A clausal analysis of possessive structures:
The view from Äiwoo[*]

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Abstract I argue that all possessive structures in Äiwoo actually contain clausal structure, revolving around the abstract verb poss, a transitive Undergoer Voice (UV) verb, something not previously recognized in the descriptive literature about this language (Næss 2006 et seq.). This verb can be used by itself to form clausal possession: "I poss the boat" ≈ "the boat is mine". Possessed DPs also contain the verb poss: the object of this verb is extracted, to form a relative clause. Informally described, "my boat" really is "the boat_i [that I poss __i]" ≈ "the boat that is mine". Thus, Äiwoo doesn't have true nominal possessives like *my, mine, their(s),* or anything like the Saxon genitive *'s*; the only way to form a possessed DP in Äiwoo is through relativization. Evidence for this comes from the morphosyntax of possessive structures. Their word order and syntax mirrors what is found for UV verbs, including their relativization properties. Several quirks of UV verbs (voice concord morphology, and a complex system of object agreement) are also perfectly replicated in possessive structures. This has implications for our understanding of the syntactic properties of possession cross-linguistically. An influential view (Szabolcsi 1983, 1994, Freeze 1992, Kayne 1993) maintains that universally, all clausal possession is derived from an underlying nominal (DP-like) constituent, from where an argument is extracted. The existence of a language that demonstrably does the opposite (building possessed DPs through relativization out of a transitive clause) challenges the universality of this approach.

Contents

1 INTRODUCTION

1.1 POSSESSIVES AS VERBS

In this article, I argue that all possessive structures in Äiwoo (Oceanic < Austronesian; Solomon Islands) have at their core a verb. In other words, Äiwoo doesn't have true "nominal" possessives, like possessive pronouns (*my, mine, their(s), …*) or determiner-like items (the Saxon genitive). I propose that this verb is a null transitive predicate, with the possessor as its external argument and the possessum as its internal argument (1a), and carries meaning similar to 'POSSESSUM is POSSESSOR's' (1b). A concrete example is given in (2) (the word order here is OVS). To stay maximally neutral and avoid any associations with transitive 'have', I label this transitive possessive predicate simply POSS (in fact, I argue that POSS is different from 'have' in some ways; see below)[1].

(1)   a.   *v*P
              ╱‾‾‾‾‾‾‾╲
         POSSESSOR   ╱‾‾‾‾╲
                     v   POSSESSUM
                    POSS

      b. ⟦(1a)⟧ ≈ 'POSSESSUM is POSSESSOR's'.

(2)   *boat   nogo   Pita*[2]
      boat   POSS:TOOL.3MIN   Peter
      'The boat is Peter's'; lit. 'Peter POSS the boat'

The verb POSS can be used by itself, in a simple transitive clause like (2), which then conveys the semantics in (1b). Alternatively, its object (the possessum) can be extracted to form a relative clause: for example, from the transitive clause '[Peter] POSS [the boat]' ("the boat is Peter's; Peter owns the boat"), one can derive 'the boat$_i$ [(that) Peter POSS ___$_i$]', that is, "the boat that is Peter's", more idiomatically translated to "Peter's boat". I propose that, in fact, all possessed DPs in Äiwoo underlyingly contain a relative clause.

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1 I discuss the relation between the translation "DP is POSSESSOR's" and the underlying transitive Äiwoo syntax in §1.4. For more details about the semantics of POSS and its relation to 'have', see §7.

2 I adopt the working Äiwoo orthography that is also used in other recent published literature (Næss 2006 et seq.) and the dictionary (Næss 2017a). Most symbols have their predictable IPA value, with the exception of ⟨ä⟩ = /æ/, ⟨â⟩ = /ɑ~ɒ/, ⟨j⟩ = /ⁿdʒ/, ⟨ng⟩ = /ŋ/, ⟨ny⟩= /ɲ/. All voiced stops are prenasalized (/ᵐb, ⁿd, ⁿdʒ, ŋg/).

    The abbreviations used in the text are: 1/2/3 'first/second/third person', 12 'first person inclusive', A 'agent', ACC 'accusative', AGR 'agreement', ANIM 'animate', ASP 'aspect', AUG 'augmented number', AV 'actor voice', BN 'bound noun', COLL 'collective', CONJ 'conjunct order', DAT 'dative', DEF 'definite', DEM 'demonstrative', DIR 'directional', DIST 'distal', EXCL 'exclusive (first person)', F 'feminine', GEN 'generic' (for Äiwoo), 'genitive' (only for Avar and Nepali); IC 'initial change', III 'noun class number 3', INAN 'inanimate', INCL 'inclusive (first person)', L 'linker', MIN 'minimal number', NEG 'negation', NMZ 'nominalizer', NOM 'nominative', OBV 'obviative', PL 'plural', POSS 'possessive', PRES 'present tense', PROX 'proximal', PRT 'particle', RELM 'relational marker', SG 'singular', TAM 'tense/aspect/mood', UA 'unit-augmented number', UNM 'unmarked case', UV 'undergoer voice'.

The simple proposal that possessives are verbal and not nominal in nature can account for a number of interesting (and, at times, apparently odd) properties of the possessive system of the language.

The core part of the paper (§§3-5) has the following general structure. I will show that undergoer voice (UV) verbs show a given phenomenon P, and then show that P also happens in the exact same way in the possessive system. To ease exposition, for every phenomenon I will first present a brief summary of the core points, and then lay out the richer empirical details both in the verbal domain and in the possessive domain. The reader who is not necessarily interested in a very detailed exposition of all the empirical data might want to focus on the introductory parts of these sections.

In the rest of this introductory section, I present some basic background about Äiwoo, its possessive system, and a summary of my proposal. In §2 I show that the word order syntax of possessive structures is compatible with an analysis of them as containing an UV verb and relativization. Then, in §3 I present the first piece of evidence: the agreement morphology on possessives is (almost) the same as on UV verbs. After that, §4 shows how a particular type of voice-related morphology has the same behaviour on UV as verbs as in possessive structures. The final empirical argument is made in §5: the object agreement pattern of UV verbs replicates perfectly in possessive structures, which show "possessum agreement". Section §6 presents a few parallels to what I argue for in Äiwoo, and explores a few predictions of my analysis. Then, §7 discusses the semantic relationship between poss and English 'have' (and its Western European equivalents). Finally, §8 discusses the implications of my analysis of Äiwoo for our syntactic theories of possession. Section §9 concludes.

1.2   Background about the language

Äiwoo is an Oceanic (Austronesian) language spoken in the Solomon Islands, more specifically on the Reef Islands in the Temotu province, with about 8 400 speakers (Ross & Næss 2007). The data this work builds on consists of a corpus of natural speech collected by Åshild Næss over several fieldwork trips (2004–2018), whom I thank for making it available to me. Inflectional paradigms have been collected independently through targeted elicitation, also by Næss. Because of the nature of the elicitation process, neat minimal pairs are mostly not available, and neither is negative evidence (i.e., unacceptability judgments). In addition, a translation of the Gospel of Mark has been consulted. Due to logistical issues, unfortunately we have no direct access to native speakers at the present time, so that some datapoints are crucially unavailable; this will be pointed out when relevant throughout the text.

Äiwoo is an underresearched language, and there is no published grammar. This paper builds on and extends the available description and analysis of the language, mostly carried out by Åshild Næss (Næss 2006, 2015b, 2018, 2021, Næss & Boerger 2008, Ross & Næss 2007, a.o.). I proceed to present a few background facts about the grammar of the language, indispensable to follow the argumentation of this paper.

First, a few terminological remarks are in order. Throughout the text, I use the terms 'subject' and 'object' in a loosely defined pre-theoretical sense, equivalent respectively to 'external/internal argument' or '(proto-)agent' and '(proto-)patient/theme' (cf. the labels A and O/P often used in the typological literature). With this, I do not make any claims about the nature of grammatical relations in Äiwoo (see Næss 2015a,b for a detailed discussion in a functionalist/typological framework). In the Minimalist framework I adopt (Chomsky 2000, 2001), 'subject' and 'object' are not a primitive or in any way technical notion (McCloskey 1997), so my adopting these labels is purely for ease of exposition. See also Harley 2011 for an overview of grammatical relations in Minimalism.

The number system of Äiwoo is a so-called minimal-augmented one (Næss 2006). Simplifying coarsely, the number labels 'minimal', 'unit-augmented' and 'augmented' loosely correspond to 'singular', 'dual' and 'plural' respectively. For ease of exposition, I'll simply illustrate the whole pronominal paradigm in (3), with informal/idiomatic English translations. The interested reader can refer to Corbett (2000), Cysouw (2003), Harbour (2016), and references therein for more details about minimal-augmented number systems.

(3) **Pronominal paradigm (slightly elaborated from Næss 2006: 272):**

MINIMAL		
1	*iu*	'I'
12	*iuji*	'You and I'
2	*iumu*	'You'
3	*inâ, ine*	'S/he (DIST, PROX)'

UNIT-AUGMENTED		
1	*iungole*	'I and another person; we.EXCL two'
12	*iudele*	'You, I, and another person; we.INCL three'
2	*imile*	'You and another person; you two'
3	*ijiile*	'S/he and another person; they two'

AUGMENTED		
1	*iungo(pu)**	'I and others; we.EXCL'
12	*iude*	'You, I, and others; we.INCL'
2	*imi*	'You and others; you.PL'
3	*ijii*	'S/he and others; they'

* The form *iungo(pu)* alternates freely with *ingo(pu)*, even within the same sentence. The same applies to the unit-augmented form *iungole~ingole*.

Finally, like other Austronesian languages, Äiwoo has a symmetrical voice system, first described as such in Næss (2015b)[3]. The main contrast is between Actor Voice (AV) and

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3 Interestingly, these systems are actually not found in Oceanic languages, but only in (geographically) Western sub-branches of the Austronesian family. See Næss (2015b) for a discussion of the diachrony. Äiwoo also has a Circumstantial Voice, but it functions in many ways differently from the two main ones, and is not crucial for the present work; see (Næss 2015b) for details.

Undergoer Voice (UV). The voice morphology itself is highly idiosyncratic and often not segmentable, so I gloss it as fused to the verb stem itself (see Roversi 2019: §3.2 for discussion); to avoid cluttering the examples, I will only gloss voice when relevant.

AV and UV are illustrated in (4)-(5) respectively. Word order is fairly strict: the pivot (the argument selected as the most salient one in each voice) is sentence-initial[4]. AV has SVO order, and the verb carries person/number prefixes (4); intransitive verbs pattern like AV ones (of course, without an object). UV, on the contrary, has OVS order, and the verb carries suffixes instead of prefixes (5a). The position of the non-pivot argument – the object in AV, and the subject in UV – is asymmetrical with respect to a template-like series of particles that cliticize phonologically to their left, here represented by the TAM clitics *=to* and *=jo*: AV has S V=CL O order, whereas UV has O V S=CL order (5b). (Keep in mind that Äiwoo, like most languages of the area, shows frequent drop of any nominal argument, as long as it's recoverable from the discourse context.)

(4) **Actor Voice**: S φ-V=CL O
[*pe-sime-engâ*]$_S$ *li-epave=to*   [*sii=kâ*]$_O$
 COLL-person-DIST   3AUG-cook.AV=TAM   fish=DIST
'The people cooked fish'

(5) **Undergoer Voice**: O V-φ S=CL

   a. [*sii*]$_O$ *lâ*   *ki-epavi-i=to=wâ*
       fish   DIST   IPFV-cook.UV-3AUG=TAM=DIST
       'They cooked the fish'

   b. [*nupo*]$_O$ *lâ*   *i-pa-kä-∅*   [*gipiä*]$_S$ *=jo=wâ*
       net   DIST   ASP-fetch.UV-DIR3-3MIN   br.in.law.3MIN=TAM=DIST
       'His brother in law took the net'

I assume that in UV the subject is base-generated above and asymmetrically c-commands the object, despite the surface OVS word order, which I assume to be a result of later movements. Although we lack data to run classic c-command tests (such as anaphors, binding, etc.), this can still be shown to be the case in an indirect way. UV has a rather complicated agreement system, described in §5.1. Roversi (2020) shows that the only way to successfully model this system is to posit a φ-probe that first targets the subject, and then the object. Assuming uniformly downward agreement (Chomsky 2000, Preminger 2014, Deal 2015, to appear, Preminger & Polinsky 2015, Polinsky & Preminger 2019, Rudnev 2021 a.o., *contra* Bjorkman & Zeijlstra 2019), this is only possible if the probe asymmetrically c-commands both arguments, and the subject asymmetrically c-commands the object.

1.3   Äiwoo possessives: a first description

The Äiwoo possessive system shows an alienability split, as do many languages of the same family and geographical area (Lynch, Ross & Crowley 2002: §2.7). In the Oceanist literature, the two different possessive constructions used with the two groups of nouns are

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4 With the exception of pronominal objects in UV, which are post-verbal instead of sentence-initial; see §2.1.

commonly referred to as "direct possession" (for inalienable nouns) and "indirect posses-sion" (for alienable nouns)[5]. Here, I will use the less language-specific terms "inalienable" and "alienable".

Inalienably possessed nouns take a suffix indexing the possessor's φ-features, attached directly to the noun itself. This group consists, chiefly, of kinship terms and body parts. Some inflected forms of the noun 'father' are shown in (6) (notice that this is not an exhaustive paradigm).

(6)   **Inalienably possessed nouns**:

   a.   *tumo-**mu***
        father-2MIN
        'Your father'

   b.   *tumo-**de***
        father-12AUG
        'Our.INCL father'

   c.   *tumwä*
        father.3MIN
        'His/her[6] father'

   d.   *tumwä-**i***
        father-3AUG
        'Their father'

There is no non-inflected or non-possessed form of inalienable nouns. I follow Næss' prac-tice of using the 3MIN form as the citation form.

Alienably possessed nouns (the rest) can't take a possessor-indexing suffix directly. Instead, they are followed by a possessive classifer to their right, which takes (almost) the same paradigm of suffixes seen on the inalienably possessed nouns. Some illustrative forms are shown in (7).

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5 The possessive system also comprises a "third member", the so-called 'relational markers', which I exclude from this paper due to their being poorly understood; see appendix D for a brief discussion.

6 Äiwoo pronouns and agreement markers do not make any gender distinctions. In this paper, I will consis-tently use of the forms 's/he' and 'his/her' for 3SG/MIN forms in the free translation line of glossed examples. However, I don't want to pass this as an unproblematic neutral editorial choice, and it ought to be com-mented briefly. In general, a good alternative in these cases – also recommended by the LSA's Guidelines for Inclusive Language (https://www.linguisticsociety.org/resource/guidelines-inclusive-language) – is to use singular *they* (Conrod to appear[b]). Note also that younger English speakers find referential definite uses of singular *they* grammatical to a much larger degree than older speakers do (Bjorkman 2017, Con-rod 2019, to appear[a]). However, the use of singular *they* (even in a typographically disambiguated form like 'they.SG') in this paper specifically would provide some issues. Because of the nature of the data under discussion, the reader would face the cognitively taxing task to rapidly and precisely distinguish between 'they.SG hit them.PL' vs. 'they.PL hit them.SG', 'their.SG dog' vs. 'their.PL dog' vs. 'their.SG dogs', etc. This may reduce the readability and clarity of the paper, at times drastically. Therefore, I choose the variants 's/he' and 'his/her', which unambiguously convey singular number, despite the fact that they may actively contribute to enforcing a strictly binary conception of social gender. I find that there is no real good solution to this issue; I gladly welcome any feedback as to how to tackle it in the specific context of this paper. I thank Kirby Conrod (p.c.) for precious advice about this.

(7) **Alienably possessed nouns**:

    a. *nenu*   *na-**mu***
       coconut POSS:FOOD-**2MIN**
       'Your coconut'

    b. *nenu*   *na-**i***
       coconut POSS:FOOD-**3AUG**
       'Their coconut'

    c. *nenu*   *numo-**mu***
       coconut POSS:DRINK-**2MIN**
       'Your coconut'

    d. *nenu*   *numä-**i***
       coconut POSS:DRINK-**3AUG**
       'Their coconut'

    e. *nenu*   *no-**mu***
       coconut POSS:GEN-**2MIN**
       'Your coconut'

    f. *nenu*   *no-**i***
       coconut POSS:GEN-**3AUG**
       'Their coconut'

There are six possessive classifiers, whose use depends on the intendeed construal of the relation between the possessor and the possessum noun[7]. For example, the coconut in (7a,b) is one that the speaker construes as an edible object, the one in (7c,d) is one that is intended to be drinkable (as in, at the ripening stage where one drinks the coconut water, but doesn't eat the flesh), and the one in (7e,f) only has more generic possession semantics (e.g., it could be a piece of decoration in the house). The six classifiers are the following: (i) general; (ii) food; (iii) drinks; (iv) betelnuts and betelnut-related objects (paraphernalia for chewing, parts of the plant, etc.); (v) tools and utensils (including generically "useful things", very loosely and context-dependently defined); (vi) "real estate" objects and other locational nouns (houses, gardens, earth ovens, paths and trails, beaches, reefs, etc.). The full series of classifiers, each with its full φ-paradigm, is shown in (26) (§3).

1.4 THE PROPOSAL IN A NUTSHELL

After having described what the possessive system looks like on the surface, in this section I will flesh out my proposal in greater detail. As briefly presented in the introduction, the core idea is that Äiwoo has only one abstract possession verb, which I label POSS. This predicate is at the base of every possessive construction in the language, whether DP-internally (possessed DPs, both alienable and inalienable) or predicatively (i.e., to convey meanings like 'I have DP' or 'DP is mine'). In other words: unlike more familiar languages, Äiwoo doesn't have possessive pronouns/determiners like *my/mine*, anything like a Saxon genitive construction, or anything like a verb *have*.

    First, I will introduce the basic argument structure and syntactic properties of POSS. I argue that it is an UV verb, which lacks an AV counterpart. This is not unique to POSS: other verbs are also not attested as having an AV form, such as *kää* 'know' and *te* 'see', though we currently don't know exactly why this is the case (or whether the AV forms exist but are simply extremely infrequent in usage, so that they don't appear in our corpus). POSS takes the possessor as its external argument, and the possessum as its internal argument. This is illustrated in (8a), repeated from (1a) above. The asymmetric c-command relation

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7 These classifiers are only used to express possession, and not for example in combination with numerals as in many East Asian and South East Asian languages.

between possessor and possessum follows from the argument structure of UV clauses in general, where the external argument c-commands the internal one; see the end of §1.2 for an argument.

(8) a.   *v*P
                          ╱ ╲
       Possessor
                    v   Possessum
               poss
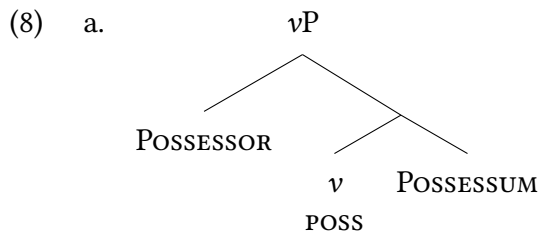
     b. ⟦(8a)⟧ ≈ "possessum is possessor's'.

Given its transitive argument structure, it might be tempting to conceptualize poss as the Äiwoo equivalent of 'have' in English and other Western European languages (henceforth have). However, this would be inaccurate, and I explicitly refrain from doing so. The main reason is that have poses a definiteness restriction on its object which poss doesn't share. An English sentence like *Alex has the boat* is simply infelicitous under the standard ownership reading of have, and can in fact only have a temporary possession reading (roughly, 'the boat is available to Alex (at a contextually salient time)'). Differently from have, Äiwoo poss has no troubles with definite objects. A simple sentence like "Alex poss boat" is not translated by speakers into "Alex has a boat"; rather, this means something more along the lines of "the boat is Alex's", or – staying closer to Äiwoo argument structure, but probably not entirely semantically equivalent in all contexts – "Alex owns the boat". This is what is shown abstractly in (8b). Another fact that highlights the difference between Äiwoo poss and have is that, when trying to convey the same semantics as have, native speakers opt for a different strategy than just using poss, involving an existential verb. A more detailed discussion of the semantics of poss and have and their possible relation is given in §7.

English doesn't have a clear example of a transitive possession verb that works like poss in being fine with a transitive object: there exists no hypothetical verb *nave* such that ⟦Alex naves the boat⟧ = ⟦the boat is Alex's⟧[8]. Therefore, in this paper I will mostly keep the translation "DP is possessor's" in the third line of glossed examples, simply because it often happens to be the most idiomatic or natural one in English. However, it ought to be explicit that this translation is not meant to be reflective of Äiwoo syntax. Although Äiwoo poss is most readily translated into English with an intransitive/copular construction, it's a fully transitive verb. In order to avoid confusion, the reader should keep in mind the detachment between the syntactic structure of Äiwoo poss and that

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8 Verbs like 'possess' and 'own' wouldn't be good alternatives, because their semantics are restricted to possession in the strict sense, that is, ownership. The Saxon genitive *'s*, on the other hand, is notoriously vague in what kind of relation between two DPs it can convey: 'Alex's book' could be the one they own, the one they wrote, the one they are supposed to carry up the stairs, etc. This seems to be true of Äiwoo poss as well, so that 'possess' is not an optimal choice for translation.

of its most idiomatic English rendition (just like, for example, Italian *ho fame* 'have.1sg hunger' is better rendered as 'I'm hungry' rather than 'I have hunger', despite the fact that the latter mirrors the original argument structure and the former doesn't).

In addition to its generic possession semantics, I assume that poss is a phonologically null verb. I assume that the possessive classifiers (7) are nothing else than the spell-out of poss when combined with six different roots, carrying various richer semantics. The results are six morphologically complex possessive predicates with the meaning 'poss.as.food', 'poss.as.drink', etc. Moreover, I argue that this line of thinking can and should be extended to the inalienable possessive system: these are the result of adjoining poss to kinship (and body parts) roots. Consistently, the result is another array of complex possessive predicates, with the meaning 'poss.as.son', 'poss.as.mother', etc.[9]

The question arises now of how Äiwoo can express the semantics of a possessed DPs, like 'my boat', given that the only item with possession semantics in the whole language is a transitive verb. I argue that this is done through relative clause formation. Intuitively: 'my boat' in Äiwoo is underlyingly 'the boat that is mine/that I possess'. More formally, given a transitive UV clause 'I poss boat' (9a), we can extract the theme, and derive thus 'boat$_i$ [(that) I poss —$_i$]' (9b).

(9)   a.   **Baseline transitive clause**:
            ⟦I poss.as.tool boat⟧ ≈ "the boat is mine"

       b.   **Possessed DP via relative clause formation**:
            ⟦boat [that I poss.as.tool —]⟧ ≈ "the boat that is mine" ≈ "my boat"

Once again, I argue that the syntax of inalienable possessive constructions is entirely parallel. What looks on the surface like an inflected noun (*ginou* 'son.1min' = "my son") is in fact a relative clause headed by a null pronoun. Given a basic UV transitive clause 'I poss.as.son him' ("he's my son"), we can extract the theme and create the DP 'he$_i$ [(whom) I poss.as.son —$_i$]', that is, "my son". An alternative, and perhaps superficially more intuitive analysis of this would have the kinship noun as the object of poss, which gets extracted: "my son" would be the reading of the structure 'son$_i$ [whom I poss —$_i$]'. However, I explicitly argue against such an analysis in §5.2.2.

The possibility of extracting the theme is obviously tightly connected to poss being an UV verb. Äiwoo follows the canonical Austronesian extraction restriction, whereby Ā-movement is restricted to the voice-selected argument (see Chen & McDonnell 2019 for an overview and extensive references). Only subjects (agents) can be extracted from AV clauses, and only objects (patients/themes) can be extracted from UV clauses (Næss 2015b)[10]. Therefore, the fact that poss is UV is perfectly expected[11].

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9 An alternative to this would be to not segment out poss from its putative modifiers. Instead of a single abstract poss verb that can be modified by a series of roots, one would have a list of more semantically specific poss verbs. I'm not sure either of these options is clearly better than the other. In both cases, approximately the same amount of arbitrary information needs to be listed somewhere: either "the verb poss can incorporate roots *a, b, ...*", or, "the lexicon contains the verbs poss$_a$, poss$_b$, ...". I thank Amy Rose Deal (p.c.) for this insight. For concreteness, in this article I opt for the first approach, where there is one poss verb and several modifiers, although this does not have bearings on my proposal.

10 In fact, Äiwoo allows agents to be extracted from UV clauses under some specific circumstances. See §2.2 for details, and §6.2 for an argument that this possibility is also exploited by the possessive system.

11 Under one view of Austonesian voice, voice morphology is what makes extraction of a given argument possible (a.o. Aldridge 2004, 2008, Erlewine 2018). According to a different analysis of Austronesian voice,

2   Syntax and word order

2.1   Word order in UV and possessives

Before I proceed to present stronger arguments supporting an analysis based on an UV verb poss, let's establish that the syntax and word order of possessive structures is not only compatible with, but in fact exactly what we expect given the syntax of UV in general. This section contains an argument for the clausal analysis, although these facts might be interpreted in different ways; here, I simply establish that the clausal analysis is viable in the first place at all. If the word order facts weren't compatible, then this kind of analysis would be a no-go from the start.

As showed in §1.2, UV clauses have unmarked O V S=CL order, where =CL identifies a fixed series of clitic-like particles of different kinds. One of these clitics is the negative particle =*gu* (10)[12]. Since sentences with two overt DPs are fairly rare in our natural speech corpus, here I show the position of both arguments with two distinct sentences.

(10) **Negative clitic =*gu*:**

   a. **[O] V (S)=CL:**
      [*nubo*]$_O$ *ba*   *ki-ve-i=gu*
       ground NEG IPFV-pay.UV-3AUG=**NEG**
      'They don't buy land'

   b. **(O) V [S]=CL:**
      ba   *i-te-kä-∅*   [*sime*]$_S$=*gu*
      NEG ASP-see.UV-DIR3-3MIN   person=**NEG**
      'No one saw (him)'

Interestingly, the O V S=CL order in UV has an exception: when the object is a (overt) pronoun, then the order is V S=CL O. Consider (11), where the object pronoun *ijii* 'them' appears to the right of the same negative particle =*gu*:

(11) **V S=CL [O$_{PRON}$]:**
    ba   *i-te-kâ-mu=gu*   [*ijii*]$_O$?
    NEG ASP-see.UV-DIR3-2MIN=**NEG**   3AUG
    'Haven't you seen them?'

Having established basic word order facts in UV clauses, let's now turn to possessives. In predicative constructions, when possessives convey the semantics "possessum is pos-

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the verbal morphology is in fact a result – not the cause – of a given argument being extracted (Richards 2000, Pearson 2001, 2005, Rackowski & Richards 2005). This is orthogonal to the purposes of this paper, so I stay agnostic with respect to this issue; what matters is that the voice morphology of poss is not only entirely compatible with its syntactic possibilities, but exactly what we should expect given the grammar of the language.

12 Negation in Äiwoo has a bipartite structure, with a pre-verbal particle *ba* co-occuring with =*gu*. See Roversi & Næss (2019) for details.

sᴇssᴏʀ's", the attested word order has the possessum in sentence-initial position, and the possessor immediately right-adjacent to the possessive classifier.

(12) [*sapulâu*]   *tä*   [*penyibe*]
        men's.house   ᴘᴏss:ʟᴏᴄ   old.man
        'The *sapulâu* house belongs to the elders', or '… is [the elders']'

(13) [*nelo*]   *tä*   [*sii*]
        sea   ᴘᴏss:ʟᴏᴄ   fish
        'The sea belongs to the fish', or '… is the place of the fish'

This is entirely what we expect if we hypothesize that ᴘᴏss is an UV verb with the possessum as its internal argument and the possessor as its external argument: it reduces to O V S order. In fact, we can conclude that an overt possessor DP is in the same structural position as overt UV subjects, as both appear to the left of the negative particle *=gu*:

(14) [*lovävei enge ngâgu-de*]   *ba*   *nogo*   [*miluwopa*]*=gu*
        system this to-12ᴀᴜɢ   ɴᴇɢ   ᴘᴏss:ᴛᴏᴏʟ   Europeans=ɴᴇɢ
        '[This system/arrangement for us] is not of [the Europeans]'

Once again, presented on their own, the data in (12)-(14) don't provide very strong evidence that ᴘᴏss is indeed a transitive predicate. In fact, they would be easily amenable to an alternative analysis that is closer to the English translation: the possessum is the subject of an intransitive clause (with a null copula). Äiwoo freely allows non-verbal predicates, so this wouldn't be surprising. The position of the overt possessor DP in (14) would only entail that the possessor classifier and a possessor DP form a constituent together, so that the bipartite negation structure needs to flank it. However, so far I only want to point out how the word order facts are both entirely compatible with, and in fact correctly predicted by, an analysis of ᴘᴏss as an UV predicate. In the sections below I will present further arguments strengthening my analysis.

2.2 Rᴇʟᴀᴛɪᴠɪᴢᴀᴛɪᴏɴ ɪɴ Äɪᴡᴏᴏ

Let's now turn to the more common use of possessive classifiers (and possessed inalienable nouns), that is, when these are used within DPs. My claim is that these possessed DPs in fact contain a relative clause: the object of the transitive verb ᴘᴏss is extracted, and forms the head of the relative clause. Repeating and simplifying slightly from (9):

(15) a. **Baseline transitive clause**:
            ⟦I ᴘᴏss boat⟧ ≈ "the boat is mine"

        b. **Possessed DP via relative clause formation**:
            ⟦boat [that I ᴘᴏss __]⟧ ≈ "the boat that is mine" ≈ "my boat"

In order to show that this is a feasible analysis of possessive structures, let's now look at what relativization in Äiwoo looks like in general. Like several kinds of subordinate clauses in the language, relative clauses show no overt marking of embedding whatsoever; the relative clause is simply juxtaposed to the right of its head noun. Äiwoo also

mostly respects the same restriction on Ā-extraction commonly found in other Austrone-sian languages with similar voice systems: only the voice-selected argument of a clause can be extracted. In other words, from AV clauses only the subject can be relativized, and from UV clauses only the object can. Both types are shown in (16)-(17). Notice how in UV relative clauses (17), the post-verbal position of the non-pivot subject is preserved (in this case *tumwä* 'her father').

(16)   **Subject extraction from AV clause: S$_i$ [—$_i$ V(=CL) O]**

   sime   [— lu-wâ-nubo   sime]
   person   3AUG-kill.AV   person
   'People$_i$ [who —$_i$ had killed people]'

(17)   **Object extraction from UV clause: O$_i$ [—$_i$ V S=CL]**

   i-lotolâ-kä=nâ   [***dena***   [— ki-pi-kä-∅   tumwä=jo]]
   ASP-prepare.AV-DIR3=DIST   **food**   IPFV-bring.UV-DIR3-3MIN   father.3MIN=TAM
   'She prepared [food$_i$ [that her father had brought —$_i$]]'

Since pivots are sentence-initial, extracting them to the left is linearly vacuous, and since there is no overt marking of embedding, there could in fact be no movement at all, so one could hypothesize a head-internal relative clause. However, a syntactic peculiarity of Äiwoo lets us see that there is in fact movement. The Austronesian pivot restriction can be violated in Äiwoo in a specific context: when an UV clause has a pronominal object, then the subject can be extracted (Næss 2015b: 290)[13]. This is shown in (18). The applicative suffix *-ive* derives UV verbs (Næss 2015b, 2021, Roversi 2019), and that this form is in UV is clearly confirmed by the suffixal φ-marking (as opposed to prefixal). If the head of the relative clause (*sime* 'person') hadn't moved, it would be post-verbal, whereas we see it to the left of the relative clause. Two more examples of this are shown in (19). In the first one, the wh-indefinite *iie* 'who(ever)' shows leftward movement from its post-verbal position as the subject of the relative clause ('whoever welcomes me'); note that Äiwoo is a fully wh-*in situ* language, so there would be no other reason for this element to move than relativization. In the second part of the sentence, the bound noun *me-* 'person' is being used as a relativizer; essentially, it's no different from any other noun, apart from it being obligatorily phonologically bound (see Næss 2017b for details about bound nouns).

(18)   **Subject extraction from UV clause: S$_i$ [V —$_i$=CL (O$_{PRON}$)]**

   sime   [*ki-singä-ive-gu-∅*   — =ngâ]
   person   IPFV-lie-APPL-3MIN-1MIN   =DIST
   'The man$_i$ [who —$_i$ told lies about me]' (Næss 2015b: 290; glossing slightly altered for consistency)

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13 I have no explanation of this phenomenon, but it's consistent. See §6.2 for a possible case of subject extrac-tion out of a possessive structure (that is, the possessor is being extracted instead of the possessum).

(19) [***iie*** [*ki-liko-lâ-mâ-gu-∅*   ⌐ *=ngâ*]] *i-liko-lâ-epu-kä-∅=nâ*
       who IPFV-love.UV-out-DIR1-3MIN-1MIN   =DIST ASP-love.UV-out-also-DIR3-3MIN=DIST

       God, [***me***-[*wowâi-mä-gu-∅*   ⌐ __]]
       God   BN:person-send.UV-DIR1-3MIN-1MIN
       'Whoever welcomes me also welcomes God, the one who sent me' (Mark 9:37)

Turning now back to possessives, once again we see that the word order found in posses-
sive structures is entirely compatible with the expected syntax given an UV-based analy-
sis. If the possessum is the extracted object of the UV verb POSS, then it should be to the
left of the possessive marker, and it is. Moreover, if the possessor is the in-situ subject of
the embedded relative clause (whose verb is POSS), it should be right-adjacent to the pos-
sessive marker, and not preceded by any preposition or any other material. This is also
borne out, both in alienable (20) and inalienable structures (21):

(20) *box no*   [*sime   mi-nubo=kâ*]
       box POSS:GEN.3MIN   person BN:one-die=DIST
       'The coffin of the dead person'

(21) *isä*   [*Meri*]
       mother.3MIN   Mary
       'Mary's mother'

To summarize: in this section I have shown that the word order and syntax in possessive
constructions is entirely compatible with an analysis of possessives as underlyingly con-
taining a transitive UV predicate. Of course, this doesn't by itself confirm the hypothesis,
but it's a necessary condition for it to hold. If the word order facts themselves hadn't been
compatible, then the POSS-based analysis would've been a no-go from the start. In the next
sections, I provide progressively more convincing evidence that in fact is hard to explain
without assuming a POSS verb.

3 Φ-MORPHOLOGY ON UV VERBS AND POSSESSIVES

The first piece of evidence for a close relation between the possessive system and the UV
verbal system comes from the φ-marking morphology. The core observation is that the
suffix paradigm found on inalienable nouns and possessive classifiers alike (22a,b) is very
similar to the one found on UV verbs (23a), and crucially different from the one found on
AV (23b) (intransitives pattern like AV verbs):

(22) **Possessives**:
       a. *tumä-**i***   b. *nenu   na-**i***
           father-**3AUG**   coconut POSS:FOOD-**3AUG**
           'Their father'   'Their coconut'

(23)　**Verbs**:
　　a.　**UV verbs**:
　　　*ki-lââ-**i***
　　　IPFV-build.UV-**3AUG**
　　　'They build (it)'

　　b.　**AV verbs and intransitives**:
　　　*ki-**li**-lâwââ*
　　　IPFV-**3AUG**-build.AV
　　　'They build (it)'

Having laid out the general idea, let's take a closer look at the verbal paradigms in both AV and UV (slightly amended from Næss 2015b: 74). UV verbs have their subject marked by suffixes (24a), whereas AV verbs take prefixes (24b) (intransitive verbs pattern like AV verbs in this respect). Moreover, the morphological form itself of the affixes is different between the two paradigms for almost all 1st and 3rd person forms, apart from 3MIN ∅.

(24)　a.　**UV agreement markers (suffixes)**:

	Min	Unit-Aug	Aug
1	-no, -nee*, -∅†	-ngo-le	-ngo(pu), -ngee*
12	-ji	-de-le	-de
2	-mu	-mi-le	-mi
3	-∅, -gu‡	-i-le	-i

* The allomorphs *-nee, -ngee* (respectively 1MIN, 1AUG) are only used when preceding a 2nd person object marker. For details about object agreement and the morpheme *-ngee* specifically, see §5.1 and appendix B.

† 1MIN is only *-∅* when following the 3MIN subject marker *-gu*.

‡ 3MIN is only *-gu* when preceding an object marker (including 1MIN *-∅*).

　　b.　**AV agreement markers (prefixes)**:

	Min	Unit-Aug	Aug
1	i-	me- … -le	me-
12	ji-	de- … -le	de-
2	mu-	mi- … -le	mi-
3	(∅-)	li*- … -le	li*-

* 3AUG *li-* has an allomorph *lu-*, whose use is conditioned by phonological factors.

As can be seen from (6)-(7) and (22)-(23) above, all possessives – both alienable and inalienable alike – take a suffix paradigm that is far more similar to the UV one than the AV one. However, some deviations from the UV paradigm are found, in 1MIN and 3MIN forms only. In the possessive paradigms, these are often represented by morphological mutations of the stem itself rather than by segmentable suffixes. The full paradigm of the inalienably possessed noun *isä* 'mother' is shown in (25). Notice how apart from 1MIN and 3MIN, the suffix paradigm is identical to the UV verbal paradigm (24a). (Other nouns have slightly different stem alternation patterns, but what is consistent is that 1MIN and 3MIN don't show overt suffixes, whereas all other forms do; see appendix A for full paradigms.)

(25)   **Full paradigm of *isä* 'mother' (Næss in prep.):**

	Min	**Unit-Aug**	**Aug**
1	iso	iso-ngo-le	iso-ngo(pu)
12	iso-ji	iso-de-le	iso-de
2	iso-mu	iso-mi-le	iso-mi
3	isä	isä-i-le	isä-i

As for the possessive classifiers used with alienably possessed nouns, the whole φ-paradigm for all six is shown in (26). Once again, 1MIN and 3MIN are the less predictable forms, whereas the rest of the paradigm is the same as the UV verbal paradigm. We can see that most classifiers have at least two different stems, but how these are distributed is seemingly semi-arbitrary. In the GENERAL paradigm, one stem is shared by 1st and 12nd person (*nou-*) and one by 2nd and 3rd (*no-*). In the DRINK, UTENSILS and LOCATION paradigms, all participant forms share one stem which is different from the one used in 3rd person forms. In the FOOD paradigm, 1st person forms have one stem (*nugo-*) whereas the rest have a different stem (*na/nä-*). The only paradigm with only one stem seems to be the BETELNUT one, although one can observe vowel harmony-like effects in the alternation between *da-* and *dä-*; however, these are not clearly phonological, since the 3AUG suffix *-i* doesn't trigger the fronted stem *dä-*. This is also the case for the alternation between *na-* and *nä-* in the food paradigm. A schematic summary of the various stem alternation patterns is showed in (27).

(26)   **Possessive classifiers, full paradigm (Næss 2006: 273)**

	GENERAL	FOOD	DRINK	BETELNUT	UTENSILS	LOCATION
1MIN	nou	nugo	numo	da-no	nugu	to
12MIN	nou-ji	nä-ji	numo-ji	dä-ji	nugu-ji	to-ji
2MIN	no-mu	na-mu	numo-mu	da-mu	nugu-mu	to-mu
3MIN	no	na	numä	da	nogo	tä
1UA	nou-ngo-le	nugo-ngo-le	numo-ngo-le	da-ngo-le	nugu-ngo-le	to-ngo-le
12UA	nou-de-le	nä-de-le	numo-de-le	dä-de-le	nugu-de-le	to-de-le
2UA	no-mi-le	nä-mi-le	numo-mi-le	dä-mi-le	nugu-mi-le	to-mi-le
3UA	no-i-le	na-i-le	numä-i-le	da-i-l	nogo-i-le	tä-i-le
1AUG	nou-ngo(pu)	nugo-ngo(pu)	numo-ngo(pu)	da-ngo(pu)	nugu-ngo(pu)	to-ngo(pu)
12AUG	nou-de	nä-de	numo-de	dä-de	nugu-de	to-de
2AUG	no-mi	nä-mi	numo-mi	dä-mi	nugu-mi	to-mi
3AUG	no-i	na-i	numä-i	da-i	nogo-i	tä-i

(27)   **Stem alternation patterns:**[14]

      a.   {1, 12, 2} ≠ {3}: DRINK, UTENSILS, LOCATION

      b.   {1, 12} ≠ {2, 3}: GENERAL

      c.   {1} ≠ {12, 2, 3}: FOOD (+ "vowel harmony")

      d.   1 = 12 = 2 = 3: BETELNUT (+ "vowel harmony")

These alternation patterns – that is, how two different stems are distributed between the different person forms – are the same that are found in the inalienable noun paradigms (see appendix A). Since a full analysis of the morphology is beyond the scope of this paper, I leave this issue aside here. What matters for the purpose of this paper is that, apart from 1MIN and 3MIN, the paradigm of φ-suffixes found on possessive forms is the same as the one found on UV verbs, and clearly different from the one found on AV verbs. Rather then being a simple coincidence, this is predicted by an analysis where possessives are built on the UV verb POSS.

4   THE MORPHOLOGY OF MODIFIERS

In this section I describe what I analyze as voice concord morphology, and show that it behaves in the exact same way in UV verbs and in possessives. Äiwoo verbs routinely includes several stems ("nuclear-level verb serialization"; Ross & Næss 2007, Næss & Boerger 2008, Næss 2012 et seq.). The so-formed complex stem behaves as one single verb for purposes of TAM and φ-marking. The main stem is the linearly leftmost one, and all subsequent stems act as modifiers of the main one. Moreover, the main stem is the one that determines the voice properties of the whole form.

    The core pattern is the following. When a modifier is attached to an UV verb stem, it has to take the suffix *-i/-nyii*. This doesn't happen with AV verbs and intransitives (Roversi 2019, Næss 2021). This is illustrated in (28), where I bracket the whole complex stem. When the modifier *mana* 'very' is added to the UV form *ââ* 'pull', it carries the *-i* suffix (28a); when it is added to the AV form of the same verb *âwââ*, it does not (28b) (the fact that these verbs have different subjects is irrelevant).

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14 Interestingly, this distribution of stems is in line with the much discussed *ABA generalization (Caha 2009, Bobaljik 2012 et seq.). Informally put, stem alternations don't "skip" cells, but divide the paradigm in contiguous regions. For example, if 1st person has a stem A and 2nd person has a different B, then 3rd person won't have stem A. This is also true if one doesn't make the simplification of analyzing the FOOD and BETEL paradigms as involving vowel harmony. For example, if one analyzes the FOOD paradigm as consisting of three different stems (*nugo, nä, na*), these still divide the person paradigm in contiguous regions: the minimal number would have ABCC, and the (unit-)augmented number would have ABBC, but – crucially – there is no ABAC, ABCA or ABCB paradigm. For a discussion of *ABA patterns in four-way person paradigms with clusivity distinctions, see Moskal (2018).

(28)   **Voice concord morphology**:

    a. **UV**:
       *ki-[ââ-mana-**i**]-mu=wâ*
       IPFV-pull.UV-very-**UV**-2MIN=DIST
       'You catch a lot (of fish)'

    b. **AV**:
       ki-[âwââ-mana]=kâ
       IPFV-pull.AV-very=DIST
       'He catches a lot (of fish)'

To restate my claim clearly: all possessive structures in Äiwoo contain the null UV verb POSS. This predicts that (i) like all other predicates, they should be able to be modified by an array of additional stems; (ii) since POSS is UV, all additional modifiers should carry voice concord morphology. In fact, both predictions are born out. The same *-i/-nyii* suffix found on modifiers of UV verbs also appears on modifiers when these are attached to possessives, both inalienably possessed nouns (29) and possessive classifiers (30).

(29)   *go   ile   ine [ibete   päko-**i**]   Pita*
      because this he   friend.3MIN good-**UV** Peter
      'Because he (here) is a good friend of Peter'

(30)   *mo molâ   [nugu-mole-**nyii**]-ji   ile=to*
      but tradition   POSS:TOOL-exactly-**UV**-12MIN this=TAM
      'But this is exactly our tradition'

In the two following sections I lay out the details in greater detail, first on voice concord in verb forms, and later in possessive constructions. The crucial point is that every particular quirk and idiosyncrasy that voice concord morphology shows in verbs, it also shows in possessives.

4.1   VOICE CONCORD MORPHOLOGY IN UV VERBS

In this section I present the complete empirical facts regarding voice concord in UV verbs; an even more detailed description can be found in Næss (2021: §4.5) and Roversi (2019: §3.3.1). When several modifiers appear on an UV verb, every single one must take the voice concord *-i/-nyii* suffix, in a recursive fashion. Consider the examples in (31), showing cases of one (31a), two (31b) and even three (31c) modifiers carrying the same suffix.

(31)   **Voice concord morphology appears on every modifier**:

    a. *bäli enge=ke   i-[[kää]-päko-**i**]-no*
       side DEM.PROX=PROX ASP-know.UV-good-**UV**-1MIN
       'I know this topic well'

    b. *i-[[[kää]-päko-**i**]-mana-**i**]-no*
       ASP-know.UV-good-**UV**-very-**UV**-1MIN
       'I know this very well'

    c. *ki-[[[[eâmole]-wâtu-i]-päko-i]-mana-i]-i*   *ijii=le*
       IPFV-look.UV-COMP-**UV**-good-**UV**-very-**UV**-3AUG   3AUG=PROX
       'They have to look after them more properly'

Although the form of this suffix is mostly *-i*, some modifiers consistently take the allomorph *-nyii* instead in exactly the same contexts; the alternation seems to be arbitrary, or simply a matter of lexical allomorphy. One of these is *mole* 'exactly', as showed in (32). Moreover, some modifiers consistently don't take any suffix, for reasons currently not understood. A few of these are *eopu* 'also' (33) and *du* 'finish, all' (34).

(32)   *lâ*   *sime-eângâ*   *ba*   *i-[kää-mole-**nyii**]-no=gu*
       DIST   person-DEM.DIST   NEG   ASP-know.UV-exactly-**UV**-1MIN=NEG
       'I don't know this person exactly' (Mark 14:70)

(33)   *kele*   *nunugo-ee*   *i-[viteia-**eopu**]-mu=dä*
       here   tobacco-PROX   ASP-sell.UV-also-2MIN=some
       'This tobacco, do you sell some of that too?'

(34)   *ile=ke*   *nye-eângâ*   *i-[meli-**du**]-kä-de=to*
       this=PROX   BN:manner-DIST   ASP-let.go.UV-all-DIR3-12AUG=TAM
       'At this time/now, we have abandoned all that'

Finally, a related consistent pattern obtains between the two forms of the modifier meaning 'again': the form used with AV and intransitive verbs is *ute* (35a), whereas with UV verbs it's *usi* (35b)[15].

(35)   'Again': AV ***ute*** vs. UV ***usi***

    a. *li-[lotâlâ-**ute**]*   *numomoji*   *nogo-i*
       3AUG-prepare.AV-**again.AV**   canoe   POSS:TOOL-3AUG
       'They prepared their canoe again'

    b. *ku-[lotoläi-**usi**]-∅=jo*
       IPFV-prepare.UV-**again.UV**-3MIN=TAM
       'She prepared (it) again'

4.2   MODIFYING POSSESSIVES: ALSO VOICE CONCORD MORPHOLOGY

As introduced above, the distribution of voice concord morphology in possessive constructions is exactly identical to the one in UV verbs. Possessives – both alienables and inalienables alike – can be modified, and when this happens, the modifiers show the suffix *-i* (36a,b) or *-nyii* (37a), depending on their lexical identity. Again identically to UV verbs, those modifiers like *eopu* 'also' that don't carry voice concord morphology with verbs also fail to carry it with possessives (38). Finally, the modifier 'again' takes the form *usi* and not *ute* (39).

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15 This is plausibly diachronically deriving from *ute-i*, as /t/ consistently neutralizes to /s/ before /i/. However, at the synchronic level there arguments to analyze *usi* as unsegmentable. See Roversi (2019: 37) for details.

(36) **Poss-modifier-*i*:**

   a. *ile   sime-enge   [Gino   une-**i**]   God*
      this person-PROX son.3MIN true-**UV** God
      'This man is the true Son of God' (Mark 15:39)

   b. *go   ile   ine [ibete   päko-**i**]   Pita*
      because this he   friend.3MIN good-**UV** Peter
      'Because he (here) is a good friend of Peter'

(37) **Poss-modifier-*nyii*:**

   a. *mo molâ   [nugu-mole-**nyii**]-ji   ile=to*
      but tradition POSS:TOOL-exactly-**UV**-12MIN this=TAM
      'But this is exactly our tradition'

   b. *go   le   nubo enge   nâ-[to-lâoo-**nyii**]-mi=to=waa*
      so.that PROX land this=DIST IRR-POSS:LOC-always-UV-2AUG=TAM=FUT
      'So that this land will always be yours'

(38) **Poss-also:**

   *nuwa   nyigaa   [na-**eopu**]-de   ile Nyiwoo*
   fruit/seed see.almond POSS:FOOD-**also**-12AUG this Reef.Islands
   '*Nuwa nyigaa* is also our fruit here in the Reefs'

(39) **Poss-*usi*:**

   *lâ   minugolunänâ lâ   [na-**usi**]   nää   nogo=nâ*
   DIST the tenth one DIST POSS:FOOD.3MIN-**again.UV** spirit POSS:TOOL.3MIN=DIST
   'The tenth one is for his spirit again' (lit. 'is [his spirit]'s again')[16]

All examples in (36)-(39) show possessives used predicatively, and not within a DP. One could therefore think that the voice concord morphology showed by modified possessives is a consequence of this[17]. However, this does not seem to be a likely explanation. In Äiwoo, almost any grammatical category can function as a predicate. Nominal predicates abound, and they behave morphosyntactically like intransitive verbs, taking φ-prefixes:

(40) *ba   ji-ki-[penyibe]=gu*
   NEG 12MIN-IPFV-old.man=NEG
   'We're not fully grown' (lit. 'we're not elders')

Nominal predicates – like all other predicates – can also be modified. When this happens, they confirm their intransitive-like behaviour: their modifiers do not take the voice concord morphology shown by UV verbs and possessives. Compare in this respect (36a),

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16 This line is part of a text explaining the traditional shark fishing customs of the Reef Islands. Fishermen will offer, or sacrifice, every fifth shark they catch to a spirit so that they will continue to have good luck in their fishing. Therefore, the speaker is explaining how the fifth shark is for the spirit, then the tenth one is again for the spirit, then the fifteenth, etc.

17 I thank Mitya Privoznov (p.c.) for raising this point, and Åshild Næss (p.c.) for reminding me of it in a later occasion.

repeated here as (41), to (42). In the former, containing a possessive (the inalienably possessed noun *gino* 'son'), the modifier *une* 'true' takes the voice concord suffix *-i*. In the latter, the non-possessed noun *Kraes* 'Christ' is used as a predicate; the same modifier *une* here takes no voice concord suffix.

(41) *ile   sime-enge*   [*Gino   une-i*]   *God*
      this person-PROX   son.3MIN true-UV   God
      'This man is the true Son of God' (Mark 15:39)

(42) *iumu=wâ   mu-*[*Kraes   une*]
      2MIN=DIST   2MIN-Christ   true
      'You are the true Christ' (Mark 8:29)

Unfortunately, there are no available examples in the corpus of a modified possessive used within a DP, but the prediction is that these should show voice concord morphology in the same manner. A constructed illustration of this showed in (43) (the constructedness is marked with an exclamation point); this kind of data will have to be elicited when the practical circumstances allow it.

(43)   **Constructed, predicted to be grammatical**:

          ! [*gino-une-i*]-*no*   *ku-basiki*
            son-true-UV-1MIN   IPFV-run
            Intended: 'My true son is running'

To summarize: possessive structures, both inalienable and alienable ones, show the same type of voice concord pattern that UV verbs have. This follows naturally from an analysis of possessives as (underlyingly containing) the UV verb POSS. Otherwise, we would have no explanation for this phenomenon: non-verbal predicates abound in Äiwoo, but they never show this type of morphology. Possessives would therefore constitute an exception, whereas my analysis accounts for their behaviour in a more unified and elegant manner.

5   OBJECT AGREEMENT AND POSSESSUM AGREEMENT

In this section I show how possessives and UV verbs once again show identical behaviour, this time in the domain of object agreement. Äiwoo UV has a rather complex agreement system, where object agreement surfaces in only a specific subset of configurations of subjects and objects, depending on both arguments' φ-features (44a). In all other cases, the object is realized as a pronoun (44b). Remember that in UV pronominal objects are post-verbal instead of sentence-initial. (I adopt the notation 'X > Y' to represent a configuration where the subject has φ-features X and the object has φ-features Y.)

(44) **Object agreement vs. pronouns on UV verbs**:
      a. **3MIN > 3AUG: object agreement**
          i-togulo-gu-i=laa
          ASP-hit-**3MIN-3AUG**=FUT
          'S/he will hit them'

b. **2MIN > 3AUG: object pronoun**
*i-togulo-**mu**=waa   **ijii***
ASP-hit-**2MIN**=FUT   **3AUG**
'You will hit them'

An analysis of possessives as containing the UV verb POSS predicts that, in all and only the configurations where UV verbs show object agreement, we should find a suffix indexing the possessum's φ-features. In all other cases, we should find a pronoun doing the same thing. And in fact, this is once again exactly what we see:

(45)   **Possessum agreement vs. pronoun in possessive structures:**

a. **3MIN > 3AUG: possessum agreement**
*kuli   no-**gu-i***
dog   POSS:GEN-**3MIN-3AUG**
'His/her dogs'

b. **2MIN > 3AUG: possessum pronoun**
*kuli   no-**mu**   **ijii***
dog   POSS:GEN-**2MIN**   **3AUG**
'Your dogs'

In the following sections I lay out the details. First (§5.1) I present the exact distribution of object agreement in Äiwoo UV, partly amending earlier descriptions and analyses. Then, in §5.2 I discuss the manifestations of this system in possessive constructions, and show how they are exacly parallel to the UV system. First I consider the (most frequent) case in which the possessum is 3rd person, that is, a noun phrase (§5.2.1). I also show that the parallel holds when the possessum is 1st or 2nd person, in predicative contexts of the type "I am yours" (§5.2.2).

5.1   UV VERBS: OBJECT AGREEMENT

Here I will present the complex pattern of agreement found on UV verbs, in order to compare it later to what we find on possessives. As we have seen, the verb always agrees with the subject. In addition, it may agree with the object as well, depending on the φ-features of both arguments, as schematized in (46).

(46)   **Object agreement** is found iff:

a. Subject = 1st person; Object = 2nd person[18]
b. Subject = 3MIN; Object = non-3MIN

When there is no object agreement, the object is realized as a full pronoun instead. As mentioned in the introduction, Äiwoo shows extensive drop of any nominal argument,

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18 More precisely: this only applies to 1MIN/1AUG subjects; unit-augmented subjects of any person block object agreement (see fn. 24). I abstract away from this detail in what follows.

as long as it can be recovered from the discourse context. However, not all kinds of object pronouns are dropped to the same rate. 3MIN object pronouns are essentially always dropped[19], while 3AUG object pronouns are much more frequently pronounced overtly; we don't know as of yet what the exact conditions are governing the distribution of overt vs. covert 3AUG pronouns. Moreover, it seems from our corpus that non-3rd person object pronouns are never dropped.

The two different constructions are illustrated below: in (47a), both arguments are marked by suffixes on the verb; in (47b), only the subject is, and the object is a full pronoun. The difference between object agreement marker and object pronoun is also supported by their different placement with respect to the future clitic =waa. Note that pronominal objects are the only case where a pivot is not in sentence-initial position. As presented in the introduction (§1.2), UV clauses have O_{DP} V S=CL order; however, when the object is a pronoun, the order is always V S=CL O_{PRON} instead.

(47)   a.   **1MIN > 2MIN: object agreement**
             *i-togulo-**nee-mu**=waa*
             ASP-hit.UV-**1MIN-2MIN**=FUT
             'I will hit you'

        b.   **2MIN > 1MIN: object pronoun**
             *i-togulo-**mu**=waa*   ***iu***
             ASP-hit.UV-**2MIN**=FUT   **1MIN**
             'You will hit me'

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19 Interestingly, overt 3MIN pronouns are used in reflexive configurations (Äiwoo doesn't have own reflexive pronouns). Although the data on this is not rich, it seems that the default way of expressing reflexive semantics involves using an overt object pronoun (ia); if this lacks, the default reading is disjoint (ib).

(i)   a.   *i-togulo-∅*   ***inâ***   b.   *i-togulo-∅*   *(∅)*
             ASP-hit-3MIN   3MIN   ASP-hit-3MIN   3MIN
             'S/he hit himself/herself'   'S/he hit him/her/it'

Of course, this will have to be confirmed via aimed elicitation. Assuming that this pattern does indeed hold, it's rather interesting. In a sense, it is reminiscent of how optional *pro*-drop in Romance languages can assume switch reference-like functions. For example, in Italian a dropped subject pronoun (iia) is most easily interpretable as co-referent with the subject of the previous sentence, whereas using an overt pronoun has as its most salient reading a disjoint one (iib).

(ii)   a.   *Lucia   ha   incontrato Paola   e   poi   ∅   è   tornata   a   Torino*
             Lucia   has   met   Paola   and   then   is   gone.back to   Turin
             'Lucia$_i$ met Paola$_j$ and then she$_{i,??j}$ went back to Turin'

        b.   *Lucia   ha   incontrato Paola   e   poi   **lei**   è   tornata   a   Torino*
             Lucia   has   met   Paola   and   then   **she**   is   gone.back to   Turin
             'Lucia$_i$ met Paola$_j$ and then she$_{??i,j}$ went back to Turin'

Although interesting, I exclude the Äiwoo reflexive pattern from the discussion, as it's hardly extendable to possessives. The equivalent would be a scenario where the possessor is entirely coreferential with the possessum, something which is semantically extremely implausible.

It should be noted that the generalization in (46) is an amended version of the one de-scribed in earlier literature (Næss 2006 et seq., Roversi 2020). Specifically, all 1 > 2 config-urations trigger object agreement (46a), whereas previous descriptions had only 1MIN > 2. This is based on new data emerged since the publication of those works; I discuss this mat-ter further in appendix B. What is crucial, however, is only that the set of configurations that trigger object agreement is exactly the same that trigger "possessum agreement", which I proceed to discuss now.

5.2   OBJECT AGREEMENT IN POSSESSIVES: POSSESSUM AGREEMENT

As a reminder: the hypothesis we are investigating is that all Äiwoo possessive structures are verbal in nature, and more specifically, contain a transitive UV verb POSS whose exter-nal argument is the possessor, and whose internal argument is the possessum. Possessed DPs are created by extracting the possessum, to form a relative clause as in (48b), repeated from (15b):

(48)   a.   **Baseline transitive clause**:
              ⟦I POSS boat⟧ ≈ "the boat is mine"

       b.   **Possessed DP via relative clause formation**:
              ⟦boat [that I POSS __]⟧ ≈ "the boat that is mine" ≈ "my boat"

If this is the case, the prediction is that all things being equal, the agreement pattern on Äiwoo possessives should be the same as found on UV verbs, since POSS is simply an UV verb. We have already seen in §3 that at least part of this prediction is born out: the way the possessor is marked on possessive structures follows almost the same paradigm of subject-indexing φ-suffixes as UV verbs (with only a few morphological deviations in 1MIN and 3MIN forms). This follows naturally if the possessor is the subject of POSS.

    In what follows, I will show that the other side of the parallel holds as well. In the same way that object agreement is triggered on UV verbs, in exactly all and only the same con-figurations we find "possessum agreement" on possessives. This is abstractly illustrated in (49), where "-S" and "-O" represent suffixes indexing respectively the subject's and the object's φ-features. Moreover, we will see that wherever an UV clause would have an overt object pronoun, in possessive structures there will be an overt pronoun indexing the possessum, as shown in (50).

(49)   **Object/possessum agreement configurations**:
       a.   Verbs: V-S-O
       b.   Possessives: $[N_i \; [(\text{SUBJ}) \; \text{POSS-S-O}_i \; _____i]]$

(50)   **No object/possessum agreement configurations**:
       a.   Verbs: V-S O_{PRON}
       b.   Possessives: $[N_i \; [(\text{SUBJ}) \; \text{POSS-S} \; O_{\text{PRON}i}]]$

First, in §5.2.1 I will show how this is true within possessed DPs, that is, when the possessum is 3rd person (a noun, or a 3rd person pronoun). Later, in §5.2.2 I will extend this to scenarios where the possessum itself is 1st or 2nd person, in predicative possession contexts (that is, in constructions of the type 'You poss me' = "I am yours").

5.2.1   3ʀᴅ ᴘᴇʀsᴏɴ ᴘᴏssᴇssᴜᴍs

3ᴀᴜɢ ᴘᴏssᴇssᴜᴍs   Within possessed DPs, the possessum cannot be anything else than 3rd person, as it is a nominal (and not a 1st/2nd person pronoun). First, let's examine the case of 3ᴀᴜɢ possessums. In an UV clause, whether a 3ᴀᴜɢ object is realised as a marker on the verb or as a 3ᴀᴜɢ pronoun depends on the φ-features of the subject. If this is 3ᴍɪɴ we'll have an object suffix (51a); else, an object pronoun (51b). (Again, the future clitic =C*aa* is only included to further strengthen the evidence that the difference between the *3aug* suffix *-i* and the 3ᴀᴜɢ pronoun *ijii* is one of syntactic position, not just allomorphy; the same facts would hold without this clitic.)

(51)   a.   **3ᴍɪɴ > 3ᴀᴜɢ: object agreement**
           *i-togulo-**gu-i**=laa*
           ᴀsᴘ-hit-**3ᴍɪɴ-3ᴀᴜɢ**=ꜰᴜᴛ
           'S/he will hit them'

        b.   **2ᴍɪɴ > 3ᴀᴜɢ: object pronoun**
           *i-togulo-**mu**=waa*   ***ijii***
           ᴀsᴘ-hit-**2ᴍɪɴ**=ꜰᴜᴛ   **3ᴀᴜɢ**
           'You will hit them'

Remember now that we're hypothesizing that all possessive structures underlyingly contain a transitive UV clause, completely alike the one in (51). Therefore, depending on the φ-features of the possessor (the subject of our putative possessive predicate), we predict to find the number of a 3ᴀᴜɢ possessum marked either as a suffix, or as a pronoun.

This is perfectly born out. The same configurations in (51) are replicated for possessive structures in (52)-(53), respectively alienable and inalienable. To highlight the parallel between UV verbal structures and possessive structuresI include below the idiomatic English translation an informal rendition of what I claim to be the underlying Äiwoo syntax. In 3ᴍɪɴ > 3ᴀᴜɢ, a configuration that triggers object agreement on UV verbs (51a), we find that possessives carry the exact same type of marking (52a)-(53a). In 2ᴍɪɴ > 3ᴀᴜɢ, however, object agreement is blocked on verbs, and the object is realized as a full pronoun (51b). Crucially, this also replicates for possessives (52b)-(53b)[20].

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20 I choose animate nouns ('dog', 'son') because inanimates have a very strong tendency to not trigger number agreement in Äiwoo, neither on verbs nor on possessives. Exceptions exist, but are extremely infrequent:

(i)   *nuwopa   tä-gu-i*
      house   ᴘᴏss:ʟᴏᴄ-3ᴍɪɴ-3ᴀᴜɢ
      'His/her houses' (Næss 2018: 48)

Why this is the case is not yet fully understood.

(52)   **Alienable possession:**

    a.   **3MIN > 3AUG: possessum agreement**
       kuli   no-gu-i
       dog   POSS:GEN-3MIN-3AUG
       'His/her dogs' < [dogs$_i$ [(such that) (s/he) POSS-**3MIN-3AUG** (them$_i$)]

    b.   **2MIN > 3AUG: possessum pronoun**
       kuli   no-mu   ijii
       dog   POSS:GEN-2MIN   3AUG
       'Your dogs' < [dogs$_i$ [(such that) (you) POSS-**2MIN them**$_i$]

(53)   **Inalienable possession:**

    a.   **3MIN > 3AUG: possessum agreement**
       gino-gu-i
       son-3MIN-3AUG
       'His/her sons' < [(they$_i$) [(whom) (s/he) poss.as.son-**3MIN-3AUG** (them$_i$)]

    b.   **2MIN > 3AUG: no possessum agreement**
       gino-mu   ijii
       son-2MIN   3AUG
       'Your sons' < [(they$_i$) [(whom) (you) poss.as.son-**2MIN them**$_i$]

(Notice that for inalienable possessive structures, I assume the kinship root to be a modifier to POSS, and not the object itself being extracted; in my analysis, the extracted object is a null pronoun, something we independently know is extremely common in Äiwoo. In other words, I don't assume the underlying structure of (53a) to be '[sons$_i$ [(whom) (s/he) POSS-3MIN-3AUG (them$_i$)]]'. See §5.2.2 for arguments.)

    I argue that all the apparent oddity of possessum marking – whether as a suffix or as a pronoun – is perfectly accounted for under an analysis of the possessives as verbal. Possessum marking is not just coincidentially similar to object marking: it simply *is* object marking. For arguments against a previous analysis of this pattern as an instance of number marking (Næss 2018), see appendix C.

3MIN POSSESSUMS   Let's now go back to the possessive data presented initially, that is, with no possessum agreement nor possessum pronouns, and see how it perfectly fits into the picture drawn here. The key observation is that the lack of (overt) marking of possessum parallels the lack of marking of (overt) 3MIN arguments in UV verbs. In UV clauses with 3MIN pronominal objects (that is, not a full DP), the 3MIN object pronoun is always dropped (though see fn. 19). If the subject is anything else than 3MIN, that's the only overt marking (54a). If both arguments are 3MIN, we see no marking at all (54b).

(54)   **UV verbs with 3MIN objects:**

    a.   *i-togulo-mu   (∅)*
       ASP-hit-**2MIN**   3MIN
       'You hit him/her/it'

b. *i-togulo-∅*   *(∅)*
ASP-hit-**3MIN**   **3MIN**
'S/he hit him/her/it'

Keeping in mind the parallel subject-possessor and object-possessum, let's consider now what happens to 3MIN possessums. Both in alienable and inalienable contexts, the distribution of null morphology – or the absence of morphology – is exactly the same as what we find on UV verbs.

(55)   **Alienable possessives with 3MIN possessums:**

a. *kuli   no-mu*   *(∅)*
dog   POSS:GEN-**2MIN**   **3MIN**
'Your dog' < [the dog$_i$ [(such that) (you) POSS-**2MIN** ∅$_i$]]

b. *kuli   no-∅*   *(∅)*
dog   POSS:GEN-**3MIN**   **3MIN**
'His/her dog' < [the dog$_i$ [(such that) (s/he) POSS-**3MIN** ∅$_i$]]

(56)   **Inalienable possessives with 3MIN possessums:**

a. *gino-mu*   *(∅)*
son-**2MIN**   **3MIN**
'Your son' < [him$_i$ [(whom) (you) POSS.as.son-**2MIN** ∅$_i$]]

b. *gino-∅*   *(∅)*
son-**3MIN**   **3MIN**
'His/her son' < [him$_i$ [(whom) (s/he) POSS.as.son-**3MIN** ∅$_i$]]

Of course, given the pervasiveness of null morphology, postulating a null possessum pronoun in (55)-(56) seems prima facie entirely unmotivated. However, the structure of the argument should be thought of as follows: i) this possessum pronoun is overt in all other non-3MIN cases (as shown above for 3AUG, and in §5.2.2 for non-3rd person possessums); ii) for the analysis to hold, this would have to extend to the 3MIN cases; iii) in UV verbs, 3MIN suffixes and pronouns are (almost) always null (and we have independent evidence for this); iv) the cases we don't see any overt morphology for 3MIN in possessive structures are exactly the same cases we don't see any 3MIN morphology on UV verbs.

5.2.2   1ST/2ND PERSON POSSESSUMS

This phenomenon of marking of 3AUG possessums, as mentioned, has already been noted in the descriptive literature (see above for references, and appendix C for a discussion). However, what has not been noted is that possessives show the same UV verb-like behaviour even when it comes to possessums that are *not* 3rd person. Of course, within a possessed DP this state of affairs cannot occur, as the possessum (the head of the DP) almost by definition needs to be 3rd person. However, I'm arguing that POSS is a transitive predicate with the reading "POSSESSUM is POSSESSOR's": therefore, we should expect

to be able to find 1st/2nd person possessums in predicative possession constructions, of a general shape like "**I/we** am {yours, his, …}" or "**you** are {mine, theirs, …}".

For clarity of exposition, at this point it's useful to restate the generalization about the distribution of object agreement, repeated from (46):

(57)   **Object agreement** is found iff:
   a.   Subject = 1st person; Object = 2nd person
   b.   Subject = 3MIN; Object = non-3MIN

In all other cases (2 > 1, and 3AUG > any object) the object is realized as a full pronoun to the right of the verb. Some examples are repeated in (58)-(59). For the participant-only configurations (1 > 2, 2 > 1), the full 2 x 2 matrix is shown (examples (a–d)), exhausting all possible combinations of person and number. For the configurations with 3rd person subjects, only a few illustrative examples are given (examples (e,f)).

(58)   **Object agreement**:
   a.   *i-togulo-**nee-mu**=waa*
        ASP-hit-**1MIN-2MIN**=FUT
        'I will hit you'

   b.   *i-togulo-**nee-mi**=aa*
        ASP-hit-**1MIN-2AUG**=FUT
        'I will hit you.PL'

   c.   *i-togulo-**ngee-mu**=waa*
        ASP-hit-**1AUG-2MIN**=FUT
        'We will hit you'

   d.   *i-togulo-**ngee-mi**=aa*
        ASP-hit-**1AUG-2AUG**=FUT
        'We will hit you.PL'

   e.   *i-togulo-**gu-mu**=waa*
        ASP-hit-**3MIN-2MIN**=FUT
        'S/he will hit you'

   f.   *i-togulo-**gu-ngo(pu)**=waa*
        ASP-hit-**3MIN-1AUG**=FUT
        'S/he will hit us'

(59)   **Object pronoun**:
   a.   *i-togulo-**mu**=waa   **iu***
        ASP-hit-**2MIN**=FUT   **1MIN**
        'You will hit me'

   b.   *i-togulo-**mu**=waa   **iungo(pu)***
        ASP-hit-**2MIN**=FUT   **1AUG**
        'You will hit us'

   c.   *i-togulo-**mi**=aa   **iu***
        ASP-hit-**2AUG**=FUT   **1MIN**
        'You.PL will hit me'

   d.   *i-togulo-**mi**=aa   **iungo(pu)***
        ASP-hit-**2AUG**=FUT   **1AUG**
        'You.PL will hit us'

   e.   *i-togulo-**i**=laa   **iumu***
        ASP-hit-**3AUG**=FUT   **2MIN**
        'They will hit you'

   f.   *i-togulo-**i**=laa   **iungo(pu)***
        ASP-hit-**3AUG**=FUT   **1AUG**
        'They will hit us'

My analysis predicts that we should get entirely parallel distribution of object agreement vs. possessum agreement, and object pronouns vs. possessum pronouns. The available data for these configurations is unfortunately not as rich as it is for the rest of the ones discussed. However, all available evidence is exactly as the POSS-as-verb hypothesis predicts it to be, and thus argues in favor of it.

In the rest of this section, first I discuss the cases that show 1st/2nd person possessum agreement, as these are the ones least amenable to an alternative analysis; later, I discuss the ones showing a 1st/2nd person possessum pronoun.

Possessum agreement   To formulate our predictions explicitly: in possession construction where the possessor is 1st person and the possessum is 2nd person ("you are {mine, ours}"), we should see possessum agreement. Moreover, we should see possessum agreement in cases where the possessum is 1st/2nd person, and the possessor is 3MIN ("{I am, you are} his/hers").

As for the 1 > 2 cases, we have two combinations attested showing clear possessum agreement on the generic possessive classifier *nou-*:

(60)   **1 > 2: possessum agreement**

    a.   **1MIN > 2MIN**:
       *go   känä   nou-**nee-mu***
       because   say.3MIN   POSS:GEN-**1MIN-2MIN**
       'Because s/he says that you are mine' (Mark 9:41[21])
       < [because s/he says that] (I) POSS-**1MIN-2MIN** (you)

    b.   **1AUG > 2MIN**[22]:
       *go   iumu=we   **nou-ngee-mu**   kono*
       because   2MIN=PROX   POSS:GEN-1AUG-2MIN   PRT
       'Because you are ours, you know'
       < [because] (we) POSS-**1AUG-2MIN** (you)'

For inalienable possessive constructions, 1 > 2 forms are not attested in the available data. However, it does seem to be possible for inalienables to carry possessum agreement, as we have one attested example of a 3MIN > 2MIN configuration:

(61)   **3MIN > 2MIN: possessum agreement**
    lâ   iumu=wâ[23]   [*Gino   une-i*]-**gu-mu**   *God*
    DIST   2MIN=DIST   son   true-UV-**3MIN-2MIN**   God
    'You are the true Son of God' (Mark 3:11)
    < 'God truly POSS.as.son-**3MIN-2MIN** you'

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21 In this verse, Jesus himself is speaking. The New International Version translation has: "[Anyone who gives you a cup of water in my name] because you belong to the Messiah [will certainly not lose their reward]"; the part "because you belong to the Messiah" is the one reproduced in the Äiwoo translation here. Since Jesus himself is speaking, it's reasonable to assume that the translator has opted to translate this in 1st person rather than 3rd, essentially rendering "because you belong to me".

22 I thank Åshild Næss for making me aware of this datapoint.

23 This sentence shouldn't be taken as counterevidence to the generalization that pronominal objects are post-verbal in UV. The constituent *lâ iumu=wâ* is in a left-dislocated or topicalized position, as shown by the fact that its flanked by the two deictic elements *lâ* and *wâ*; the "real" object argument of the sentence is pro-dropped. Consider also the following example, with the same structure (Næss 2015a: 94):

   (i)   *go   [iu=nge]   nyisi   biou-mana*
      because   1MIN=PROX   body.1MIN   heavy-very
      'Because (as for) me here, my body is heavy'

This sentence has an intransitive predicate, taking a single argument (*nyisi* 'my body'); therefore, it's clear that *iu=nge* 'me here' must be in some left-peripherical position.

Here, the noun *gino* 'son' is first being modified by *une* 'true' (which takes the voice concord suffix *-i*, consistently with what was shown in §4). The clause has a basic 'you are his' shape ('he POSS you'), just with an overt possessor DP (*God*).

This one datapoint (together with others presented below) makes it clear that an analysis where the kinship noun 'son' is the object of POSS is simply untenable. Here, the object of POSS is 2MIN, as clearly indicated by the object marker *-mu* (compare *i-togulo-gu-mu* 's/he hit you'). Therefore, the object clearly can't be the noun 'son' itself, as that would be 3rd person. Hence, I argue that the object is in fact a null pronoun, and the kinship root is a modifier of POSS. This analysis also has the fortunate consequence of making inalienable possessive structures even more parallel to alienable ones. If the semantically specific possessive classifiers represent POSS fused to various roots indicating food, drinks, etc. ('POSS.as.food', 'POSS.as.drink', etc.), then the inalienable structures represent POSS fused to kinship roots.

The table in (62) summarizes the predicted outcomes of various configurations of subjects/possessors and objects/possessumes. For every configuration, the attested verbal morphology is listed, together with the predicted forms for both alienable and inalienable possessive structures. All forms prefixed by an exclamation point are predicted to be grammatical; the ones prefixed by a checkmark are the ones actually attested. (The form *nou-nee-mi* is attested once in the translation of the Gospel of Mark; however, its syntactic context is unclear, so I haven't included it in the discussion above.)

(62) **Possessum/object agreement:**

	Verbal form	**Alienable:**	**Inalienable:**
1MIN > 2MIN	V-nee-mu	✓nou-nee-mu	!ginou-nee-mu
1MIN > 2AUG	V-nee-mi	✓nou-nee-mi	!ginou-nee-mi
1AUG > 2MIN	V-ngee-mu	✓nou-ngee-mu	!siwou-ngee-mu[24]
1AUG > 2AUG	V-ngee-mi	!nou-ngee-mi	!siwou-nee-mi
3MIN > 2MIN	V-gu-mu	!no-gu-mu	✓gino-gu-mu
3MIN > …	V-gu-…	!no-gu-…	!gino-gu-…

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24 The reason for using the noun *siwo* '(man's) sister' instead of *gino* 'son' is that at least in the relevant cultural context, children have exactly two parents. Therefore, a predicative clause of the shape 'you are our son(s)' would have not a straightforward 1AUG possessor, but a 1UA one (unit-augmented; the equivalent of a dual). Unit-augmented subjects consistently block object agreement on UV verbs, regardless of their person features:

(i) *i-togulo-**ngo-le**=naa   **iumu***
     ASP-hit-**1AUG-UA**=FUT   **2MIN**
     'We two will hit you'

Therefore, we would actually predict not *!*gino-ngee{-mu/-mi}*, but *!gino-ngo-le iumu/imi*. This problem of course goes away with a different kinship relation, like sisterhood, where one sister can have more than two siblings.

Possessum pronouns   On the opposite side, in 2 > 1 configurations object agreement is blocked in UV verbs, and the object is realized as a pronoun instead. In this case as well, the available evidence substantiates that 2 > 1 possessive configurations ("{I am, we are} yours") behave in the same way, with the possessum being realised as an overt pronoun. Consider the following attested data. In (63), the inalienable noun *tumo* 'father' is first modified by *du* 'all' (one of the few modifiers that consistently do not take voice concord morphology; see §4). It then takes a 2MIN possessor suffix, but we also see a full pronoun realizing the possessum, exactly as predicted.

(63)   **2MIN > 1AUG: possessum pronoun**[25]
    lâ   *ingopu=wâ* [*tumo-du*]-***mu***   ***ingo***
    DIST   1AUG=DIST father-all-**2MIN**   **1AUG**
    'We here, we are all your fathers[26]'
    < (You) POSS.as.father-all-**2MIN us**

(Note that here again, as in (61), *lâ ingopu=wâ* 'us here' is left-dislocated; see fn. 23. The same applies to (64) below.)

A few more considerations point in the same direction. In (64) we have a 2UA possessor/subject and a 1MIN possessum/object, and we find the expected pattern with a possessum pronoun; the reason why the possessor/subject is unit-augmented and not just augmented is simply that this person is speaking to his parents, who are two (see fn. 24). The example in (65) is more complicated, as it involves coordination. However, we can see the same pattern where the possessum is realized overtly as a pronoun (in this case, in both conjuncts; I do not wish to comment any further about the structure of coordination in Äiwoo, as this is as yet poorly understood.)

(64)   **2UA > 1MIN:**
    mo *iu*   *ile*   *gino-**mi-le***   *iu*
    but 1MIN PROX son-**2AUG-UA** **1MIN**
    'But me here, I'm your.DU son'
    < (You two) POSS.as.son-**2AUG-UA me**'

(65)   **2MIN > 1UA:**
    go   *gino-**mu*** *iungo-le* *eä* *gibu-**mu***   *ingo-le*
    because son-**2MIN** **1AUG-UA** and nephew-**2MIN** **1AUG-UA**
    'Because we (two) are your son and your nephew'
    < [because] (you) POSS.as.son-**2MIN** and POSS.as.nephew-**2MIN us two**'

The table in (66) summarizes both the predictions and the findings. (I subsume the 2UA > 1MIN case in (64) under 2AUG > 1MIN in the table, as they function exactly in the same way). Unfortunately, we lack attested examples of structures where the possessor is 3AUG and the possessum is 1st/2nd person (for example, "{I am, you are} their son").

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25 I thank Åshild Næss for making me aware of this important datapoint as well.

26 In Äiwoo culture, *tumwä* 'father' subsumes both the biological father of a child and the father's brothers, the child's paternal uncles. (Similarly, *isä* 'mother' also includes the biological mother's sisters.)
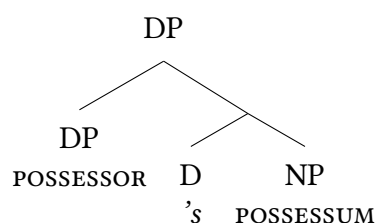
(66) **Possessum/object pronoun**:

	Verbal form	Alienable:	Inalienable:
2MIN > 1MIN	V-mu iu	!no-mu iu	!gino-mu iu
2MIN > 1AUG	V-mu iungo(pu)	!no-mu iungo(pu)	✓tumo-mu ingo
2AUG > 1MIN	V-mi iu	!no-mi iu	✓gino-mi-le iu
2AUG > 1AUG	V-mi iungo(pu)	!no-mi iungo(pu)	!gino-mi iungo(pu)
3AUG > 1st/2nd	V-i PRON	!no-i PRON	!gino-i PRON

6 INTERIM SUMMARY

6.1 THE PICTURE SO FAR, AND SOME CROSS-LINGUISTIC PARALLELS

Throughout the previous sections, I've argued that Äiwoo has a null transitive posses-sion verb POSS, which only occurs in UV. This verb takes the possessor as its external argument, and the possessum as its internal argument. In a way, POSS could be thought of a verbal/clausal counterpart of the nominal Saxon genitive. To highlight the parallel, consider the trees in (67). (67a) represents a fairly standard analysis of the Saxon genitive within generative approaches (Abney 1987, Chomsky 1995). I propose that Äiwoo POSS re-ally has essentially the same structure (67b), but belongs to the extended verbal projection instead of to the nominal one[27].

(67) a. **English Saxon genitive:**   b. **Äiwoo POSS:**
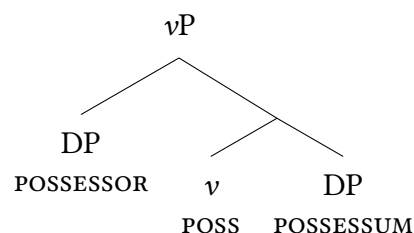
Since POSS itself is phonologically null, it's always found fused to some other root. It can either be realized as the possessive classifiers (POSS.as.food, POSS.as.drink, etc.), or it can be fused to inalienable roots (POSS.as.son, POSS.as.mother, etc.). This idea is reminiscent to what Chung & Ladusaw (2003) propose for Chamorro, where the verb *gäi* 'have' can incorporate, or be modified by, various nominal roots, so to create verbs meaning 'have

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27 These trees shouldn't be taken too literally; they are mainly meant as an informal, simplified illustration. In (67b), my *v* label isn't meant to make any strong claim other than that POSS is part of the extended verbal projection. What matters is that the two arguments are merged in their canonical position. In other words, there could very well be a VP layer below *v*P, with the internal argument being the complement to V, but I abstract away from this for simplicity. Similarly, in (67a), there could very well be several layers of functional projections between D and NP (variously labelled NumP, *n*P, etc. in the literature).

as pet' (68a), 'have as a child' (68b), etc.[28]. In the examples below, the modifier to *have* is bracketed, whereas the object of the complex verb is boldtyped.

(68)   **Chamorro** (Chung & Ladusaw 2003: 89):

a. *gäi-[ga']*   ***un ga'lagu*** *ennao na patgun*
   AGR.have-pet a   dog   that L child
   'That child has a pet dog'

b. *hayi gäi-[patgun]*   ***si   Carmen?***
   who WH[NOM].AGR.have-child UNM Carmen
   'Whose child is Carmen?' (lit. 'who has Carmen as a child?')

Another reminiscent pattern is found in some Algonquian languages, where kinship nouns can be derived into verbs like 'have a son', 'have a grandmother', etc.[29]. In Passamaquoddy, the intransitive verb *'qossiw* 'have a son' is derived from the noun *'qossol* 'son'. In Wampanoag, the correspondent verb *wunâmônayu* can also be used transitively (69).

(69)   **Wampanoag**:

[*noh*   [***wanaumonai-t***   *mattammogw-oh*]], *ne*   *wu-nneuantam8onk*
 that.ANIM   IC.have.son-3CONJ   fool-OBV   that.INAN 3-sorrow
'[He [that begetteth a fool]] doeth it to his sorrow' (Proverbs 17:21)

In Äiwoo, POSS is a transitive verb. In addition to being used in straightforward transitive clauses, its object can extract to create a relative clause, and this is the only way to derive (the equivalent of) a possessed DP. The possibility of extracting the object is tightly connected to POSS being an UV verb.

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28 I don't want to claim that the Äiwoo phenomenon under discussion is entirely the same thing as what happens in Chamorro according to Chung & Ladusaw; in fact, there are a series of important differences. First, they show how the "extra object" (the DP boldtyped in (68)) is in fact not a syntactic argument of the verb at all, but an adjunct (for example, *gäi* 'have' shows the type of agreement found on intransitive predicate rather than transitive ones; see Chung & Ladusaw 2003: 90–94 for a thorough discussion). Moreover, Chamorro *gäi* seems to be a closer equivalent of English *have*, in the kind of semantic restrictions it imposes on its object (e.g., it can't be definite). Differently from Chamorro, Äiwoo POSS doesn't seem to have this restriction (see §7).

Finally, the Äiwoo facts don't necessarily force us to commit to Chung & Ladusaw's own semantic composition principle Restrict. I don't have any detailed implementation of how the semantics of POSS are to be modified by the various items it can combine with. As for the inalienable roots, one can assume them to be relational nouns of type $\langle e, \langle e,t\rangle\rangle$ (Partee [1983] 1997, Barker 1995, Partee & Borschev 2003, Alexiadou 2003); that way, they can modify a transitive predicate (of the same type) by straightforward Predicate Modification (Heim & Kratzer 1998). This idea is not immediately extendable to the stems that end up forming the possessive classifiers (it's not clear why e.g. 'food' should be of type $\langle e, \langle e,t\rangle\rangle$). Perhaps it's here that Restrict might come into play. Speculatively, one could imagine that the main difference between alienable and inalienable possession in Äiwoo might rely on their way of composing with POSS. Inalienable roots, being of type $\langle e, \langle e,t\rangle\rangle$, can compose by Predicate Modification. Alienable roots (like 'food', 'drink', etc.) are of type $\langle e,t\rangle$, and therefore they would have to compose with POSS by Restrict, creating a predicate still of type $\langle e, \langle e,t\rangle\rangle$ with a denotation like $\lambda x\lambda y$. [y is x's & y is food]. I leave this as an open issue.

29 I thank Norvin Richards for making me aware of the Algonquian pattern, and for providing me with the Wampanoag data in (69).

A close equivalent of what I claim for Äiwoo has been argued to hold in American Sign Language (ASL) by Abner (2012, 2013). She convincingly shows that the item used in nominal possessive structure (simply labelled as 'POSS' by Abner) is not a determiner, but it is in fact a transitive predicate, which can be also used as such in predicative possessive constructions. In possessed DPs, the possessum is extracted, forming a relative clause (e.g. 'Mark Twain's book' is literally 'the book$_i$ [that ___$_i$ is Mark Twain's]'). As far as I can see, the only difference between ASL POSS and Äiwoo POSS is that their argument structures are the mirror image of each other. In Äiwoo, the possessor is the external argument and the possessum is the internal argument; the opposite is true in ASL[30].

In addition to ASL, in a comprehensive typological study, Bugaeva, Nichols & Bickel (2021) find a number of spoken languages where possessive constructions have a comparable structure to what I claim is true of Äiwoo, that is, a possessed DP is built via relativization of a possessive predicate (in their terminology, languages with "verbal appositive classifier systems"). A few such examples are alienable nouns in Ainu (Japan) (70), Seri (New Mexico), (71), and the two Papua New Guinea isolates Mpur (72) and Sulka (73):

(70) [___ *ku-kor*]   *seta*
          1SG.A-have   dog
      'My dog', lit. 'dog (that) I have' (Bugaeva, Nichols & Bickel 2021: 3)

(71) *kanóatax* *ʔi-o-ya:t*   *koi*
      boats   1-NML-own   the
      'Our boats', lit. 'the boats that we own' (Bugaeva, Nichols & Bickel 2021: 19)

(72) *n-tar*   *jan*
      1SG-possess house
      'my house', lit. 'the house that I possess' (Bugaeva, Nichols & Bickel 2021: 27)

(73) *a-kom*   *to*   *mkor*   *e-Pruo*
      SG-knife   DEM   belong:to   Pruo
      'Pruo's knife', lit. 'the knife that belongs to Pruo' (Bugaeva, Nichols & Bickel 2021: 27)

In languages like Äiwoo or ASL the presence of a 'have' or 'possess'-like verb is not as obviously visible in the surface structure as it is in these four languages, so that typological and descriptive literature might have "missed" them; it may well be the case that structures like these are in fact less rare than what one might think.

As in ASL, the evidence showing that Äiwoo POSS is indeed a UV verb come from its morphosyntax. When used transitively, it shows the same O V S=CL order that UV verbs have. Even when used within a possessed DP (that is, when the object relativizes out of its clause), an overt possessor DP occurs in the position we would expect the subject

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30 This is not necessarily a problem. The semantics of possession is notoriously highly vague, conveying essentially just that some kind of contextually relevant relation holds between two DPs. Given the vagueness of the relation, we shouldn't be surprised that we don't find strong cross-linguistic tendencies as to which DP is mapped to which argument. This is what den Dikken (2006) argues for so-called relator heads: there is definitely a hierarchical asymmetry between their two arguments, but – specifically because of this semantic vagueness – they are bidirectional in the sense that either DPs can be merged in either position.

of an UV verb to be in. Moreover, POSS triggers the same voice concord morphology on its modifiers that UV verbs do, contrarily to AV verbs, intransitives, and all non-verbal predicates. Finally, POSS shows the same complex agreement pattern that UV verbs have. In the same configuration that trigger object agreement in UV, we see a marker agreeing with the possessum's φ-features, and in the configurations where the object is realized as a pronoun in UV, we see a pronoun indexing the possessum.

6.2   EXTRACTION POSSIBILITIES: A FEW WELCOME PREDICTIONS

Analyzing possessed DPs as containing a relative clause whose verb is POSS makes a series of predictions, not all of which can be confirmed with the available data. However, for a few of them we have some evidence that might be interpreted as pointing in the right direction.

The first prediction is connected to inalienable nouns. In §5.2.2, I argued that the right analysis for the underlying structure of an inalienably possessed noun like in (74) is not as in (75a), but as in (75b). Breaking it down: the kinship root meaning 'son' is not the object of POSS undergoing extraction (75a). On the contrary, 'son' is a modifier of POSS, and what is being extracted is a null pronominal (75b). The reason for arguing for (75b) is that we see cases where the possessum is not 3rd person, ergo, it cannot be a noun.

(74)   *gino-i*
son-3AUG
'Their son'

(75)   **Two possible underlying structures**:
a.   **Argued to be untenable**:[31]
[son [(whom) (they) POSS-3AUG __]]

b.   **Argued to be right**:
[(he) [(whom) (they) POSS.as.son-3AUG __]]

If the extracted possessum is not the kinship root itself but a covert pronoun, this might predict that we perhaps should be able to expect overt material being extracted too[32]. For example, we might be able to extract a noun from the object position of POSS.as.son, creating something like 'the N who is my son'; a plausible candidate for this would be e.g., something like 'my son the fisherman'. Unfortunately, cases like this have not been elicited, and we don't have data to directly confirm this. However, in the corpus there are examples that are reminiscent of this, and that might be analyzed in this way. Consider the three examples in (76), all from the same text, about an esteemed man. Note that *pesaliki*

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[31] Note that this structure would be problematic in another respect. Simply put: making sure that (75a) results in the surface spell-out (74) would be challenging given current theories of morphosyntax, as one would be spelling out a non-constituent (though see Davis 2021 for a discussion of how this does in fact happen in natural language, and ergo any theory should allow it).

[32] I thank Norvin Richards for this insight.

is an honorific term, and *gisi*, literally 'man's brother', can also be used for friendship relationships, so that *pesaliki gisi* might be translated as something like 'my honourable friend/brother'. A possible analysis of this linearly juxtaposed structure is the same as in (75b), but with the noun *pesaliki* in place of the null pronoun: [*pesaliki$_i$* [(whom) (I) POSS.as.brother.1MIN ___$_i$]].

(76)   **Possible extraction of overt material**:

    a. [*pesaliki   gisi*]   *i-pu-mä*
       bigman brother.1MIN ASP-go-DIR1
       'My friend is nearly here'

    b. *eâpo=to,*   [*pesaliki   gisi*]
       enter=TAM   bigman   brother.1MIN
       'Come in, my friend'

    c. *dee* [*sipe*   [*pesaliki   gisi*]]
       this   daughter.3MIN bigman   brother.1MIN
       'That's my friend's daughter'

Without knowing more about the syntax of appositions in Äiwoo, of course it's impossible to rule out other analyses, so this data shouldn't been taken as conclusive proof. At best, it might be preliminary evidence; certainly, structures like these are compatible with the POSS-based analysis.

The other prediction connected to extraction has to do with Äiwoo's particular exception to the Austronesian extraction restriction, presented in §2.2. Whereas normally only the pivot (the voice-selected argument: object in UV, subject in AV) can undergo Ā-movement, if an UV clause has a pronominal object then the subject may be extracted. This particular pattern is, although slightly surprising, quite robust. Now connect this to the structure in (75b), where we have an UV clause with a pronominal object. In this case, our theory predicts that we should be able to extract the possessor as well, instead of the possessum. Although this hasn't been tested with native speakers, there are a few examples that might show exactly this. One such sentence is (77a), involving the bound noun *me-* 'person'. This is naturally interpretable as a case of possessor extraction: "the owner" is, literally, 'the person who POSS (it)' (77b).

(77)   **Possible example of possession extraction**:

    a. ***me-nogo***   *ku-pu-mä=kaa*   *lâto*   *ku-luwa-kä=nâ*
       BN:person-POSS:TOOL.3MIN IPFV-go-DIR1=FUT then IPFV-take-DIR3=DIST
       'The owner will come and take it'

    b. **Suggested underlying structure**:
       [person$_i$ [(who) ___$_i$ POSS.as.tool.3MIN (it)]]

Adopting this analysis of *me-nogo* 'owner' makes the following prediction. If it's true that the extractability of the possessor in this case follows from the possessum being pronominal, then an equivalent structure with a full DP possessum should be illicit. However, there is preliminary counter-evidence to this, shown in (78)-(79).

(78) ilâ   **me-**[**tä**   **paveli**] eângâ
      DIST **BN:person-POSS:LOC.3MIN garden** DEM.DIST
      'The owner of the vineyard' (Mark 12:9)

(79) ilâ   **me-**[**tä**   **nuwopa**] eângâ
      DIST **BN:person-POSS:LOC.3MIN house**   DEM.DIST
      'The owner of the house' (Mark 13:34)

If examples like these can't be given an alternative analysis, then the analysis of (77a) sketched above is in trouble. Alternatively, it could be that what (78)-(79) show us is that POSS, contrarily to what claimed until now, can indeed be used as an AV predicate as well (since then the possessor could be extracted unproblematically), although this is simply very infrequent and therefore (almost?) unattested in the corpus. The fact that the putative AV and UV forms of POSS seem to be morphologically identical shouldn't worry us excessively, as this is also attested for several other verbs (e.g. *nu* 'drink'). I leave this as an open issue.

7   PRELIMINARY NOTES ON THE SEMANTICS OF POSS

In the previous sections I have argued that Äiwoo has a transitive verb of possession, POSS. Here, I want to offer a speculation about the semantics of POSS and that of HAVE. Purely intuitively, POSS is different from HAVE in the sense that a sentence where POSS is used by itself as a transitive predicate is not translated with HAVE. Rather, HAVE is consistently conveyed by Äiwoo speakers by using a possessed DP as the subject of an existential predicate (81).

(80) boat   nugu
      boat   POSS:TOOL.1MIN
      'The boat is mine'

(81) [boat   nugu]   i-to
       boat   POSS:TOOL.1MIN   ASP-exist
      'I have a boat' (lit. 'a boat of mine exists')

The idea in this section is to consider whether one could capitalize on the semantics and syntax of POSS to explain why Äiwoo uses the particular construction in (81) to express the equivalent of HAVE, instead of leaving it as a coincidence. However, the reader should note that this is, for the time being, quite speculative and tentative.

First, let's examine a few naturally occurring examples of POSS used by itself were given in §2.1, one of which is repeated as (82). The translation offered by the native speakers is not 'the elders have a/the *sapulâu*'. Consider also (83): here, the possessum is dropped (as it's contextually very salient), and the possessive is used predicatively to convey 'it is/ will be ours'.

(82)   *sapulâu   tä   penyibe*
       men's.house   POSS:LOC   old.man
       'The *sapulâu* house belongs to the elders', or '... is the elders''

(83)   **nou-de-le**   mo   na-malei-wâ-ngo-le
       POSS:GEN-12AUG-UA   but   IRR-look.after-DIR2-1AUG-UA
       [Context: a man and his wife can't have children, so he asks a couple who just had
       a baby to adopt theirs] 'It will be ours [us three.INCL], but we [two.EXCL] will raise
       it for you'

At the very least, POSS differs from HAVE in not sharing the latter's definiteness effect. An
old insight in the literature is that HAVE poses some restrictions on the kind of objects
it can take (Partee 1999, 2004, Keenan 1987, Szabolcsi 1994, Iatridou 1995, Sæbø 2009)[33].
More specifically, there's a definiteness effect, similar to that found with existential pred-
icates (Milsark 1974, 1977, Barwise & Cooper 1981) (but perhaps not identical; see Myler
2016: 328–336). Simplifying: under its ordinary ownership reading, HAVE cannot take an
object containing a strong quantifier (in the sense of Milsark 1974, 1977), such as definite
descriptions, demonstratives, or universal quantifiers (84).

(84)   **HAVE's definiteness effect**:
       a. Do you see all the antiques in this room? I own/*have them. (Iatridou 1995: 197)
       b. John has *the/*that/*every sister (Partee 2004: 282)

According to a number of analyses of this phenomenon (see references above), the fact
that HAVE shares this effect with this existential predicates is no coincidence, but is simply
a consequence of the fact that HAVE underlyingly contains an existential predicate.

Differently from HAVE, Äiwoo POSS doesn't seem to have problems with definite ob-
jects. In (83), for example, the object of POSS is clearly definite, since it is a (dropped) pro-
noun. As additional evidence, consider (85), where the possessum is marked by a demon-
strative, and therefore definite:

(85)   [*ile   dekilingä   enge*]   *nä-ji*
        PROX   food   this   POSS:FOOD-12MIN
       'This food is ours (mine and yours)'

A possible idea is that POSS, differently from HAVE, doesn't contain an existential predicate
or any kind of existential semantics, however that is implemented. The semantic content
of POSS would just that be that two DPs are in a context-dependent kind of relation with
each other (i.e. 'possession', in all its declinations). Given the classical explanation of the
definiteness effect, the fact that POSS doesn't have an existential predicate inside it would

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33 Tracing the exact origin of this observation has proven a difficult task. Partee (1999, 2004) are the written-
out, published version of a never-developed abstract occasionaly cited as Landman & Partee (1987); in the
acknowledgments section of Partee (2004), she states that the original statement of the problem dates back
to a presentation of hers in 1983. Furthermore, Sabine Iatridou credits "work of Jacqueline Guéron, Anna
Szabolcsi and others" (Iatridou 1995: 197), but I haven't managed to reconstruct specific references.

make it compatible with definite objects. Furthermore, since POSS doesn't contain an existential predicate, to convey something like HAVE an existential predicate simply must be added, as in (81).

Another speculative idea is that, perhaps, POSS doesn't allow for indefinite objects. This could be formulated as POSS strictly requiring an object of type e. If merged with an indefinite, then, the only option to make the derivation converge is to extract the object, creating a relative clause: this would leave a trace of type e in situ, which POSS can compose with. Abstractly:

(86) **In situ indefinite objects are bad:**
      *'I POSS [a boat]' ≈ *a boat is mine

(87) **Solution: extraction**
      'a boat$_i$ [such that I POSS it$_i$]' ≈ a boat [that is mine]

The problem now is that (87) can't by itself constitute an utterance expressing that the speaker possesses a boat. This is for a banal syntactic reason: (87) is a DP, not a sentence. Therefore, a more or less semantically vacuous existential predicate has to be inserted. This derives the structure in (81) ('a boat of mine exists' ≈ "I have a boat").

The obvious issue here is that this is all rather speculative, and impossible to test given our current knowledge of the language. We don't know if any corner of Äiwoo grammar shows the same definiteness effects known for English and other Western European languages. Chung (2008), with data from Māori and Chamorro, shows that the universality of these effects cannot simply be assumed: some languages lack some of these effects, and some others show other definiteness effects that English lacks. Therefore, we can't simply assume the same definiteness effects to apply in Äiwoo, but it's something that must be argued for with empirical evidence. Moreover, we don't know of any specific reason why POSS (or any verb, for that matter) should not be able to take indefinite objecs. Unfortunately, testing this can't be done at the moment, as it will require elicitation from native speaker consultants.

8   THEORETICAL AND CROSS-LINGUISTIC IMPLICATIONS

In this paper I have shown that in Äiwoo, DP-internal possession is structurally derived from clausal possession. Such an analysis is potentially significant when seen from the perspective of proposed syntactic universal connected to possessive structures. In the literature about possession, an influential view proposes that languages "do it the other way around": clausal possession is derived from an underlying nominal (or locative) constituent. Three important pieces of work arguing for this are Freeze (1992), Kayne (1993), and Szabolcsi (1994).

Szabolcsi (1994) (itself a refinement and expansion of Szabolcsi 1981, 1983) proposes that Hungarian possessive clauses are derived from an underlying DP constituent. Simplifying: the possessed DP in (88a) has the dative possessor in a high specifier position

(c-commanding the possessum), argued to be parallel to that of a clausal subject. From here, the possessor can be extracted, to create a clausal possession structure (88b).

(88) a. **Nominal possession**: (Szabolcsi 1994: 180; glosses from Myler 2016: §2.2.1)
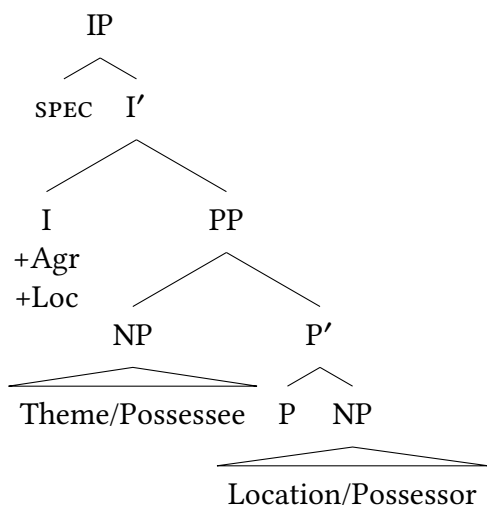 *Mari-nak   a   kalap-ja-i-∅*
  Mari-DAT   the hat-POSS-PL-3SG
  'Mari's hats'

  b. **Predicative possession**: (Szabolcsi 1994: 223; my annotations)
  Mari-nak   van-nak [⌀   kalap-ja-i-∅]
  Mari-DAT   be-3PL   hat-POSS-PL-3SG
  'Mari has hats'

Freeze (1992) and Kayne (1993) extend this idea, arguing that this is actually a language universal: in all languages, predicative possession (HAVE and its cross-linguistic equivalents, including locative constructions) is based on an underlying constituent. These two differ in exactly what structure is held to be the underlying one. Freeze (1992) proposes that the universal underlying structure is that of a locative PP, where the possessum c-commands the possessee (89). Different surface structures that semantically correspond to HAVE are derived by moving different constituents to the subject position (spec,IP). To derive HAVE, the possessor moves to the subject position, and P head-moves into I; the so-formed complex head is spelled out as HAVE[34].

(89) **Proposed universal underlying structure** (Freeze 1992: 558)[35]:

```
                  IP
                 /  \
              SPEC   I′
                    /  \
                   I    PP
                 +Agr  /  \
                 +Loc NP   P′
                     / \   / \
        Theme/Possessee  P   NP
                            / \
                    Location/Possessor
```
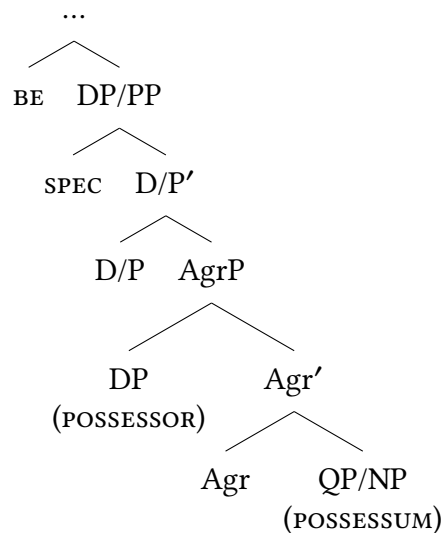
Kayne's (1993) main focus is to account for HAVE and BE as auxiliary verbs; however, it contains an analysis of possessive HAVE, which is similar in spirit to Freeze's. The proposed universal underlying structure is (90). The element notated as D/P is a 'prepositional determiner'. HAVE is derived by raising the possessor DP to the subject position (passing

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34 Note that the Hungarian structure in (88b) is not derivable from (89), and as such is explicitly set aside by Freeze, and taken to instantiate a separate kind of construction.

35 The tree is as shown in Myler (2016: 113), in a slightly modernized version compared to the original.

through spec,DP), and incorporating D/P into the copula BE, which is then spelled out as HAVE. Note that the asymmetric c-command relation between possessor and possessum is the same as Szabolcsi's, and the opposite of Freeze's.

(90) **Proposed universal underlying structure** (elaborated from Kayne 1993: 7):

```
              …
            /   \
         BE     DP/PP
               /    \
            SPEC    D/P′
                   /    \
                 D/P    AgrP
                       /    \
                     DP      Agr′
                (POSSESSOR)  /  \
                           Agr   QP/NP
                              (POSSESSUM)
```

The three approaches just very briefly reviewed can be summarized as in (91), at least for what is relevant to the issues in this paper (X » Y = X c-commands Y):

(91) **Proposed underlying structures for predicative possession**:

 a. Szabolcsi (1981, 1983, 1994): DP; possessor » possessum (Hungarian-specific)

 b. Freeze (1992): PP, possessum » possessor (universal)

 c. Kayne (1993): DP/PP, possessor » possessum (universal)

On the other hand, more recently it has been argued that the view under which all predicative possession is to be derived from one single underlying structure is untenable. Levinson (2011) analyzes the Icelandic *vera með* 'be with' construction. The sentences in (92) show that this can express a series of different types of possession. Levinson makes the case that this construction is impossible to derive from Freeze's underlying argument structure (89). Therefore, that structure cannot be universal.

(92) **Icelandic *vera með* construction** (Levinson 2011: 360):

 a. *Hún   er með bækurnar   fimm*
    she.NOM is   with books.DEF.ACC five
    'She has five books'

 b. *Jón   er með kvef*
    John.NOM is   with cold.ACC
    'John has a cold'

    c. *Jón   er með gleraugu*
       John.NOM is with glasses.ACC
       'John is wearing glasses; John has glasses'

    d. *Jón   er með blá   augu*
       John.NOM is with blue eyes.ACC
       'John has blue eyes'

A similar (though weaker) claim is made in Boneh & Sichel (2010). Although they still adopt the Freezian/Kaynian idea that HAVE is derived from BE through incorporation, they do argue that various possessive constructions in Palestinian Arabic are derived from several underlying argument structures. Finally, Myler (2016) reviews in detail a series of proposals and data, part of which novel and based on a study of closely-related varieties of Quechua. His conclusion is, again, that not all possessive constructions across languages can be derived from one and the same universal underlying structure, *contra* Freeze (1992) and Kayne (1993).

Looking back at Äiwoo, there is now an obvious tension between what I claim and the Freezian/Kaynian universalist approach. Their claim is that clausal possession is derived from a non-clausal constituent (PP or DP). In Äiwoo, the exact opposite happens: DP-internal possession is derived from a transitive clausal structure. Given that my analysis of Äiwoo is correct, then this language is incompatible with the analyses sketched so far. Freeze's approach is ruled out immediately, because the asymmetric c-command relation between the two arguments is reversed: in Äiwoo, the possessor c-commands the possessum, whereas Freeze assumes the opposite configuration. Moreover, Szabolcsi's and Kayne's analyses are also very hard to square with the Äiwoo evidence. This can be shown schematically as in (93). Szabolcsi and Kayne argue that possessive clauses are derived from an underlying DP; in Äiwoo, the opposite is true. Therefore, an analysis of Äiwoo under their view would entail a sort of Duke-of-York syntactic derivation (93c). The transitive clausal structure I assume to be at the base of possessed DPs would itself derive from a DP. If one is to build a possessed DP and is already starting from one, it's unclear why there should be a middle step of building clausal structure.

(93) **Derivational history of possessive structures**:

    a. Szabolcsi/Kayne: DP → clause

    b. Äiwoo: clause → DP

    c. Äiwoo under Szabolcsi/Kayne: DP → clause → DP

(Note that this same issue arises with ASL POSS, according to Abner's 2013 analysis.)

Given this tension, the logical possibilities at this point are two. On one hand, we could follow Levinson (2011) and Myler (2016) and conclude that what Freeze and Kayne are wrong about is the universality of their analysis. Äiwoo is yet another language that cannot be reduced to the same underlying structure proposed for English, Hungarian, etc. Therefore, that structure cannot be universal, and we simply have to accept the conclusion that there is no clear syntactic universal regarding possession.

On the other hand, it could be the case that Freeze and Kayne (and Szabolcsi) are wrong about their analysis of English, Hungarian, etc. Maybe, the underlying clausal structure that Äiwoo possessives transparently wear on their sleeves is actually universal, and just happens to be very hard to spot in other languages. Under this view, English *my boat* would also be derived from an underlying clause like *the boat that I POSS*. This approach would preserve a claim of universality, at the cost of having to develop a new analysis of possessives in many different languages. It would remain to be seen whether an Äiwoo-style analysis of other languages would gain us anything compared to current received wisdom, whether it be theoretical elegance, empirical coverage, currently missed insights and generalizations, etc. I leave this as an open and exciting path for further research.

9 CONCLUSION

In this paper I have shown that all possessive structures in Äiwoo involve a transitive UV verb POSS. This includes not only predicative possession (i.e. clausal possession), but also DP-internal possession, which involves a relative clause. The evidence from this comes from (i) word order, which is the same as we would find with UV verbs; (ii) voice concord patterns, which are the same found on UV verbs; (iii) a particular agreement pattern, once again identical between possessives and UV verbs. A series of open questions remain, given the current logistical impossibility of conducing fieldwork with native speaker consultants. Several of these open questions concern the semantics of POSS, the range of possible kinds of possession it can convey, and its relation to HAVE.

The typological literature has focused on Oceanic possessive construction to some degree (see Lichtenberk 2009a,b and references therein). However, this is not the case for the generative syntactic literature about possession (especially when one excludes a few better-studied Polynesian languages), so that this study contributes to expanding the cross-linguistic coverage of our theories. A few exceptions are den Dikken (2003) on Rotuman (Polynesian), Pearce (2010) on Unua (Vanuatu), and von Prince (2012, 2016) on Daakaka (Vanuatu), although these last two works are more focused on the semantics of the alienability distinction rather than any syntactic aspects. An obvious possible next step would be to verify whether the facts I used to argue for my analysis of Äiwoo (verbal or voice morphology, agreement) could be detected in any other Oceanic language[36].

Finally, I argued that the Äiwoo facts pose an immediate problem for classic generative analyses of clausal possession as deriving from a universal underlying nominal or locative constituent. It remains to be seen whether the universality of these analyses should be abandoned, or whether one could extend an analysis like the one I gave for Äiwoo to other languages.

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36 Äiwoo's closest relatives, the Santa Cruz languages Natügu (Næss & Boerger 2008), Nalögo (Alfarano 2021) and Engdewu (Vaa 2013), are of no help, since they don't have voice concord (in fact, they don't have symmetrical voice at all) or object agreement.

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A   Inflectional paradigms of inalienable nouns

In this appendix, I report the full φ-paradigms of various classes of inalienable nouns; the data is from Næss (in prep.). Similarly to the possessive classifiers, many inalienable nouns show an alternation between two different stems. The distribution of these two stems can be characterized in terms of person features; number does not seem to play a role. The alternation patterns attested for inalienable nouns replicate almost entirely the ones found on the possessive classifiers, repeated in (94). The only exception is pattern (94c), which isn't found in inalienable nouns.

(94) **Stem alternation patterns in possessive classifiers**:

    a. {1, 12} ≠ {2, 3}: GENERAL

    b. {1, 12, 2} ≠ {3}: DRINK, UTENSILS, LOCATION

    c. {1} ≠ {12, 2, 3}: FOOD (+ "vowel harmony")

    d. 1 = 12 = 2 = 3: BETELNUT (+ "vowel harmony")

First, (95) shows a paradigm where all forms are built on the same stem. In (96), on the other hand, we see the same pattern as in (94a), with forms including the speaker (first person, exclusive and inclusive) built on one stem and second/third person forms built on a different stem. Note that, as in all other paradigms in the language, unit-augmented forms are consistently built by adding *-le* to the corresponding augmented forms.

(95) **1 = 12 = 2 = 3:**

	'Body'
1MIN	nyisi
12MIN	nyisi-ji
2MIN	nyisi-mu
3MIN	nyisi
1UA	nyisi-ngo-le
12UA	nyisi-de-le
2UA	nyisi-mi-le
3UA	nyisi-i-le
1AUG	nyisi-ngo(pu)
12AUG	nyisi-de
2AUG	nyisi-mi
3AUG	nyisi-i

(96) **{1, 12} ≠ {2, 3}:**

	'Daughter'
1MIN	sipeu
12MIN	sipeu-ji
2MIN	sipe-mu
3MIN	sipe
1UA	sipeu-ngo-le
12UA	sipeu-de-le
2UA	sipe-mi-le
3UA	sipe-i-le
1AUG	sipeu-ngo(pu)
12AUG	sipeu-de
2AUG	sipe-mi
3AUG	sipe-i

Finally, other nouns show the alternation pattern in (94b), where all participant forms share one stem, and third person forms have a different stem. Exactly how the two stems are different, however, varies. The consistent generalization is that the final vowel in the third person stem is lower than the final vowel in the participant stem. All the attested alternations are shown in (97) ('mat.' stands for 'maternal'). Note that in *gisi~gite*, the consonantal alternation is predictable, as /t/ and /s/ consistently neutralize to /s/ before /i/. Similarly, the vowel alternation in the first syllable of *giângu~giängä* is predictable in terms of vowel harmony.

(97) **{1, 12, 2} ≠ {3}:**

	'Mouth' u~e	'Man's sister' ou~e	'Man's brother' i~e	'Mat.uncle' u~ä	'Mother' o~ä	'Mat.grandma' u~o
1MIN	nedu	siwou	gisi	giângu	iso	ipebu
12MIN	nedu-ji	siwou-ji	gisi-ji	giângu-ji	iso-ji	ipebu-ji
2MIN	nedu-mu	siwou-mu	gisi-mu	giângu-mu	iso-mu	ipebu-mu
3MIN	nede	siwe	gite	giängä	isä	ipebo
1UA	nedu-ngo-le	siwou-ngo-le	gisi-ngo-le	giângu-ngo-le	iso-ngo-le	ipebu-ngo-le
12UA	nedu-de-le	siwou-de-le	gisi-de-le	giângu-de-le	iso-de-le	ipebu-de-le
2UA	nedu-mi-le	siwou-mi-le	gisi-mi-le	giângu-mi-le	iso-mi-le	ipebu-mi-le
3UA	nede-i-le	siwe-i-le	gite-i-le	giängä-i-le	isä-i-le	ipebo-i-le
1AUG	nedu-ngo(pu)	siwou-ngo(pu)	gisi-ngo(pu)	giângu-ngo(pu)	iso-ngo(pu)	ipebu-ngo(pu)
12AUG	nedu-de	siwou-de	gisi-de	giângu-de	iso-de	ipebu-de
2AUG	nedu-mi	siwou-mi	gisi-mi	giângu-mi	iso-mi	ipebu-mi
3AUG	nede-i	siwe-i	gite-i	giängä-i	isä-i	ipebo-i

B UV AGREEMENT IN 1AUG > 2 CONFIGURATIONS

In this paper I have proposed the following generalization regarding the distribution of object agreement on UV verbs (repeated from (46):

(98)   **Object agreement** is found iff:
    a. Subject = 1st person; Object = 2nd person
    b. Subject = 3MIN; Object = non-3MIN

As mentioned in §5.1, this generalization is slightly different from the one proposed in Næss (2006, 2015b) et seq., and analyzed in a Minimalist framework in Roversi (2020). Specifically, the first clause (98a) is different. In these earlier works, the generalization has it that only 1MIN > 2 configurations trigger object agreement, whereas 1AUG > 2 block it. However, since then new data has emerged showing that 1AUG > 2 is also one of the configurations that trigger object agreement. In fact, in the whole corpus there is only one example showing 1AUG > 2 without object agreement, and with the object realized as a full pronoun instead:

(99)   *go   ku-wobii-**ngopu**=to=we*   ***iumu**, ä   jelâ   nugu-ngo*
    for   IPFV-follow.UV-**1AUG**=TAM=PROX   **2MIN**, and   thing   POSS:TOOL-1AUG
      i-meli-du-kâ-ngo
      ASP-let.go.UV-all-DIR3-1AUG
    'We have left everything to follow you' (Mark 10:28; lit. 'in order for us to follow you, we have left all our things')

On the contrary, there are a small but considerable number of examples of similar configurations showing object agreement and no object pronouns:

(100)   *i-kää-**ngee**-**mu***
    ASP-know.UV-**1AUG**-**2MIN**
    'We know you' (Mark 1:24)

(101)   *ki-viteiâ-**ngee**-**mu**=to*
    IPFV-sell.UV-**1AUG**-**2MIN**=TAM
    'We will sell you' (said by parents to their child as a threat)

As for the form *-ngee* itself, there are good reasons to believe it to be a 1AUG marker. 1MIN has the allomorphs *-no* and *-nee*, where the former is the default and the latter is only used when preceding a 2nd person object marker. 1AUG has *-ngo(pu)* as its default allomorph. Therefore, it seems plausible to assume that *-ngee* would be the 1AUG equivalent of 1MIN *-nee*. Schematically, *-no : -nee = -ngo(pu) : -ngee*.

As for the contrast between (99) and (100): it might be that there is inter-speaker variation, so that some variety 'Äiwoo A' forbids object agreement in a 1AUG > 2 configuration like in (99), whereas some other variety 'Äiwoo B' allows it[37]. Alternatively, it could be

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37 However, both these examples are from the same translation of the Gospel of Mark, so a variation-based hypothesis doesn't seem too likely to hold water.

the case that object agreement is the default (in the configurations that allow it), but it can be suspended in the presence of special information-structural circumstances. This is not unlikely what happens for example in Romance languages: pronominal objects are most often realized as clitics (102a), but may be realized as full pronouns when emphasized (e.g., under contrastive focus, here represented with capitalization) (102b).

(102)   **Object clitics vs full pronouns (Italian)**:

a. ***le***   *ho*   *viste*   b. *ho*   *visto* ***LORO***
   them.F have.1SG seen   have.1SG seen **them**
   'I saw them'   'I saw THEM'

One could hypothesize that the object in (99) is carrying some type of emphasis; however, this cannot be confirmed at the present moment, and more research will be needed to clarify this. An interesting point concerns the formal analysis of Äiwoo agreement in Roversi (2020), designed to capture the old generalization, that is, a system where object agreement is triggered iff (i) 1MIN > 2; (ii) 3MIN > non-3MIN. This was done by proposing a probe with a disjunctive satisfaction condition (in the interaction-and-satisfaction theory of agreement; Deal 2015, to appear): it can be satisfied by either an [ADDR(ESSEE)] feature, or an [AUG] feature. The probe will always agree with the subject. if the subject has either of these features, it will stop there. This leaves out 1MIN and 3MIN subjects, the only ones that don't have either of the satisfaction features, and that in fact are the only ones that trigger object agreement. See Roversi (2020) for details.

Now, this analysis clearly doesn't work for the new generalization that was discovered since and presented here, where 1AUG > 2 also triggers object agreement. In fact, it's not immediately clear to me how to capture this distribution of object agreement within current Minimalist theories of agreement. I leave this interesting puzzle open for future inquiry. However, the broader theoretical claim that probes can have a disjunctive satisfaction condition has since been confirmed by other work on other languages. Even just limiting the empirical domain to φ-agreement, Bondarenko & Zompì (2021) analyze agreement in Svan (Kartvelian) as showing disjunctive satisfaction. Moreover, Oxford (2022) proposes various types of probes with a disjunctive satisfaction condition to model agreement phenomena in a series of Algonquian languages (including varietes of Mi'kmaq showing the specific "addressee or plural" pattern argued to exist in Äiwoo in Roversi 2020; see Oxford 2022: 27).

C   3AUG POSSESSUM MARKING VS. NUMBER MARKING

As shown in §5.2.1, when a possessed nominal (a possessum) is 3AUG, its number is marked either as a suffix or as a pronoun (*kuli no-gu-i* 'his/her dogs'; *kuli no-mu **ijii*** 'your dogs'). This pattern was analyzed in Næss (2018: §4.5–4.6) as a way of expressing plural marking on nouns. However, such an analysis must come with a number of caveats, several of which are already noticed by Næss herself. First of all, Äiwoo essentially never marks

number of nouns themselves[38]. Having number marked exclusively on possessed nouns – both inalienables and alienables, as long as they're marked for possession – would be a typologically extremely unusual state of affairs; Næss herself is unaware of any other attested case (Næss 2018: 56).

Moreover, it's unclear why to mark plurality a 3AUG suffix should be added on top of a 3MIN one, when the inalienable noun/possessive classifier is already in its minimal number form. Næss here adduces an ambiguity-avoidance explanation: since *gino-i* 'son-3AUG' already means 'their son', the 3MIN suffix would be added then to make sure that *gino-gu-i* 'son-3MIN-3AUG = his/her sons' is different. However, such an explanation only carries so much bite in a language where number-related ambiguity and vagueness are otherwise perfectly tolerated. Finally, the additional 3AUG pronoun seen in configurations like (52b)-(53b) is perhaps even stranger as a mean of number marking from a typological perspective. A possible parallel might be found in Haitian Creole. In this language, the 3PL pronoun *yo* is homophonous to the definite plural marker *yo*, which is only used in definite noun phrases, whereas indefinite plurals are left unmarked[39] (Joseph 1988, DeGraff 2007, Glaude 2013). This would be an instance of a pronoun being used to mark number, parallely to what Næss argues for Äiwoo. (However, as far as I know, there is no analysis in the literature proposing that the *yo* found in definite plural DPs is in fact just the 3PL pronoun, rather than being a homophonous item.)

(103)   **Plurals in Haitian Creole:**

    a. **Indefinite: unmarked**   b. **Definite: marked by *yo***
       liv   *liv*   *yo*
       book   book DEF.PL/3PL
       'book, books'   'the books'

Finally, Næss' analysis of possessum marking as augmented number marking cannot extend to those cases where the possessum is 1st/2nd person. Again, these perfectly reproduce the distribution of object marking in UV verbs, so my analysis based on the UV verb POSS does predict them fully. These are examined in §5.2.2.

D   A POSSIBLE EXTENSION: "RELATIONAL MARKERS"

In addition to possessive classifiers and inalienably possessed nouns, Äiwoo's possessive system comprises, so to speak, a third member, which Næss labels "relational markers" or "relational prepositions" (Næss 2006 et seq.). Here I gloss them as RELM (for "relational marker"). These are *eä/wä, nä, lä, ngä*; it's unclear if anything behind lexical idiosyncrasies determines exactly which one will be chosen for which noun. They are used to encode

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38 The only exception to this is the collective prefix *pe-*, used with human-referring nouns and kinship terms, e.g. 'person', 'child', 'man', 'woman', etc. However, as argued in Næss (2018: §4.4), this is not straight-forward purely inflectional plural marking in the same way as e.g. *-s* in English, as it carries richer quasi-lexical collective semantics, referring to "a specific, delimited group of people" (Næss 2018: 45).

39 I thank Christopher Legerme for pointing this out to me, and for providing the example in (103).

various kinds of relations between two noun phrases, often other than prototypical possession proper (examples from Næss in prep.):

(104)   a.   *nupo* **eä**   *nubââ*
            net   RELM.3MIN shark
            'Net for (to catch) sharks'

       b.   *numonu* **nä**   *talâu*
            money   RELM.3MIN meal
            'Money for feasts/ceremonies'

       c.   *dekuluwo* **lä**   *Temotu*
            bird   RELM.3MIN Temotu
            'Bird from Temotu Province'

The second noun phrase, as commonly in Äiwoo, can be dropped: *nubu eä* 'the core of it (breadfruit); its core'. Like inalienable nouns and possessive classifiers, the relational markers can be inflected as well for φ-features, with the same paradigm of suffixes found on other possessives (and UV verbs):

(105)   a.   *totokale* **eou**
            picture   RELM.1MIN
            '(A) picture of me'; cf. the different reading of *totokale nou* '(A) picture that I own', with the general possessive classifier (Næss 2006: 273)

       b.   *ibe*   **eou-de**
            old.man RELM-12AUG
            'Our.INCL God'

       c.   *talâu* **wä-i**
            meal   RELM-3AUG
            'Ceremonies for them'

Unfortunately, the status of these markers is rather unclear, and the data is not abundant. For example, we don't know whether all forms have a full φ-paradigm, and their exact semantic properties are unknown. However, there is some preliminary evidence that they might have similar morphosyntactic properties to the rest of the possessive system. They seem to show the same possessum agreement pattern as other possessives (and UV verbs), with a parallel distribution of possessum suffixes vs. possessum pronouns (106). They also seem to consistently show UV voice concord on their modifiers (107).

(106)   **Possessum agreement**:

       a.   **As a suffix**:
            sime   **lä-gu-i**   *nuumä eângâ*
            person RELM-3MIN-3AUG village that
            'People from that village'

b. **As a pronoun**:
eabe   ***eou-de***   ***ijii***
family.line   RELM-12AUG   3AUG
'Our family members, our elders' (Mark 7:5)

(107) **Voice concord on modifiers**:

a. *ngâ*   *numalu* ***wä-mole-nyii***   *nubonu* *elo* *eângâ=to=wâ*
LOC.PREP   middle   RELM.3MIN-exactly-UV   lake   big   that=TAM=DIST
'Right in the middle of the big lake'

b. *doo*   *naaeo* ***wä-mole-nyii****=nâ*
what   story   RELM.3MIN-exactly-UV=DIST
[About a specific ceremony] 'What exactly is the story of that?'

c. *ki-li-boli-ee-kä=naa*   *go*   *taapi* ***eä-usi****=nâ*
IPFV-3AUG-wrap-go.up-DIR3=FUT   with   leaf   RELM.3MIN-again.UV=DIST
'It will be covered with its leaves again'

Although the preliminary evidence might be promising, unfortunately, very little can be concluded on the basis of this sparse data alone. Thus, I leave these aside, and simply note that they might conform to the generalizations proposed in this paper, but more research is needed.