \text{POSSESSOR } \boxed{4} \\ \text{POSSESSED } \boxed{2} \end{bmatrix} \right\rangle \end{bmatrix} \end{bmatrix}$$

If a noun lexeme is marked for possession, the correlated semantic contribution relates the possessee noun and the index of a possessor, given here as "$\boxed{4}$". The possessor noun is also marked as a syntactic dependent by virtue of being represented on the possessee's ARG-ST list. Finally, the person and number features of the possessor index then give rise to the paradigm of possession marking listed in (12) via the morphological spellout function $F_{poss}$:

(12) *Paradigm of possessive marking ($F_{poss}$)*

| | singular | plural |
|---|---|---|
| 1st person | **no**-píivanla | **cham**-píivanla |
| 2nd person | **o**-píivanla | **om**-píivanla |
| 3rd person | **po**-píivanla | **pom**-píivanla |

Given the two lexical mappings above, a case-inflected possessed noun such as *po-píivanla-yk* ('to his/her sling(s)') can be understood as the result of two mappings, first one that adds possession to a lexeme and second one that turns a lexeme into a case-inflected word. This is outlined in (13):

(13)

| | | $\overset{(11b)}{\Rightarrow}$ | | $\overset{(10b)}{\Rightarrow}$ | |
|---|---|---|---|---|---|
| | *lexeme* | | *lexeme* | | *word* |
| e.g.: | píivanla | | po-píivanla | | po-píivanla-yk |
| | 'sling' | | 'his/her sling' | | 'to his/her sling' |

### 2.3.2 Locality of possessors

In English possessive constructions, the possessor phrase is in effect encapsulated and cannot enter into grammatical relations outside of the phrase in which it occurs. There is reason to believe that this strict locality is not observed in the corresponding Luiseño constructions. As is argued by Steele (1990:21), the predicative possession construction in (14) involves two separate

dependents of the verb, a possessor phrase (here: *noo*) and a possessed phrase (here: *páhchum no-ṣwáámayum*):[4]

(14) **Noo** mil [páhchum **no**-ṣwáámayum] qálquṣ.
1SG AUX three 1SG-daughters was.sitting
'I had three daughters.'

Crucially, the possessor phrase agrees with the possessed phrase in number and person. This seems to suggest that the internal possessor marking on the possessed phrase must be information that is accessible outside of that phrase. In (11b) the possessor argument is recorded on the ARG-ST list of the possessed head. If ARG-ST is taken to be information that is only recorded on lexical items, then it is not entirely clear how the requisite linkage can be achieved. If, on the other hand, ARG-ST—or at least the least oblique element on that list—is projected to the phrasal level, then these facts can straightforwardly be accounted for.

The second question raised above, which was not addressed in the possessive rule in (11b) is the status of overtly expressed possessor phrases. This is issue is taken up next in Section 2.3.3.[5]

### 2.3.3 Overt possessors

As was mentioned earlier in (8), repeated here, when a possessor is given overtly, it occurs before the possessive-marked noun.

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[4]As evidence for the two-argument claim, Steele presents data from different placement options of second-position auxiliary particle clitics. These can generally occur after the first phrase, either within NP or at the clause level (p. 21):

(i) a. Xwaan upil po-ṣwáámay héélaquṣ.
Juan AUX 3SG-daughter was.singing
'Juan's daughter was singing.'

b. Xwaan po-ṣwáámay upil héélaquṣ.
Juan 3SG-daughter AUX was.singing
'Juan's daughter was singing.'

As (ii) shows, these clitics cannot occur after a sequence of the possessor and the possession-marked nominal, which argues against their constituent status:

(ii) a. *Noo páhchum **no**-ṣwáámayum mil qálquṣ.
1SG three 1SG-daughters AUX was.sitting

b. *Noo **no**-ṣwáámay upil 'áw'quṣ.
1SG 1SG-daughter AUX was.sitting

[5]Steele (1990:167) reports that the order between possessor and possessee can be reversed so long as the two occur adjacent:

(i) a. heŋéémal po-taana yuvataat
boy 3SG-blanket black
'the boy's black blanket'

b. po-taana heŋéémal yuvataat
3SG-blanket boy black

c. ?po-taana yuvataat heŋéémal
3SG-blanket black boy

For the purposes of this paper, I will ignore issues arising from order variation.

(8) a. hengéémal$_i$ **po**$_i$-na$_j$
boy 3SG-father
'the boy's father'

b. hengéémal-um$_i$ **pom**$_i$-na$_j$
boys-PL 3PL-father
'the boys' father'

In these constructions the possessive NP must occur in nominative case.

What then, is the syntactic relation between overt possessors and possessed nouns? The most straightforward account, which I will adopt here, is to assume that they are specifiers. If we follow this proposal then the output description of the possessive rule in (11b) should be augmented as shown in (15):

(15) *Revised output of possessive lexical rule*

$$\left[\begin{array}{l} \textit{lexeme} \\ \text{PHON } F_{poss}(\boxed{1},\boxed{4}) \\ \ldots \mid \text{ARG-ST } \left\langle \boxed{6}\text{NP}[\textit{nom}]_{\boxed{4}}\text{:}\boxed{5} \right\rangle \\ \ldots \mid \text{CONT } \left[\begin{array}{l} \text{IND } \boxed{2} \\ \text{RESTR } \boxed{3} \cup \left\langle \left[\begin{array}{l} \textit{possession} \\ \text{POSSESSOR } \boxed{4} \\ \text{POSSESSED } \boxed{2} \end{array}\right] \right\rangle \end{array}\right] \\ \boxed{\ldots \mid \text{SPR } \boxed{3}\langle(\boxed{6})\rangle} \end{array}\right]$$

Where: $\boxed{5} ppro$ if $\boxed{3} = \langle\rangle$

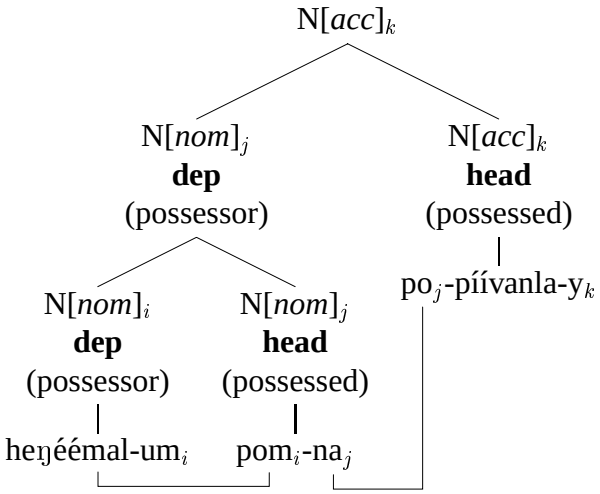
Because of structure sharing, the index of the possessor ($\boxed{4}$) in the possession relation is identical to the index of the nominative specifier. Since possessed nouns never have to occur with an overt possessor, the specifier requirement is optional, notated by means of parentheses. Conversely, if there is no overt possessor phrase, the possessor is interpreted pronominally. This can be modeled by assuming that the content of the possessor is of type *ppro*. The referential identity of such nominals must be contextually retrievable, i.e., they are interpreted definitely.

### 2.4 Concequences

The proposed analysis has a number of desirable consequences. First, it straightforwardly allows for recursion of possessive relations, as shown in (16):

(16) a. heŋéémal-um$_i$ pom$_i$-na$_j$ po$_j$-píivanla-y$_k$
boy-PL 3PL-father 3SG-sling-ACC
'the boys' father's sling (acc)'

b.




Here the head of the construction—and rightmost possessed noun (*po-píivanla-y*)—agrees in number with the preceding possessor phrase (*heŋéémal-um pom-na*). Internal to that phrase, the possessee *pom-na* agrees in number and person with its plural possessor (*heŋéémal-um*). Note also the distribution of case. The highest head (*po-píivanla-y*) is eligible to occur in any case, here accusative. All other nominals must exhibit nominative case. This is either because they head a possessive phrase (as *pom-na*) or because they are themselves a possessive phrase (*heŋéémal-um*).

Further, the case marking and possessive rules in (10b) and (11b), respectively, make proper predictions with respect to possible agreement relations within the noun phrase. Following Kathol (1999), I assume that only those features explicitly listed under AGR are eligible for morphological covariation within the NP. While case is listed as a head feature (via (10b)), possession is not. This means that adjectives may only agree with possessed nouns in case (and number) (cf. (17a,b)), but not in possession (cf. (17c)):

(17) a. ya'ásh po-ṣwáámay-**um** yawáywich-**um**
man 3SG-daughter-PL beautiful-PL
'the man's beautiful daughters'

b. ya'ásh po-ṣwáámay-**um-i** yawáywich-**um-i**
man 3SG-daughter-PL-ACC beautiful-PL-ACC
'the man's beautiful daughters (acc)'

c.*ya'ásh **po**-ṣwáámay-**um-i** **po**-yawáywich-**um-i**
man 3SG-daughter-PL-ACC 3SG-beautiful-PL-ACC

In possession constructions it is relatively straightforward to ascertain which element is the head and which one the dependent. We will see next in Section 3 that the formal analysis developed here carries over with almost no modification to another class of constructions where the head–dependent distinction is somewhat less clear.

## 3 Oblique case constructions

A second environment for nominal specifier-head constructions arises because of a general constraint against oblique case marking on animate nouns. Thus, while (18a) lists the expected morphological form for 'to the girl', this form is actually unavailable.[6] Instead, a periphrastic construction has to be chosen in which the nominal occurs with an inflected pronoun (*po-yk*), as shown in (18b):[7]

(18) a.*nawítmal-ik
girl-ILL

b. nawítmal$_i$ po$_i$-yk
girl 3SG-ILL
'to the girl'

On the surface, this construction looks different from the possessive cases discussed earlier. In particular, it involves only one referential argument, as opposed to two. Also, it appears that in this construction, what looks like a possessive prefix (*po-*) should actually be considered the pronominal head of the word with *-ik/yk* as the illative case ending, as illustrated in (19):

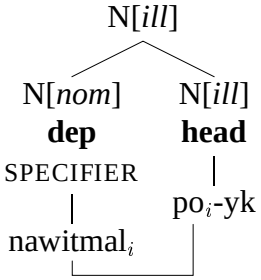
(19) a. *Possession*
po$_i$ -píívanla$_j$
POSS **head**

b. *Inflected pronoun*
po$_i$ -yk
**head** CASE

### 3.1 Similarities with possessed noun constructions

Despite these differences, however, it seems that periphrastic oblique case marking of the kind in (18b) is an instance of the same general phenomenon as overt possessor constructions. This entails treating the inflected pronoun as the head and the preceding phrase as its dependent, in particular as the specifier, as shown in (20).

(20)




Support for this proposal comes from the fact that parallel to possessive constructions, the pronominal head has to match the number and person properties of the dependent noun phrase, as illustrated in (21):

[6] This constraint was captured in (10b) by restricting application of the illative case lexical rule to inanimate nouns.
[7] *-ik* and *-yk* are phonologically conditioned allomorphs.

(21) a. nawítmal **po**-yk
girl.SG 3SG-ILL
'to the girl'

b. nawítmal-**um pom**-ik
girl-PL 3PL-ILL
'to the girls'

Next, as before, the dependent has to occur in the nominative case which in turn is also responsible for the lack of oblique case marking on agreeing adjectives, as shown in (22):

(22) a. nawítmal yawáywish po-yk
girl beautiful 3SG-ILL
'to the beautiful girl'

b.*nawítmal yawáywich-**ik** po-yk
girl beautiful-ILL 3SG-ILL

It is important to note here that the lack of case agreement is not an intrinsic property of adjectives. As is shown in (23), adjectives may exhibit oblique case forms if and only if the modified noun does. An inanimate noun such as *tóóta* ('rock') has oblique case forms, hence an accompanying adjective exhibits the same case marking.

(23) tóó-**yk** yuváátaan-**ik**
rock-ILL black-ILL
'to the black rock(s)'

### 3.2 A formal analysis

Turning now to the formal treatment of oblique pronoun constructions, I assume that at their heart lies a lexical relation that maps pronoun lexemes onto fully case-inflected words. The details of this mapping are given in (24b):

(24) *Case inflection on pronouns (illative)*

a.

| | *lexeme* | ⇒ | *word* |
|---|---|---|---|
| e.g.: | po | | po-yk |
| | 'he/she' | | 'to him/her' |

b.

$$\begin{bmatrix} \textit{lexeme} \\ \text{PHON } \boxed{1} \\ \ldots \mid \text{HEAD } \textit{pronoun} \\ \ldots \mid \text{CONT } \begin{bmatrix} \text{IND } \boxed{2} \\ \text{RESTR } \boxed{3} \end{bmatrix} \end{bmatrix}$$

$$\Downarrow$$

$$\begin{bmatrix} \textit{word} \\ \text{PHON } F_{ill}(\boxed{1}) \\ \ldots \mid \text{HEAD } \begin{bmatrix} \textit{pronoun} \\ \text{AGR} \mid \text{CASE } \textit{ill} \end{bmatrix} \\ \ldots \mid \text{ARG-ST } \left\langle \boxed{6}\text{NP}[\textit{nom, anim}]_{\boxed{2}}\text{:}\boxed{5} \right\rangle \\ \ldots \mid \text{SPR } \boxed{3}\langle(\boxed{6})\rangle \\ \ldots \mid \text{CONT } \begin{bmatrix} \text{IND } \boxed{2} \\ \text{RESTR } \boxed{3} \cup \left\langle \begin{bmatrix} \textit{to} \\ \text{ENTITY } \boxed{2} \\ \text{REGION } \boxed{2'} \end{bmatrix}, \begin{bmatrix} \textit{located-at} \\ \text{LOCATED-ENTITY } \boxed{4} \\ \text{LOCATION } \boxed{2'} \end{bmatrix} \right\rangle \end{bmatrix} \end{bmatrix}$$

Where: $\boxed{5} ppro$ if $\boxed{3} = \langle\rangle$

The lexical rule in (24b) is very similar to the one that is responsible for oblique case markings on common nouns seen earlier in (10b). In particular, it accounts for the morphological form and it adds a locational semantics to the head. At the same time, however, it also shares a number of features of the possessive lexical rule in (11b) and (15). Most significant is the fact that case-inflected pronouns license an optional coreferential specifier as a dependent. That dependent is required to be animate. As a result, periphrastic oblique case marking with inanimate nouns, such as in (25), is ruled out and the grammar forces the expression of case on inanimate nouns directly, as in (23) above.

(25) *tóóta po-**yk**
rock.NOM 3SG-ILL

Finally, if that dependent is not realized overtly, then as before, it is understood pronominally and hence receives definite interpretation.

### 3.3 Summary

To summarize, Luiseño utilizes the same basic syntactic structure, i.e., head-specifier constructions, for the expression of dependents of two head-marking constructions. In the possessive cases, the distribution of arguments is similar to the ones in English, except that it is the head, rather than the dependent that records the possession relation. Head-marking appears to be responsible for the fact that the possessor is optional. The seccond case, that of periphrastic oblique nouns, does not have a close correlate in English. In order to comply with the restriction against oblique case marking on animate nouns, pronouns are pressed into service as honorary heads, rendering referential NPs as quasi-dependents. Thus, a piece of syntax is coopted for the expression of oblique case marking due to a need that arises from morphology. As the formal analysis has shown, HPSG offers sufficient descriptive machinery to account for various kinds of nominal head-marking structures and state the similarities and differences among them.

In my concluding remarks, I'd like to address some larger issues that the current work intersects with.

## 4 Concluding remarks

In recent years there has been a rather lively debate, mostly in the transformational literature, on the proper analysis of so-called non-configurational languages. This term typically is used to refer to languages with relatively free word order among the clause-level dependents and rampant optionality in their phonological realization.[8] One popular proposal has been Jelinek's (1984) "pronominal argument hypothesis". This is the idea that the "true" arguments of verbs are the affixes, while the full NPs in the clause are related to the head not as arguments but as adjuncts.

While the notion of head marking is strictly speaking distinct from that of nonconfigurationality (if this term should in fact be granted any theoretical status at all), there nevertheless is a significant amount of overlap. Nonconfigurational properties tend to arise in languages with elaborate head-marking—which does not rule out dependent-marking (i.e., case inflection) as well. In fact, Jelinek's proposal can be seen as a way of deriving nonconfigurational properties by treating head-marking in those languages as a syntactic, rather than morphological phenomenon.

In the context of a lexicalist theory such as HPSG, Jelinek's pronominal argument hypothesis does not seem very attractive,[9] at least as far as the nominal constructions under discussion are concerned. If the nominative NPs preceding possessed nouns or case-marked pronouns have adjunct status, then one would expect them to have modificational semantics. Instead, their referents are simply identified with the argument positions that the head makes available. But this process does not appear radically different from what happens, say, in English subject-predicate constructions. Moreover, the pronominal interpretation of arguments that have no fully phrasal realization appears rather similar in nature to the interpretation of pro-drop constructions, for instance in Italian.

The picture that emerges then is that we can avoid a purely syntacto-centric approach to nonconfigurationality if greater emphasis is given to the role of morphology. Specifically, starting out with the lexematic information, morphology makes argument positions available while syntax fills them by means of valence features; alternatively syntax does not provide referential role fillers and the interpretation of the arguments becomes pronominal.

Future research will have to show whether this view carries over successfully to the description of nonconfigurational properties in verb-centered constructions, in particular those that have been attributed to the putative adjunct-like status of full nominal expressions.

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[8] Another property of nonconfigurational languages is the possibility of discontinuous constituents, which I will ignore for now.

[9] See also Austin & Bresnan 1996 for related critical discussion of the validity of PAH for Australian languages.

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