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When the alienability contrast fails to surface in adnominal possession: bound nouns in Harakmbut

Abstract: This article investigates the nature and behavior of independent, bound and deverbal nouns at various levels of linguistic organization in Harakmbut (isolate, Peru), and assesses the explanatory potential of the alienability contrast for the data observed. While the distinction between bound and independent nouns is to a great extent motivated by the conceptual distinction between inalienably and alienably possessed items, the behavior of bound and independent nouns in adnominal possession is not. Whereas independent (and deverbal) nouns use a genitive-marked two-word construction, bound nouns can use the same one, when keeping their noun prefix, or they can use a genitive-marked one-word construction, in which they drop their prefix. It is thus argued that there is no alienability split in adnominal possession, that is, there is no coding split according to which bound nouns behave fully differently from independent nouns. This is supported by the finding that bound nouns (unlike independent and deverbal ones) also show the same choice between a two-word and a one-word coding strategy in non-possessive adnominal modification. In noun-noun compounding, the data merely reveal different preferences of bound and independent nouns for the N1 versus N2 position; here deverbal nouns behave identically to bound nouns in dropping their prefix in N2. In noun incorporation, finally, the relevance of the alienability contrast is similar to that for the two-way noun class system. Inalienable semantics (and morphological boundness) could be argued to determine the incorporability of nouns, but there are also exceptions.

Keywords: coding split; genitive marking; noun classes; noun-noun compounding; noun incorporation

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1 Introduction

This article investigates to what extent the notion of alienability can account for the distinct behavior of classes of nouns in the underdescribed language Harakmbut, more precisely the Arakmbut (Amarakaeri) dialect (glotto-code amar1274),[1] spoken in south-east Peru (departamentos of Madre de Dios and Cusco). Harakmbut is still regarded as an unclassified Amazonian language (Wise 1999: 307; Dryer and Haspelmath 2013), although Adelaar (2000, 2007) has made a case for a genetic link with the Brazilian Katukina family, which may be further linked to Macro-Jê. More information on its genetic affiliation, internal classification, vitality and sociolinguistic context is presented in Van linden (2023: 441–444).

   The notion of alienability entered the linguistic scene in the early twentieth century in the context of studies on possession. It was proposed to explain patterns of distinct morphosyntactic marking, or coding splits, in the grammatical environment of adnominal possession, e.g., in Melanesian languages (Lévy-Bruhl 1914) and North American languages (see Nichols 1988), and to account for restrictions in terms of possessee types in the grammatical environment of external possession in Indo-European languages (e.g., Bally 1926). These phenomena were explained in terms of the conceptual difference between inalienable and alienable possession: the former involves "inextricable, essential or unchangeable relations" between possessor and possessee, while the latter involves associations between possessor and possessee that are of a less permanent and inherent type (Chappell and McGregor 1996: 4). Prototypical possessees of the former type include body-part terms and kinship terms, while those of the latter type comprise artifacts. Within adnominal possession, then, the observed pattern is that inalienable possession is typically coded with less "morphosyntactic material" than alienable possession (Payne 1997: 105; see also Haspelmath 2017). Rather than viewing the alienability contrast as a semantic explanation for coding splits, Nichols (1988) proposed regarding it as a formal contrast at work on two different levels of linguistic organization: at the word level, yielding two different noun classes (inalienable vs. alienable nouns), and at the phrase level, yielding two different adnominal possessive constructions, with the inalienable construction featuring less morphosyntactic marking than the alienable one. This article will investigate the explanatory potential of each interpretation of

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1 Speakers of this variety consider the label *Amarakaeri* a depreciating term; it is adapted from *wa-mba-arak-a-eri* (NMLZ-VPL-kill-TRNS-AN), a verb-based nominalization meaning '(fierce) killer/murderer', which goes back to an ancient story about the origin of the different ethnolinguistic groups of the Harakmbut people. They prefer to call their variety 'Arak(m)but', as distinct from the Watipaeri variety, with whose speakers they generally have tensed relations.

the alienability contrast in examining the class of bound nouns in Harakmbut, and their morphosyntactic behavior in different grammatical environments.

The starting point of this article is indeed the morphological distinction between independent and bound nouns in Harakmbut. Unlike independent nouns, as in (1a), bound nouns require a noun prefix to obtain independent nominal status (*wa(ʔ)-* or *e(ʔ)-*), as in (2a), and mainly refer to inalienably possessed entities, such as body parts, plant parts, and landscape parts, as well as kinship terms and basic shapes or qualities of entities. These two noun classes are sometimes called non-obligatorily versus obligatorily possessed nouns, or alienable versus inalienable nouns, and they are ubiquitous in Amazonian languages (Krasnoukhova 2012: 87–88). Considering the two adnominal possessive constructions in the Harakmbut Examples (1b) and (2b), one may conclude that the distinct morphosyntactic patterning exhibited by members of the two noun classes can be explained in terms of the alienability contrast.

(1)   Independent noun
     a.   *kõsõ*
        pot
        'pot'
     b.   *ndoʔ-edn   kõsõ*
        1SG-GEN   pot
        'my pot'

(2)   Bound noun
     a.   *wa-ʔi*
        NPF-foot
        'foot'
     b.   *ndoʔ-edn-ʔi*
        1SG-GEN-foot
        'my foot'

The pattern with the bound noun in (2b) shows a tighter morphosyntactic bond between the genitive-marked possessor and possessee – in fact, the two form a single phonological unit – than the two-word pattern with the independent noun in (1b). The examples are representative of their respective noun classes in patterns with human possessors, and might thus trick the analyst into thinking that Harakmbut has an alienability split. However, it will turn out that bound nouns can also enter the two-word possessive construction shown in (1b) when they take their noun prefix, and that some bound nouns (e.g., some kin terms) do not enter the one-word possessive construction. In such cases, then, the two noun classes use the same possessive construction. As observed by Krasnoukhova (2012: 87–88), this is very common among Amazonian languages having a class of inalienable nouns. She found that such languages even more often use the same construction with inalienable and

alienable nouns (22 out of 41 languages) than a different construction (18 out of 41 languages; Krasnoukhova 2012: 87–88). I will thus argue that Harakmbut does not show a possessive split based on the distinction between bound and independent nouns. In fact, the data will point to a possessor-governed coding split with body-part possessees: animal possessors require a different coding than human possessors.

Corroborating evidence for the finding that adnominal possession is not determined by the alienability contrast in Harakmbut comes from data showing the distinct morphosyntactic behavior of bound nouns in grammatical environments other than adnominal possession. For instance, the data show that the bound nouns that enter the one-word possessive construction in (2b) can also fuse phonologically with other types of prenominal modifiers, such as interrogative, demonstrative, or quantifying modifiers, unlike independent nouns. As is the case in adnominal possession, the one-word strategy is invariably in competition with the two-word strategy. Moving beyond adnominal modification, the article will also hone in on noun-noun compounding and noun incorporation, in which bound nouns also behave differently from independent nouns. All in all, the article concludes that while the alienability contrast could be argued to motivate semantically the noun class system in Harakmbut, it falls short in accounting for the distinct morphosyntactic behavior of bound nouns in adnominal modification and beyond. Rather, this behavior is determined by the morphological property of boundness, which also takes effect in constructions that do not involve the semantics of possession.

As the prefixes *wa(ʔ)-* and *e(ʔ)-* serve not only to give independent nominal status to bound nouns but also to derive nouns from verb stems (or action nominals from predicates-cum-arguments) (see Van linden 2019), this article will also take nominalization into account. It will investigate the distinction between bound nouns and deverbal nouns in the various grammatical environments examined here, focusing on deverbal nouns as possessees in adnominal possessive constructions, but also as heads in other adnominal modification structures, and as N1 or N2 in noun-noun compounds. It will become clear that deverbal nouns always use the two-word strategy in any type of adnominal modification, featuring the nominalizing prefixes, but that they drop their prefix when occurring as N2 in noun-noun compounds, just like bound nouns. Unlike the latter, however, deverbal nouns are not incorporable into verbs.

In terms of data, this article draws on earlier work on Harakmbut, which has mainly focused on the Arakmbut variety (Hart 1963; Helberg Chávez 1984, 1990; Tripp 1976, 1995), as well as fieldwork conducted by the author. The first-hand data recorded in the field include elicited data and a collection of seven texts representing spontaneously produced language recorded in the native communities of Puerto Luz, San José del Karene and Shintuya, all with Arakmbut consultants, in the summers of 2010, 2011 and 2016. Additional elicited data were also collected at a distance. The practical orthography used in this article is IPA-based and different from the community spelling (see Van linden 2020: 9, Note 2).

The discussion is organized as follows. Section 2 discusses the distinction between bound nouns and independent nouns at the word level, concentrating on the distinct semantic domains covered by the members of either class. It also introduces verb-based nominalization. Section 3 moves to the phrase level, and focuses on adnominal possessive constructions, classifying them in terms of types of possessees (independent, bound and deverbal nouns) and possessors (human, animal and inanimate), and also considering alienable construal of bound nouns denoting body parts. Section 4 hones in on the morphosyntactic behavior of bound, independent and deverbal nouns in adnominal modification constructions other than adnominal possession. Section 5 leaves the phrase level and explores the morphologically complex word-level phenomenon of noun-noun compounding as well as the clause-level phenomenon of noun incorporation, again distinguishing between bound, independent and deverbal nouns. The article winds up with a brief summary and its conclusions on the relevance of the alienability contrast in Harakmbut in Section 6.

2 Bound, independent and deverbal nouns

This section takes a closer look at the two noun classes in Harakmbut, bound and independent nouns, and investigates whether they could be regarded as reflexes of the alienability contrast in terms of the semantic domains they cover. It will also introduce the nominalizing function of the two noun prefixes *wa(ʔ)-* and *e(ʔ)-* on verb stems.

Common nouns in Harakmbut divide into two morphologically distinct classes, viz. bound and independent nouns.[2] While independent nouns can occur on their own without any additional morphology (see (1a)), bound nouns do need a noun prefix in their citation form, viz. *wa(ʔ)-* (3) or *e(ʔ)-* (4).[3] As these noun prefixes enable bound nouns "to stand alone without possession", they serve the function of what Nichols (1988: 597) has called *absolutivization*: they derive independent nouns from bound ones. In Chousou-Polydouri et al.'s (this issue) terms, they are markers of the *unpossession* construction.

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2 There might be one other noun class with just one member, viz. *-mba* 'land, place', which cannot be used outside of a possessive construction (e.g., *Nildaʔ-en-mba-yo* [Nilda-ɢᴇɴ-land-ʟᴏᴄ] 'to Nilda's place') or noun-noun compound (e.g., *tareʔ-mba* [manioc-land] 'manioc field'). That is, it cannot be absolutivized with *wa(ʔ)-* or *e(ʔ)-*; in Lehmann's (1998: 52) terms, it is an inabsoluble noun.

3 The *e(ʔ)-* prefix has been identified as a feature of the Guaporé-Mamoré linguistic area by Crevels and Van der Voort (2008: 167): it has the same form and function (in noun-based nominalization) as the dummy noun prefix *e-* in Cavineña (Guillaume 2008: 409–416) and other Tacanan languages like Ese Ejja (Vuillermet 2012: 299–305). It is also similar to the unspecified possessor prefix *e-* in Baure (Danielsen 2007: 119–120) and to the semantically empty root *e-* in Kwaza, which serves as "a noun formative to lend independent status to classifiers" (Van der Voort 2005: 397).

(3)   *waʔ-ayʔ*
      NPF-bone
      'bone'

(4)   *eʔ-pidn*
      NPF-spine
      'spine, thorn'
      (Tripp 1995: 51)

Typically, bound noun stems combine with a single noun prefix exclusively, as in (2a) and (3), but some combine with both prefixes, yielding two different independent nouns whose referents show similarity in shape. For example, the bound root in (4) can also combine with the prefix *wa(ʔ)-* to denote the body part 'rib'. Another exception is given in (5), in which the *wa(ʔ)-* form denotes a body part (5a), while the *e(ʔ)-* form denotes a plant part (5b), similar to (4).

(5)   (a) *wa-mbaʔ*   (b) *e-mbaʔ*
           NPF-hand   NPF-hand
           'hand'   'leaf'

As can be seen in Table 1 below, there are also plant parts that exclusively take *wa(ʔ)-*, but overall the generalization can be upheld that referents of bound nouns with *e(ʔ)-* belong to the world of vegetation. This generalization supports an analysis of the absolutivizing prefixes as derivational rather than inflectional (see also Danielsen (2007: 119–120) on the unspecified possessor prefix *e-* in Baure, Arawak, Bolivia).[4]

Table 1: Semantic domains covered by Harakmbut bound nouns *(T = Tripp 1995).

Semantic domains	Bound nouns	Independent nouns
(a) Part-whole		
Body part	*wa-ayʔ* 'bone'; *wa-ʔidn* 'tooth'; *wa-kupi* 'horn'	–
Plant part	*e-mbaʔ* 'leaf'; *eʔ-mbih* 'liana' (generic term); *e-pidn* 'thorn'; *wa-mbuh* 'manioc root'; *wa-ʔiwit* 'root'; *wa-kidn* 'seed'; *wa-tioʔpi* 'branch'	–

4 The Harakmbut noun prefixes are also functionally equivalent to classifiers in languages with multiple classifier systems like Bora-Miraña, where classifiers can transform mass nouns into countable nouns as well as derive nouns from verbs (Seifart 2007). Aikhenvald (2000: 220–221) lists Guahibo, Tucano and Tariana as languages in which classifiers serve these functions as well. However, such classifiers carry a specific semantic load related to shape or substance, much unlike the Harakmbut prefixes.

Table 1: (continued)

Semantic domains	Bound nouns	Independent nouns
Landscape part	*wa-kumbogŋ* 'ravine'; *wa-kupo* 'hill'; *wa-ndagŋ* 'path'; *wã-wẽ* 'river'	*mbayako* 'pool, lagoon'; *ndumba* 'forest'; *widnmba* 'pebble beach'
Non-physical part	*wa-nokĩrẽŋ* 'spirit of a person'	–
Other part	*wa-ktaʔpe* 'half'; *wã-ẽ(kõŋ)* 'hole'	–
(b) Relations		
Kinship	*wa-mambuy* 'same-sex sibling'; *wa-siʔpo* 'child'; *wã-ỹẽ* 'mother'	*nãŋ* 'mother'; *pagŋ* 'father'
Social relation	*wa-iri* 'chief'; *wa-ndi* 'friend' (T:32)*; *wa-nindi* 'romantic partner'	–
Spatial relation	*wa-kĩrẽŋ* 'interior'; *wa-topen* 'below' (T:149)	–
(c) Shape and substance		
Shape	*wa-po* 'something round'; *wa-puʔ* 'tube'	–
Substance	*wã-õŋ* 'powder'; *wã-wẽ* 'liquid'	–
(d) Miscellaneous		
Attribute	*wa-ndari* 'native land'; *wa-ndik* 'name'	–
Bodily emanation	*wa-nokĩrẽŋ* 'shadow of a person'	–
Bodily excretion	*wa-ndawẽ* 'semen'	*iŋkusĩʔwẽ* 'saliva' (T:339)
Animal	*wa-koy* 'cormorant' (T:119); *wa-kuwẽŋ* 'specific frog species' (T:120)	*sũwĩt* 'hummingbird'; *kẽmẽ* 'tapir'

Let us now turn to the semantic domains encompassed by the referents of bound nouns, which are listed in Table 1 with a non-exhaustive set of examples. The table also includes independent nouns belonging to the same semantic domain if available. What may strike the reader immediately is that bound nouns predominantly denote entities that are – in conceptual terms – inalienably possessed, such as body parts, plant parts, landscape parts, kinship terms, social and spatial relations, attributes, basic shapes, substances, and other parts of wholes (see Rose and Van linden, this issue). The Harakmbut data thus support the implicational hierarchy for membership of the 'inalienable' class of nouns proposed by Nichols (1988: 572), in which kin terms and/or body parts outrank part-whole and/or spatial relations, which in turn outrank culturally basic possessed items; the latter are invariably lexicalized as independent nouns in Harakmbut.

Interestingly, Table 1 also includes items that are less easily categorized as conceptually inalienably possessed and which some languages treat as non-possessible, viz. animals (see Lehmann 1998) for wild animals in Yucatec Maya; see also Chousou-

Polydouri et al. (this issue). For this semantic category, independent nouns far outnumber bound nouns in Harakmbut. In relation to kinship terms, it should be noted that the independent nouns in Table 1 are in fact terms of address which have come to be used as reference terms (see Tripp 1995: 175–185) (see also Bril [this issue] on Kanak languages). With respect to landscape parts, bound nouns tend to refer to elements determining the physical shape of a landscape, while independent nouns refer to types of soil cover.

By and large, we can conclude that the class of bound nouns is semantically homogeneous and that the two noun classes can be regarded as a reflex of the alienability contrast surfacing at the word level, albeit not a perfect one. Specifically, since not all conceptually inalienable entities are lexicalized as bound nouns (e.g., kinship terms, bodily excretions) and since a few bound nouns denote conceptually non-possessible entities (animals), the data rather support Nichols' (1988: 574) claim that inalienability is a lexical category rather than a semantic property. Yet, according to the criteria used by Chousou-Polydouri et al. (this issue) in their crosslinguistic study, the class of bound nouns in Harakmbut would rate as semantically coherent.

In addition to covering certain semantic domains, Nichols (1988: 564) also notes that bound nouns form a closed set, which may vary considerably in size across languages. In terms of the criterion of loan integration, bound nouns in Harakmbut form a closed class indeed: loan words invariably enter the class of independent nouns. For instance, even though there is a Harakmbut bound noun for 'grandmother', -*mama*,[5] the Spanish loan *abuela* is also often used, and it is grammatically treated as an independent noun in spite of its inalienable semantics. The issue of productive compounding or derivation is not generally regarded as a criterion for open versus closed classes. However, if it were, the class of bound nouns could be regarded as (semi-) open because Harakmbut has many morphologically complex lexical items that contain bound noun roots and take a noun prefix, such as (6) and (7), and because such processes of word formation are productive (see also Section 5.1). Note that (6) combines (5a) and (3), with (3) being the head of the compound. The noun prefixes occur in (6) and (7) because the first elements in these complex items are bound nouns, namely -*mbaʔpih* 'finger' and -*wẽ* 'liquid' respectively.

(6)   *wa-mbaʔ-pih-ayʔ*
      NPF-hand-digit-bone
      'finger bone'

(7)   *wã-wẽ-ĕrĩ*
      NPF-liquid-AN
      'river spirit'

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5 Bound forms are represented with a hyphen in this paper.

The prefixes *wa(ʔ)-* and *e(ʔ)-* serve not only to derive independent nouns from bound ones; they also serve in verb-based nominalization. Nominalization with *wa(ʔ)-* is restricted to participant nominalization, viz. for instrumental and objective nominalization (see Comrie and Thompson 2007: 338–342), as in (8) and (9) respectively. It is primarily used to produce nouns for NP-use (Van linden 2019: 465–467).[6]

(8)   a.   *wa-wedn*   b.   *wa-kpo-k-bet*
          NMLZ-lie   NMLZ-eye-SPAT:separation-attach
          'bed'   'spectacles, glasses'

(9)   a.   *waʔ-aʔ*   b.   *wa-mbuey*
          NMLZ-say   NMLZ-die
          'speech, word, language'   'corpse'

Nominalization with *e(ʔ)-*, in turn, is used for both event nominalization and participant nominalization (see Van linden 2019: 468–484). The type of participant nominalization attested is that of objective nominalization, illustrated in (10). Just as in (9), the nominalized form in (10) denotes the result or the typical or 'cognate' object of the action designated by the verb; it can be used as the head of an NP.

(10)   *e-ma-mboʔ-e-a*
         NMLZ-[VPL-stand-ITER-TRNS]photograph
         'picture, photograph'

In terms of semantic domains, instrumental nominalizations will typically denote items that are – in conceptual terms – alienably possessed, such as artifacts (8a) or accessories (8b), while objective nominalizations are often inalienably possessed. Example (9a) is an attribute, just like *eʔ-mbaʔaʔ* 'work'. Other examples are in Table 2; note that the prefix *e(ʔ)-* is also used in the citation form of verbs (Van linden 2019: 482–483).

Table 2: Deverbal nouns with inalienable semantics.

Deverbal noun	Glosses	Meaning	Semantic domain
e-ʔi-mboʔ	NMLZ-foot-stand	'footprint'	Bodily emanation
eʔ-ndigŋ-pak	NMLZ-pain-VBZ	'(have) fever'	Bodily sensation
e-tã-ēʔ	NMLZ-APPL-be	'visit(or)'	Social relation
eʔ-tiriʔ	NMLZ-ache	'(have) pain'	Bodily sensation
ēʔ-wīēʔ	NMLZ-smell	'smell'	Bodily excretion

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6 Note that (8b) and *e-ʔi-mboʔ* in Table 2 are nominalized forms of N + V compounds, i.e., they involve noun incorporation (see Van linden 2023: 470–471).

In conclusion, deverbal nouns feature the same prefixes as bound nouns and may even show inalienable semantics similar to bound nouns. However, they are not analyzed as members of this noun class because of their verbal origin and their distinct morphosyntactic behavior in several grammatical environments. The latter will be exposed in the remainder of this article.

3 Adnominal possession

This section moves to the phrase level and discusses adnominal possessive constructions. It is organized according to types of possessees: independent nouns (Section 3.1), bound nouns (Section 3.2), and deverbal nouns (Section 3.3), and will focus on different types of possessors (human, animal and inanimate). It will argue that Harakmbut does not manifest an alienability split; it merely shows a coding split for body-part possessees that is based on the human versus animal nature of the possessor.[7] In addition, there is no pronoun/noun split.

3.1 Possessive constructions with independent-noun possessees

Independent nouns predominantly denote alienably possessed entities (see Section 2), and the possessor types observed are restricted to humans and animals. As shown in (11) to (13), possession is dependent-marked, and there is no pronoun/noun split or animacy-based split: the genitive marker *-edn~-en~-ēn* attaches to human nominal (11), pronominal (12) and animal nominal possessors (13) alike.

(11)　*Lupeʔ-edn　hak*
　　　Lupe-GEN　　house
　　　'Lupe's house'

(12)　*ndoʔ-edn　hak*
　　　1SG-GEN　　house
　　　'my house'

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7 In a similar vein, Creissels (this issue) argues that the possessive coding split in Mandinka (West Mande, Gambia, Senegal, and Guinea Bissau) looks like an alienability split, but under closer analysis turns out to be a possessor-governed coding split according to animacy.

(13)   *apetpet-edn   hak*
          jaguar-GEN   house
          'a/the jaguar's den'

3.2 Possessive constructions with bound-noun possessees

Bound nouns overwhelmingly denote inalienably possessed entities (see Section 2), which is why in principle they can combine with any semantic type of possessor. In contrast to constructions with independent-noun possessees, constructions with bound-noun possessees show a coding split according to the human versus animal nature of the possessor. Consider Examples (14) to (17), in which stressed syllable nuclei are underlined. It should be noted that the domain for stress assignment in nouns is the root plus derivational affixes, with the main stress falling on the penultimate syllable, which may be a noun prefix. Inflectional suffixes and clitics fall outside the stress domain.

(14)   a.   *Lupeʔ-edn waꞏku*   b.   *Lupeʔ-edn-ku*
               Lupe-GEN   NPF-head   Lupe-GEN-head
               'Lupe's head'   'Lupe's head'

(15)   a.   *on-en   waꞏku*   b.   *on-en-ku*
               2SG-GEN   NPF-head   2SG-GEN-head
               'your (sg) head'   'your (sg) head'

(16)   *mbawi-ku-pi*
          deer-[head-CLF:stick]$_{horn}$
          'a/the deer's horn'

(17)   *kurukuru-mbaʔ*
          bijao-hand
          'bijao leaf' (plant species: Calathea lutea)

Examples (14) and (15) indicate that there is no pronoun/noun split with bound-noun possessees either. In addition, they show that bound nouns differ from independent nouns in allowing for two coding strategies with human possessors: a two-word strategy with prefixed head nouns, as in the a-examples, and a one-word strategy without noun prefixes, as in the b-examples.[8] Because the bound noun root is monosyllabic in (14)–(15),

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[8] The same competition between a two-word and one-word strategy in adnominal possession has been noted for *e*-nouns in Ese Ejja as well (Vuillermet 2012: 302–304). Unlike in Harakmbut, however, proper name possessors in Ese Ejja tend to allow the two-word strategy only. Cavineña and Baure (see Note 3), by contrast, do not show any competition between possessive constructions for bound nouns (Danielsen 2007: 118–124; Guillaume 2008: 484–491).

the two strategies differ in which syllable of the genitive modifier carries the stress. More importantly, however, both strategies involve the genitive marker, while structures with animal possessors (16) and inanimate possessors (17) use fundamentally different morphosyntactic marking, viz. noun-noun compounding. As the possessor in structures with inanimate possessors like (17) is never referentially distinct from the possessee, examples like (17) in fact do not instantiate adnominal possession but merely word formation (see Section 5.1). In structures with animal possessors like (16), by contrast, the possessor may well be referential. A case in point is in (18) below, in which *wadnpisindak* 'the ocelot's skin' does exemplify adnominal possession.

(18) *Lupeʔ-a me-niŋ-to-tiak-ne*   **wadnpi-sindak** *Luisʔ-a eʔ-arak*
       Lupe-NOM 3SG>1/2SG-BEN.APPL.CAUS.SOC-come-IND ocelot-skin   Luis-NOM NLMZ-kill
       'Lupe brought me the skin of the ocelot killed by Luis.' (elicited)

In (18), the possessor (*wadnpi*) is further modified by the post-nominal non-finite clause and is hence referential; an interpretation in which the possessor is non-referential ('an/the ocelot's skin killed by Luis') would make no sense, as one cannot kill a skin. On the basis of Examples (14) to (18), the main coding split with bound nouns is thus determined by the possessor: human possessors use the genitive marker, whereas animal possessors use noun-noun compounding.

However, there is an exception to this generalization about animal possessors which relates to the type of possessive relation. While noun-noun compounding is used to refer to body parts, it is the genitive marker that is typically used for kinship relations, for example with respect to the animal's offspring in (19).

(19) a. *apetpet-edn   wa-siʔpo*[9] b. *apetpet-edn-siʔpo*
          jaguar-GEN   NPF-child   jaguar-GEN-child
          'a/the jaguar's cub'   'a/the jaguar's cub'
      c. *apetpet-siʔpo*   d. *apetpet-siʔpo*
          jaguar-child   jaguar-DIM
          'a/the jaguar's cub'   'a/the small jaguar (of adult age)'

Just like human possessors (see (14)), animal possessors show two coding strategies with the kin-term possessee 'child', viz. a two-word strategy (19a) and a one-word strategy (19b).[10] Unlike in (14b) and (15b), the stress does not fall on the genitive marker in the one-word structure because the bound-noun possessee in (19) has two syllables rather than one. The second syllable of the genitive modifier in (19b) carries secondary stress. The compounding strategy (19c) can also be used to code this

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9 Note that 'child' is morphologically complex itself: *-siʔ-po*, consisting of a bound noun (*-siʔ* 'peel') and a bound noun that also functions as a classifier denoting a round shape (*-po*).
10 The latter is most frequently used according to my consultant.

specific kinship relation, but this might cause confusion with the diminutive form (19d), whose suffix, of course, originated in the bound noun denoting 'child'. For other kinship relations, animal possessors do not allow the compounding strategy.

There is one other exception to the above generalization about animal possessors, but this one relates to the alienable construal of semantically inalienably possessed entities such as body parts. Consider Examples (20) and (21).

(20)　　a.　*mokas-kutipo*　　　　　　　b.　*mokas-en-kutipo*
　　　　　　collared.peccary-thigh　　　　　collared.peccary-GEN-thigh
　　　　　　'a/the collared peccary's thigh (still　　'a/the collared peccary's
　　　　　　attached to the animal, dead or alive,　thigh, removed from its
　　　　　　or removed from its corpse)'　　　corpse'

As indicated in the translations of (20a) and (20b), the default coding strategy of noun-noun compounding (20a) and the genitive-marked one-word structure (20b) come with distinct but overlapping interpretations. The overlap is exactly an 'alienable' interpretation, i.e., that of a detached body part. Table 3 summarizes the observations for human and animal possessors with bound-noun possessees. It also includes data on the disembodied interpretation of human body parts discussed in relation to Examples (21a) and (21b) below.

Table 3: Possessor-governed coding split for bound-noun possessees.

POSSESSOR	POSSESSEE		KIN-TERM POSSESSEE
	BODY-PART POSSESSEE		
	Alienable interpretation	*Inalienable interpretation*	
ANIMAL POSSESSOR	Genitive-marked one-word structure		Genitive-marked one-word and two-word structure (Noun-noun compounding with offspring relation)
	Noun-noun compounding		
HUMAN POSSESSOR		Genitive-marked one-word structure	Genitive-marked one-word and two-word structure
	Genitive-marked two-word structure		

On the basis of Table 3 and the discussion in Section 3.1, we can thus conclude that there is only a coding split for bound-noun possessees (mainly inalienable possession). This split is [±human] based and mediated by type of possessive relation (body part vs. kin term). In the remainder of this section, I will argue that the observed coding split cannot be explained in terms of alienability.

If the coding split were based on alienability, it would be expected that possessive constructions with bound nouns (expressing inalienable possession) show less morphosyntactic marking or tighter integration than possessive constructions with independent nouns (expressing alienable possession) (see Haspelmath 2017: 218). The competing coding strategies in Harakmbut do not differ in terms of number or length of morphemes but rather in number of words. Hence, when we consider Examples (1b) and (2b) (Section 1) in isolation, an analysis in terms of an alienability split seems justified. However, there are a number of reasons why such an analysis is not descriptively adequate. The first obvious one is that bound nouns *also* use the coding strategy available to independent nouns; (14a) and (15a) are not different from (11) and (12) in morphosyntactic terms (except for the presence of noun prefixes on the bound stems). This situation is very different from that in languages like Abun (West Papuan), where inalienable and alienable nouns systematically use distinct morphosyntactic marking in adnominal possessive constructions (Berry and Berry 1999: 77–78).

Another reason is that in phonological-prosodic terms, there is less difference between the two-word coding strategy of independent nouns (1b) and the one-word or prefixless strategy of bound nouns (2b) than in morphosyntactic terms. On the one hand, with possessees that have two or more syllables, as in (21), it is hard to prosodically distinguish the two-word strategy (21a) from the one-word strategy (21b). Example (21a) has two distinct stresses, while (21b) has one main stress on the penultimate syllable and a secondary stress on the penultimate syllable of the possessor root, but this difference is very subtle.[11] My consultant pronounced (21a) and (21b) also at about the same speed rate.

(21)   a.   *Maribel-en   wa-kpo*   b.   *Maribel-en-okpo*
            Maribel-GEN   NPF-eye   Maribel-GEN-eye
            'Maribel's eye (well in place, or   'Maribel's eye, well in place'
            removed from its natural place)'

On the other hand, possessive constructions with monosyllabic independent nouns like (11) often show the same one-word prosody (*Lupeʔ-edn hak*) as possessive constructions with monosyllabic bound nouns like (14b). However, there is still a small difference, as monosyllabic independent-noun possessees can still receive stress independently of the genitive modifier, while monosyllabic bound-noun possessees like *-ku* in (14) cannot. All of this indicates that the hyphen separating the genitive-marked possessor from the possessee in the one-word strategy mostly signals that the possessee is syntactically obliged to have a possessor, i.e., it cannot occur on its

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11 Note that 'eye' is morphologically complex itself: *ok-po*, consisting of a spatial morpheme (*ok-*) and a bound noun that also functions as a classifier denoting a round shape (*-po*).

own. The hyphen does not represent tighter phonological integration, except for monosyllabic bound nouns. In typologizing possessive constructions from a 120-language sample, therefore, Chousou-Polydouri et al. (this issue) conclude that the two noun classes share the same possessive construction, i.e., they do not posit a coding split at all for human possessors.

A third reason for not analyzing the possessive split as an alienability split pertains to the distinct interpretations of the two coding strategies found with human possessors and body part possessees, as in (21a) and (21b). The free translations of (21a) and (21b) show that the interpretations are opposite to those of (20a) and (20b) with animal possessors (see Table 3). Whereas the one-word strategy (21b) is dedicated to inalienable possession ('in-situ' body parts), the two-word strategy (21a) is ambiguous between alienable and inalienable interpretations. Such lack of dedicated strategies for alienable and inalienable interpretations, observed for both animal and human possessors, would be difficult to account for by an alienability-driven split.

A fourth and final reason for rejecting an explanation in terms of an alienability split is that not all bound nouns accept the one-word or prefixless strategy. Most notably some kinship terms do not. While the kin term *wa-siʔpo* 'child' is found in the two genitive-marked strategies available to human possessors, the term *wa-mambuy* 'same-sex sibling' only accepts the two-word strategy in (22a); (22b) is not well-formed.

(22)   a. *ndoʔ-edn   wa-mambuy*   b. **ndoʔ-edn-mambuy*
           1SG-GEN   NPF-same.sex.sibling   1SG-GEN-same.sex.sibling
           'my sister (of female ego)'   'my sister (of female ego)'

Examples like (22) show that not all bound nouns behave similarly and that the morphosyntactic behavior of bound nouns cannot be explained in terms of alienability, since the same possessive relation (e.g., kinship) has distinct coding possibilities. All in all, limiting our observations to the grammatical environment of adnominal possession with underived-noun possessees, this section pointed to a number of reasons for why Harakmbut has no alienability split.

3.3 Possessive constructions with deverbal-noun possessees

Extending our scope to deverbal-noun possessees does not impinge on the above conclusion that Harakmbut has no alienability-driven possessive split. Nominalization is productive in Harakmbut, and deverbal nouns do not need to be possessed by a genitive-marked modifier, but they need the prefixes *wa(ʔ)-* or *e(ʔ)-* to be used as an independent noun. As explained in Section 2, deverbal nouns may have alienable or inalienable semantics. However, they behave identically in the domain of adnominal possession, irrespective of their semantics or of their nominalizing prefix. Consider

Examples (23) to (26), which illustrate participant nominalizations used as heads of NPs. The genitive-marked modifiers do not form part of the nominalization structure,[12] but denote the possessors of the instruments (23)–(24) or attributes (25)–(26) designated by the deverbal nouns.

(23) a. *Maribel-en   wa-wedn* b. **Maribel-en-wedn*
         Maribel-GEN   NMLZ-lie   Maribel-GEN-lie
         'Maribel's bed'   'Maribel's bed'

(24) a. *ndoʔ-edn   wa-wedn* b. **ndoʔ-edn-wedn*
         1SG-GEN   NMLZ-lie   1SG-GEN-lie
         'my bed'   'my bed'

(25) a. *arakmbut-en   waʔ-aʔ*   b. **arakmbut-en-aʔ*
         people-GEN   NMLZ-say   people-GEN-say
         'the language of the people',   'the language of the people',
         'the Harakmbut language'   'the Harakmbut language'

(26) a. *on-en   eʔ-a-pak*   b. **on-en-a-pak*
         2SG-GEN   NMLZ-say-VBZ   2SG-GEN-say-VBZ
         'your (sg) voice', 'what you   'your (sg) voice', 'what you (sg) said'
         (sg) said'

Comparison of Examples (23a) and (24a) shows that constructions with deverbal-noun possessees do not show a pronoun/noun split, just like those with independent or bound nouns. More generally, all the examples use the same coding strategy, viz. the two-word construction with genitive marking on the possessor, whether the deverbal nouns are formed with the prefix *wa(ʔ)-*, as in (23) to (25), or *e(ʔ)-*, as in (26), and no matter the possessive relation, viz. conceptually alienable in (23)–(24) versus inalienable in (25)–(26).[13] In all cases, the one-word, prefixless strategy is ungrammatical, as indicated by the asterisk (*) in the (b)-structures. This finding shows that deverbal nouns behave identically to independent nouns as heads of possessive NPs, and should hence be kept separate from bound nouns.

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12 Note that in (multiple-word) event nominalizations, the participants of the situation expressed by the verb stem are nominative marked, accusative marked, or unmarked, but never genitive marked (Van linden 2019: 468–482).
13 As noted by a referee, in some cultures, beds or hammocks are not regarded as entities that easily shift possessors; they are hence conceptually inalienable within their worldview, but, I would argue, not intrinsically inalienable. Here it can be noted that instrument nominalizations denoting medicinal substances (e.g., *wa-kõõʔ* NMLZ-bathe 'infusion to bathe you with when you have fever') pattern identically to the participant nominalizations exemplified in (23) to (26). Such substances are often handed around in Harakmbut communities.

3.4 Interim conclusion and locus of marking

Wrapping up, Sections 3.1–3.3 on adnominal possession have shown that Harakmbut has no noun/pronoun split, which is crosslinguistically unusual (Dryer 2007) but characteristic of South American languages (Krasnoukhova 2012: 99). More pertinent to the central research question, they have built the case that Harakmbut has no possessive coding split governed by the alienability contrast. The only coding split we could posit is one according to humanness, and which is restricted to structures with body-part possessees. Deverbal nouns, in turn, were found to pattern identically with independent nouns in adnominal possession, in spite of sharing the same prefixes with bound nouns, and in some cases also showing inalienable semantics.

With respect to the locus of marking in possessive noun phrases, the Harakmbut data proved to form an exception to Nichols' (1988: 576) finding that there is no language that "has only dependent-marked possession and manifests an alienability opposition" (see also Bugaeva et al. 2022). It was shown that Harakmbut uses the genitive marker (and compounding) in possessive constructions and does show an alienability contrast, albeit just in the lexicon (Section 2), or at the word level rather than at the phrase level. In fact, Krasnoukhova (2012: 93) cites six South American languages that form true counterexamples to Nichols' (1988) claim. In these languages, inalienable possession is exclusively dependent marked. Abstracting away from the alienability contrast, Krasnoukhova (2012: 85) finds that head marking and dependent marking are equally represented in the Amazonian languages in her sample, with dependent-marking languages clustering "in Ecuador, on the border of Colombia and Brazil, and the Peru-Brazil border" (2012: 85). The latter area comprises the Harakmbut communities. Her study and the Harakmbut data hence do not support Dixon and Aikhenvald's (1999: 8) claim that Amazonian languages typically use a head-marking strategy in adnominal possession.

4 Other types of adnominal modification

We now move to non-possessive types of adnominal modification to reveal that the coding strategy exclusive to bound nouns in adnominal possession, i.e., the one-word, prefixless strategy, is also observed for other types of modifiers. This finding corroborates our conclusion that this coding strategy is not an alienability phenomenon. Independent nouns and deverbal ones, by contrast, will always use the two-word strategy with these types of adnominal modifiers. We will take a closer look at interrogative, demonstrative and quantifying modifiers.

The generalization that emerges is that bound nouns show the same two coding strategies as observed for possessive modifiers when combined with other modifiers that obligatorily precede the nominal head in continuous noun phrases: they either attach to a noun prefix and follow the modifier in a separate word, or they directly attach to this modifier, dropping the noun prefix (see Van linden 2023: 453–454). Independent nouns and deverbal nouns will always follow the modifier as a separate word. Consider Examples (27)–(29).

(27)   Independent noun
      k<u>a</u>te   <u>a</u>ypo   iʔ-pak-ika-Ø?
      what   food   2SG-want-HAB-DUB
      'What sort of food do you (sg) like?'
      (elicited, Van linden 2023: 452, ex. (15))

(28)   Deverbal noun
      k<u>a</u>te   w<u>a</u>-wadn   iʔ-pak-ika-Ø?
      what   NMLZ-sit   2SG-want-HAB-DUB
      'What sort of seat do you (sg) like?' (elicited)

(29)   Bound noun
      k<u>a</u>te-nda=pi   min-we-ndik   ỹãnʔ-ẽ   wa-siʔpo
      what-fruit=INDET   eat.by.sucking-NEG-POT   3PL.DUB-be   NPF-child
      'What sort of fruit shouldn't children eat?'
      (Patiachi Tayori n.d.)

In (27), the interrogative modifier *kate* modifies the independent noun *aypo* 'food', and the modifier-head structure consists of two words. The same goes for (28), featuring the deverbal noun *wawadn* 'seat' as head. In (29), by contrast, *kate* modifies the bound noun *-nda* 'fruit', which attaches to the modifier; the modifier-head structure forms a single stress domain, with the stress falling on the penultimate syllable, i.e., the last syllable of the modifier – stressed syllable nuclei are underlined (remember that clitics do not belong to the stress domain). Alternatively, the modifier-head structure can also use the two-word strategy *k<u>a</u>te w<u>a</u>-nda=pi* without a difference in meaning.

The same behavior is found with demonstrative modifiers, for example, the distal form *ken* 'that, 'those' in (30)–(32).

(30)   Independent noun
      ih-yok-i   kuwa   **k<u>en</u>**   wett<u>o</u>ne-tewapa
      1SG-give-1.IND   dog   DIST   woman-BEN
      'I give a dog to that woman.' (elicited)

(31) Deverbal noun

    a. **k̲e̲n**   w̲a̲-wadn   b.   *ken-wadn

       DIST   NMLZ-sit   DIST-sit

       'that seat'   'that seat'

(32) Bound noun

    ndig̲ŋanda   wã-mẽ   o-ka-po   o-mbuey-tuy   **ken**-si̲ʔpo

    strongly   NPF-liver   3SG.IND-do-DEP   3SG.IND-die-REM.PST.INDIR.EVD   DIST-child

    'He had a lot of diarrhea and died, that kid.' (narrative)

In (30) *ken* modifies the independent noun *wetto̲ne* 'woman', while in (31) it modifies the deverbal noun *wa̲wadn* 'seat'. Both types of head noun only allow the two-word modification construction. In (32), in turn, *ken* modifies the bound noun *-si̲ʔpo* 'child', forming one phonological word with it. As an alternative to (32), the speaker could have used the two-word strategy *ken wasi̲ʔpo* without a difference in meaning.

    In the last set of examples featuring quantifying modifiers, the (a)-examples include independent nouns showing the two-word strategy, the (b)-examples feature deverbal nouns showing the same strategy, and the (c)-examples illustrate bound nouns using the one-word strategy. Example (33) contains a numeral ((a) and (c) come from a list of ingredients for ceviche), and (34) an indefinite quantifier.

         a.   Independent noun   b.   Deverbal noun   c.   Bound noun

(33) a.   *mba̲ʔpa*   u̲gŋ   b.   *mba̲ʔpa*   wa̲-wadn   c.   *mbapa̲ʔ-ku*   sebo̲ya

         three   chili.pepper   three   NMLZ-sit   three-head   onion

         'three chili peppers'   'three seats'   'three onion-heads'

(34) a.   *wa̲kka-nda*   kã̲ã̲   b.   *wa̲kka-nda*   e-ʔi̲-mboʔ

         many-NDA[14]   pineapple   many-NDA   NMLZ-foot-stand

         'many pineapples'   'many footprints'

         c.   *wakka̲-ʔidn-a-nda*

         many-tooth-EP.V-NDA

         'many teeth'

The data discussed in this section bear out that the peculiar behavior of bound nouns in adnominal possessive constructions (discussed in Section 3.2), allowing for two coding strategies, is not limited to the expression of possession. Rather, it is a general characteristic of adnominal modification structures in which the modifier precedes the nominal head (note that adjectives do not always precede their head,

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14 The analysis of the suffix *-nda* remains unclear, which is why I use the transcription of the suffix itself as a gloss (see Van linden 2023: 458).

see Van linden 2023: 457–458). This observation bolsters our conclusion that Harakmbut does not show an alienability contrast at the level of the phrase.

5 Beyond adnominal modification

Having looked at the (simple) word level (Section 2) and the phrase level (Sections 3 and 4), we now venture into yet other levels of analysis for which alienability phenomena have been documented in the literature (see Rose and Van linden, this issue), viz. the complex word level, looking at noun-noun compounding (Section 5.1) and the clause level, discussing noun incorporation (Section 5.2).

5.1 N-N compounding

This section takes a closer look at the behavior of independent, bound and deverbal nouns in noun-noun compounding. It shows that independent and bound nouns show a skewed distribution across N1 and N2 in N(1)-N(2) compounds, in which N1 always modifies N2. Deverbal nouns, this time, behave similarly to bound nouns in that they drop the nominalizing prefix in N2 position, whereas they keep it in adnominal modification constructions.

We first focus on N-N compounds showing combinations of independent and bound nouns. All possible combinations occur, as illustrated in (35) below. When bound nouns occur as N2, they drop their noun prefix, as in (35b) and (35c) (see Rose and Van linden 2022).[15] When they occur as N1, by contrast, they keep their prefix, as in (35c) and (35d).[16]

(35) (a) I-I   *ndumba-kuwa* [forest-dog] 'bush dog' (Helberg Chávez 1984: 252; Tripp 1995: 194)
      (b) I-B   *kumo-ʔiwit* [barbasco-root] 'the root of barbasco'
      (c) B-B   *wa-ʔi-pih* [NPF-foot-digit] 'toe'
      (d) B-I   *wa-taʔpi-widn* [NPF-spine-stone] 'kidney' (Tripp 1995: 130b)

For the distribution of these noun classes across the two noun slots in N-N compounds, I use data collected for Pepper's (2020) list of 100 complex concepts, designed

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15 Some bound noun roots only occur in N2 in N-N compounds, e.g., *-pih* 'digit' in (6) and (35c).
16 *E*-nouns in Ese Ejja also drop their prefix in N2, but keep it in N1 (Vuillermet 2012: 301–302). In Cavineña, *e*-nouns generally (but not always) drop their prefix in N2 in N-N juxtaposition structures, which typically lexicalize into N-N compounds. Monosyllabic *e*-nouns are also phonologically attached to the preceding noun modifier in N-N juxtaposition structures, but polysyllabic ones are not (Guillaume 2008: 411–432).

to study binominal lexemes from a crosslinguistic perspective. Out of the 78 Harakmbut data items collected for 72 entries of this list, 15 instantiate compounding. Table 4 presents the distribution of these 15 items over the two noun classes in N1 and N2 positions. Independent nouns (I in Table 4) are only rarely found as N2, whereas bound nouns (B in Table 4) frequently occur as N2. Although this preference is statistically significant,[17] the scarcity of the data calls for caution. The tendencies in Table 4 need to be confirmed with more data.

Table 4: Types of N-N compounds according to morphological class of N1 and N2 in Pepper's list of 100 complex concepts.

Noun classes in N-N	I-I	I-B	B-B	B-I
Harakmbut (15)	0	5	9	1

In terms of semantic domains, bound N2 in compounds typically include plant parts (35b) and body parts (35c). In such cases, the semantic relation between N2 and N1 is a part-whole relation, as reflected in the translation of (35b); 'toe' in (35c) can be paraphrased as 'digit of the foot'. However, what is important is that the holonym (or 'possessor') in N1 is non-referential, which is why such examples do not rate as adnominal possessive constructions (see also Section 3.2). The landscape part term *-wẽ* 'river' is often used in hydronyms, e.g., *Karene-wẽ* 'Colorado River'. Kinship terms hardly occur in N2, but shapes and substances often do, in which N2 has an attribute-like relation to N1 and is in fact better analyzed as a classifier (see Rose and Van linden 2017, 2022 for argumentation).

Deverbal nouns (D) pattern like bound nouns in that they never use a nominalizing prefix in N2 (36a)–(36b), while they do carry such a prefix in N1 position (37a)–(37b). In (36a) and (36b), N1 is an independent noun. So far, all examples I have come across in which a bound noun precedes a verb root are similar to (36c) and (8b), and are analyzed here as instrumental nominalizations of compound N-V lexemes (so, noun incorporation, see Section 5.2) rather than N-N compounds of the B-D type. In (37a) and (37b), N2 is a bound noun. I have not found any N-N compounds of the D-I type yet. What I have found are examples like (37c), in which the deverbal noun modifies an independent noun, but these nouns are merely juxtaposed; they do not form a single phonological word.

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17 As suggested by the editor, binomial tests point to a significant difference when we compare IB + BB with II + BI (p = 0.00098), and to no significant difference when we compare II + IB with BB + BI (p = 0.30).

(36)   (a)   I-D   *siro-mba-peʔ* [metal-VPL-eat] 'metal plate' (some metal thing to eat
             from)
       (b)   I-D   *arakmbu̱t-(h)a-te* [person;people-say-LOC] 'in the language of the
             people; in Harakmbut'
       (c)   *wa-mbaʔ-ot* [NMLZ-hand-get.dressed] 'glove' ('something to put on your
             hand')

(37)   (a)   D-B *wa-ma-tãʔkea-ʔidn* [NMLZ-VPL-angle-tooth] 'fish hook' (Tripp 1995: 123b)
       (b)   D-B *wa-k-may-kidn* [NMLZ-(SPAT:separation-drink)drink.medicine-seed] 'pill'
             (Tripp 1995: 118b)
       (c)   *wa-mba-tay hak* [NMLZ-VPL-sleep house] 'accommodation' (Tripp 1995: 108)

The interim conclusion is hence that deverbal nouns do not show all logically possible combinations with independent and bound nouns in N-N compounds; B-D and D-I combinations do not occur. They thus do not fully resemble bound nouns in N-N compounding.

In addition to N-N compounds, there is one other type of binominal lexeme that deserves discussion here, as it includes a genitive-marked noun, but nevertheless does not instantiate adnominal possession. An example is in (38). According to Pepper's (2020: 155–156) classification of binominal lexemes, it instantiates the *gen* type, in which head and modifier are two separate words, with an additional word-class preserving morpheme attached to the modifier.

(38)   *amiko-en kutamah* [foreigner-GEN bag] 'backpack'

The structure in (38) is formally identical to adnominal possessive constructions with independent-noun possessees like (11), but differs in referential terms, as the 'possessor' in (38) is non-referential. Interestingly, similar examples with bound-noun heads (39) also feature a genitive marker but do not involve two separate words.

(39)   a.   *mokas-en-ayʔ*   b.   *mbawiʔ-en-ayʔ*
            collared.peccary-GEN-bone   deer-GEN-bone
            'bone of a collared peccary'   'bone of a deer'

The examples in (39) were produced in a single conversation; they refer to the material of the needles the speaker was using to make string bags. They are similar to (20b) in showing the genitive marker and being fused with the possessee in N2, as well as in having an alienable interpretation of a semantically inalienably possessed entity – the pieces of animal bone, turned into needles, now belong to the speaker. Crucially, however, they are different in that the genitive-marked possessor is not referential. Like (38), (and (17) in Section 3.2), then, (39a) and (39b) constitute binominal lexemes and do not exemplify adnominal possession.

All in all, the data on N-N compounds, or binominal lexemes more generally, merely pointed to differences in preference for the N1 or N2 position between independent and bound nouns. As expected from what we have discussed so far, bound nouns drop their noun prefix in N2. And while deverbal nouns never drop their nominalizing prefix in adnominal modification constructions, they do drop it when occurring as N2 in N-N compounds. None of these observations can be meaningfully related to the alienability contrast.

5.2 Noun incorporation

The last grammatical environment to be looked at here is noun incorporation, a phenomenon that operates at the clause level – and also at the complex word level, as it is a type of N-V compounding. Harakmbut shows all four types of noun incorporation distinguished by Mithun (1984), but these types have semantic biases, as indicated in Table 5. This table only includes the semantic domains covered by bound nouns and listed in Table 1 that have been observed in incorporated forms. Note that all of these involve inalienable possession – animals are missing from Table 5. Except for one independent noun (*hak* 'house', attested in type I only), which could be

Table 5: Semantic biases per type of noun incorporation.

Semantic fields	Type I NI (lexical compounding)	Type II NI (manipulation of case)	Type III NI (manipulation of discourse structure)	Type IV NI (classificatory NI)
(a) Part-whole				
Body part	✓	✓	✓	✗
Plant part	✓	✓	✓	✗
Landscape part	✓	✓	(✓)	✗
(b) Relations				
Kinship	'child' only	✗	✗	✗
(c) Shape and substance				
Shape	✗	✗	✓ (CLF)	✓ (CLF)
Substance	✗	✗	✓ (CLF)	✓ (CLF)
(d) Miscellaneous				
Attribute	✓	✓	(✓)	✗

regarded as a culturally basic possessed item (see Nichols 1988: 572), morphological boundness is the formal prerequisite for nouns to be incorporable.

The four types of noun incorporation in Table 5 are discussed in Van linden (2023: 470–471) and Rose and Van linden (2017, 2022: 266–270). Kin terms almost do not occur incorporated in verbs; the only noun I found is -*siʔpo* 'child', for instance in type I *e-siʔpo-ka* [NMLZ-child-make] 'procreate' (see Tripp 1995: 52a). Parts of wholes and attributes are typically found in types I and II, and only occasionally in type III. An example of type II involving a body part is in (40), whose non-incorporated equivalent would have 'Joeri's head' (with *Joeri* marked for genitive case) as Goal argument, as rendered in the translation. Incorporation of the body part -*ku* 'head' into the verb allows the possessor to be promoted to object status (see Mithun 1984: 857–858), with *Joeri* marked for accusative case in (40), and thus serves to manipulate case roles at the clause level.

(40) *Pomelo-a*   *o-**ku**-ti-kot-ay*   *Joeri-ta*
      grapefruit-NOM   3SG.IND-head-SPAT:up-fall-AVRT   Joeri-ACC
      'A grapefuit almost fell on Joeri's head.'
      (elicited, Van linden 2022: 143, Ex. (20))

Shapes and substances, in turn, show almost the reverse distribution across the four types of noun incorporation because of their wide-scope semantics; they are in fact only attested in types III and IV. An example of the latter is in (41), in which -*po* classifies the more specific external NP present in the clause (see Mithun 1984: 863), viz. *kõsõ* 'pot', characterizing it in terms of shape.

(41) *kõsõ*   *o-**po**-wadn*   *mesa-toyo*
      pot   3SG.IND-CLF:round-sit   table-under
      'The pot is under the table.' (elicited)

Summing up, apart from one independent noun (*hak* 'house'), it is only bound nouns denoting inalienably possessed entities that are incorporated in verb forms, dropping their noun prefix. They are found in all four types of noun incorporation described by Mithun (1984), but the distribution of the nouns across these four types differs in terms of the semantic domain they belong to. Deverbal nouns are of course morphologically bound as well, but as their stem is verbal in nature, they cannot get incorporated as nouns in verb forms. By and large, it can thus be argued that the difference in incorporability of common nouns in verbs can be explained by the conceptual distinction between alienable and inalienable possession just as much as the simple-word level phenomenon of the two-way noun class system can – it is not a perfect explanation because of the independent-noun exception and the skewed distribution of nouns across semantic domains; not all inalienably possessed entities get incorporated.

6 Conclusion: what can the alienability contrast account for in Harakmbut?

Having looked at the nature and behavior of independent, bound and deverbal nouns at various levels of linguistic organization in Harakmbut, we are now in a position to assess the relevance of the alienability contrast in that language. The description of the two-way noun class system (Section 2) revealed that membership of common nouns in these two morphologically determined classes is to a great extent motivated by the conceptual distinction between inalienably and alienably possessed items. While bound nouns predominantly include the former type, independent nouns primarily comprise the latter. There are exceptions at either end, which adduces evidence for Nichols' (1988: 574) position that inalienability is a lexical category at the word level rather than a semantic property (see also Nichols and Bickel 2013). Yet, going by the criteria proposed by Chousou-Polydouri et al. (this issue), the two noun classes would qualify as semantically coherent in terms of inalienable versus alienable.

Although the alienability contrast could be argued to motivate the noun class system in Harakmbut, it was found to be irrelevant to adnominal possession, or to phrase-level phenomena at large. While languages showing bound versus independent nouns typically show coding splits in adnominal possession determined by membership of the possessee in these noun classes (see Rose, this issue; Rosés Labrada, this issue), the Harakmbut data only pointed to a coding split according to humanness for a set of bound nouns (i.e., body parts). In adnominal possession constructions, but also in other types of adnominal modification constructions, bound nouns were shown to use the same (two-word) coding strategy as independent nouns. They differ from the latter in also showing another, one-word coding strategy, but only in a lexically skewed way. That is, some bound nouns do not accept one-word modification constructions. While the distinct behavior of bound nouns in adnominal modification, compared to that of independent and deverbal nouns, can be explained by their having a nominal root or stem and being morphologically bound, the reasons for the differential acceptance of the one-word, prefixless strategy across the class of bound nouns remain unexplored.

With no alienability split at the phrase level, there was little hope of finding reflexes of the alienability contrast in the complex-word phenomenon of noun-noun compounding. Bound and independent nouns were found to merely differ in preference for the N1 or N2 position; neither class is excluded from either position. Deverbal nouns, in turn, behave identically to bound nouns in dropping their prefix in N2 while keeping it in N1. However, we did note differences with the two common-

noun classes in that deverbal nouns only combine with independent nouns in N1, or bound nouns in N2; the reverse combinations are excluded.

Finally, we investigated noun incorporation and found that the explanatory potential of the alienability contrast for this clause-level phenomenon is similar to that for the (simple) word-level phenomenon of the noun class system. Inalienable semantics could be argued to determine the incorporability of nouns, but there are also exceptions.

More generally, this article has shown that although a language may manifest alienability oppositions at the lowest level of organization, viz. the word, this does not necessarily entail the presence of an alienability split in adnominal possession. This is in line with Krasnoukhova's (2012: 87–88) finding that South American languages with inalienable and alienable nouns do not always use different possessive constructions with either class. In fact, they more often use the same possessive construction. In Harakmbut, then, the relevance of the alienability contrast seems to be limited to having motivated the morphological distinction between bound and independent nouns, which in turn motivates the distinct behavior of bound and independent nouns in various grammatical environments. The most intriguing aspect of this distinct behavior is the choice that bound nouns offer to speakers: when do speakers choose the two-word strategy and when do they select the one-word strategy? Is the competition between the morphosyntactic patterns discourse-related, semantically motivated, or lexically determined? These questions are left for further research.

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Abbreviations

1	1st person
2	2nd person
3	3rd person
>	'acts on'
ACC	accusative
AN	animate
APPL	applicative
AVRT	avertive
BEN	beneficiary/benefactive
BEN.APPL	benefactive applicative
CAUS.SOC	sociative causative
CLF	classifier
DEP	dependent verb form
DIM	diminutive
DIST	distal
DUB	dubitative
EP.V	epenthetic vowel
GEN	genitive
HAB	habitual
IND	indicative
INDET	indeterminate
INDIR.EVD	indirect evidential
ITER	iterative
LOC	locative
NEG	negation
NMLZ	nominalizer
NOM	nominative
NPF	noun prefix
POT	potential
PL	plural
REM.PST	remote past
SG	singular
SPAT	spatial prefix
TRNS	transitivizer
VBZ	verbalizer
VPL	verbal plural

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