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Between symmetrical voice and ergativity: inverse and antipassive in Movima

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1 Introduction¹

In recent years, many detailed studies have been published on the forms and functions of antipassive constructions, both in individual languages and from a typological perspective (see especially Heaton 2017; Janic 2016; Janic & Witzlack-Makarevich 2021a; Seržant et al. 2021). It may seem that by now, all the aspects of antipassive and related constructions have been discovered and sufficiently discussed. For instance, we know from these studies that antipassives are not restricted to ergative languages, that they come in many different forms and with varying syntactic and semantic functions, that they can be governed both by syntactic and by lexical factors. And yet, research on lesser described languages reveals still further facets of the phenomenon, without distorting the concept as such.

The present paper is a further contribution on antipassive constructions in the languages of the world. Movima (ISO 639: mzp), an endangered linguistic isolate of

¹ This study forms part of the research programs *Morphosyntax in Discourse* (Axe3-GL5 of the LabEx EFL, ANR-10-LABX-0083 and IdEx Université Paris Cité - ANR-18-IDEX-000) and *De la description à la typologie* of the *Laboratoire Structure et Dynamique des Langues* (SeDyL: CNRS UMR8202, INALCO, IRD). I am deeply grateful to the Movima speakers who taught me their language, told me their stories, and had the patience to answer my many questions. The paper has benefited greatly from discussions with my colleagues Katharina Janic, Aimée Lahaussois, Sonja Riesberg, and Alena Witzlack-Makarevich, as well as from the comments by two anonymous reviewers and an assistant editor of IJAL. All remaining shortcomings are my own responsibility.

lowland Bolivia,² has two transitive constructions, direct and inverse (defined below). They can be compared to symmetrical-voice systems known from Western Austronesian languages: The direct voice corresponds to an Austronesian undergoer voice, and the inverse voice corresponds to the Austronesian actor voice, in that each voice provides the respective argument with the privileged syntactic status, in particular, access to extraction. In addition to the inverse (actor) voice, however, Movima has a detransitivizing operation, which functions like a prototypical antipassive: It promotes the actor to single-argument status, which, similar to the inverse, allows the extraction of the actor.

To my knowledge, the coexistence of an inverse (or actor) voice and a functionally overlapping syntactic antipassive has not been described yet. Furthermore, while in some languages there is a diachronic relationship between an antipassive and an inverse (Konnerth 2021; Polinsky 2017) or between an antipassive and an actor voice (Aldridge 2011; Hemmings 2021), in Movima there is no sign of a diachronic or synchronic relationship between the two constructions. The goal of this study, therefore, is to provide a detailed description of the Movima antipassive construction against the background of a symmetrical-voice analysis, and to find out how the antipassive interacts with the direct-inverse alternation of transitive clauses.

The remainder of this introductory section offers first a brief overview of the parallels between the Austronesian-type symmetrical voice system and the Movima directinverse alternation (1.1) and then presents the Movima antipassive (1.2). Section 2 provides background information on the Movima syntactic constructions relevant for the present study: basic clauses (2.1), "extraction" (2.2), and the antipassive (2.3).

After this presentation of the structural properties of the antipassive, Section 3 then turns to the question of how these potentially competing constructions, inverse and antipassive, are distributed in actual discourse. Based on data from spontaneous oral discourse, it is shown that the choice of the construction is primarily based on the relative position of the event participants in the animacy hierarchy (3.1), and that, when

² Movima is an endangered language spoken by several hundred adults in the town of Santa Ana del Yacuma of the Amazonian Beni department. The text data on which this research is based were collected there during ten field trips between 2001 and 2012.

both event participants are equal in the hierarchy, the choice is largely based on the definiteness (i.e. givenness and/or identifiability) of the undergoer (3.2). It is investigated how these factors are reflected in the encoding of the undergoer as a pronoun (3.2.1), as a referential phrase (3.2.2), or by the absence of an overt expression (3.2.3), with the finding that the inverse is restricted to overtly expressed, definite undergoers, while the antipassive is employed more flexibly. It is furthermore suggested that in case of a free choice, the antipassive is preferred because it is the more analytic and therefore simpler construction (3.2.4). The conclusions are presented in Section 4.

1.1 Symmetrical voice and the Movima direct-inverse

Symmetrical-voice systems are characterized by the fact that there is more than one transitive construction, each of which is overtly marked and neither of which can be considered the basic form (Himmelmann 2005a: 112). These systems are typical of Western Austronesian languages (Himmelmann 2005a; Riesberg 2014), with Tagalog as the probably most familiar example.³

In a Tagalog transitive clause, the semantic role of the nominative argument is specified by a so-called voice marker on the verb. The infix $\langle in \rangle$ in (1)a marks the so-called "patient voice": It indicates that the nominative argument (in square brackets) is the undergoer. By contrast, the infix $\langle um \rangle$ in (1)b marks the "actor voice": It indicates that the nominative argument is the actor. Unlike a canonical passive or antipassive voice, which is overtly derived from an active or ergative construction, respectively (Dixon 1994: 246, and see below), both actor and undergoer voice are morphologically marked. The other core argument of the transitive clause is termed "genitive" (Kroeger 1993), since it is encoded in the same way as a nominal possessor.⁴

³ The comparison here will be restricted to Tagalog, even though the voice systems of other Austronesian languages such as Totoli (Riesberg 2014; Riesberg et al. 2021) are also strongly reminiscent of the Movima direct-inverse system.

⁴ Symbols and abbreviations:

⁼ internal cliticization; ~ reduplication; < > infixation

a. B<in>abasa ng titser [ang diyaryo]
 <PV>read:IMPF GEN teacher NOM newspaper
 'The teacher is reading the newspaper.'

b. B<um>abasa ng diyaryo [ang titser].
<AV>read:IMPF GEN newspaper NOM teacher
'The teacher is reading a newspaper.'
(adapted from Schachter & Otanes 1972: 69)⁵

Apart from the patient voice in (1)a, Tagalog also has two additional undergoer voices, the locative voice (marked by *-an*) and the conveyance voice (marked by *i-*) (Himmelmann 2005b: 363). Thus, Tagalog has several transitive constructions, which are distinguished by overt morphological marking on the verb.

Movima has exactly two transitive constructions, which are labelled "direct" and "inverse". These terms are borrowed from the Algonquanist literature (see Hockett 1966: 65) and imply that their choice is based on a person (1 > 2 > 3) and animacy (human > non-human animate > inanimate) hierarchy: When the actor outranks the undergoer in the hierarchy, the direct construction is chosen, and when the undergoer outranks the actor, the inverse construction is chosen. Since the choice between these constructions is, in part, also based on discourse-related factors, I consider it a voice alternation (in line with Croft 2003).

¹⁼first person; 2=second person; 3=third person; A=actor; AB=absential; ABST=absolute state; AGT=agentive; ANIM=non-human animate; ART=article; ATT=attenuative; AV=Actor voice; CAUS=causative; CLF=classifier; CO=coparticipant; DEF=definite; DEM=demonstrative; DETR=detransitivizer; DR=direct; DSC=discontinuous; DUR=durative; EMPH=emphasis; EPIST=epistemic; EVT=event; F=feminine; GEN=genitive; HUM=human; HYP=hypothetical; IMPF=imperfective; INANIM=inanimate; INV=inverse; IRR=irrealis; LK=linker; LN=linking nasal; LV=linking vowel; M=masculine; MD=middle; MOV=moving; N=neuter; NEG=negation; NMZ=nominalization; NOM=nominative; NTR=neutral; OBL=oblique; P=undergoer; PL=plural; PRO=free pronoun; PST=past; PV=patient voice; R/R=reflexive/reciprocal; REL=relativizer; SG=singular; SUB=subordinate; V=vowel; VBZ=verbalization.

⁵ The Tagalog examples are glossed according to Kroeger (1993).

Just like the Tagalog actor and undergoer voices, the Movima direct and inverse voice are both overtly morphologically marked on the verb, and neither is derived from the other one. Like the Tagalog examples above, the Movima examples in (2) and (3) both consist of a transitive predicate that is followed by two referential phrases (henceforth RP) representing the arguments.⁶ The two arguments are not differentiated by case markers in Movima, but by their position in the clause. In (2), the direct suffix *-a* indicates that the first argument RP after the verb (henceforth "internal argument", since it is part of the predicate phrase and cannot be extracted) must be interpreted as encoding the actor and the second argument RP (henceforth "external argument", since it is located outside the predicate phrase and can be extracted) must be interpreted as encoding the undergoer. The inverse suffix *-kay* in (3) signals the reversed situation: Here, the internal argument must be interpreted as encoding the undergoer and the external argument as encoding the actor.

- (2) *ela-na=us pa' [isnos ma'a]* leave-DR=ART.M my_father ART.F.PST my_mother 'My father left my mother.' [HRR TX 199]
- (3) sal-kay-a=kus ona:cho=Ø [as pa:ko]
 look_for-INV-LV=ART.M.AB grandchild=1SG ART.N dog
 'The dog looks for my grandson.' [elicited 20, 005a]

Both the Tagalog symmetrical voice and the Movima direct-inverse system have strong constraints on extraction, e.g. relativization (see 2.2). In Tagalog, only the nominative argument can be extracted (Kroeger 1993: 23; Kaufman 2009). Thanks to the verbal voice marking, the semantic role of the relativized argument is always obvious in Tagalog: When the verb is marked for undergoer voice, as in (4)a, this means that the extracted argument is the undergoer; when, as in (4)b, the verb is marked for actor voice, this means that the extracted argument is the actor.

⁶ The term "referential phrase (RP)" is chosen rather than "noun phrase (NP)" because in both languages these phrases have the potential to refer, but are not restricted to nouns (see Section 2.2.).

- (4) a. Interesante [ang diyaryo]=ng b<in>asa ng lalaki.
 interesting NOM newspaper=LK <PV>read GEN man
 'The newspaper that the man read is interesting.'
 - b. Matalino [ang lalaki]=ng b<um>asa ng diyaryo.
 intelligent NOM man=LK <AV>read GEN newspaper
 'The man who read the/a newspaper is intelligent.'
 (adapted from Schachter 1976: 500)

Similarly, in Movima, only the external argument has access to extraction, as illustrated by the relative clauses below. Direct voice signals that the relativized phrase is the undergoer, (5), and the inverse voice signals that the relativized phrase is the actor, (6).⁷

- (5) Ka:w-e [is majni=Ø] di' vel-na=us.
 much-CLF.person ART.PL offspring=1SG REL watch-DR=3M.AB
 'I had many children (lit.: Many were my children), whom he looked after.'
 [ERM_150806 146]
- (6) *Kiro'* [*kis* senyo:ra] di' vel-kay-a=sne.
 DEM.PL.AB ART.PL.AB lady REL watch-INV-LV=3F.AB
 'There are ladies who look after her.' [EAO Asilo 004]

We can see here that both the Tagalog undergoer voice and the Movima direct voice show a syntactically ergative pattern (Dixon 1994), as they provide the undergoer with exclusive access to relativization. Conversely, the Tagalog actor voice and the Movima inverse show an accusative pattern, providing the actor with access to relativization. Another parallel between Tagalog and Movima is that in both languages, the ergative construction (undergoer voice in Tagalog, direct voice in Movima) is the most frequent

⁷ Neither tense nor definiteness are obligatorily overtly marked in Movima. The English translations correspond to the context in which the examples occurred.

transitive construction in discourse (Hopper & Thompson 1980; Himmelmann 2005b: 368; Haude 2014).

While the Movima direct-inverse and the Tagalog symmetrical-voice systems are thus strikingly similar, there are also some important differences. One is that a Tagalog nominative argument is usually interpreted as definite or at least referential (Hopper & Thompson 1980: 288; Himmelmann 2005b: 367; Collins 2019); this is not the case for a Movima external argument RP, whose interpretation as definite or indefinite depends on the context. Another difference, which is at the core of the present study, is that in Tagalog, the voice alternation in extraction (e.g. relativization) is fully predictable: the actor voice is chosen when the actor is extracted, and an undergoer (patient, locative, or conveyance) voice is chosen when the undergoer is extracted. In Movima, by contrast, the use of the inverse voice is restricted by a referential hierarchy, both in basic clauses and in extraction, and consequently, the inverse cannot be used to extract a high-ranking actor. Here, an antipassive operation comes into play, introduced in the following section.⁸

1.2 The Movima antipassive

The Movima antipassive, illustrated in (7), is derived from the direct construction through the insertion of the particle *kwey* (or *kaw*, depending on the speaker) before the verb. While the verb retains its direct marking, it is syntactically intransitive: It does not take an internal argument, and the undergoer is encoded as oblique. The extracted actor RP (in square brackets) is the single argument of the clause.

⁸ There have been accounts of a dedicated antipassive in Austronesian languages as well (Aldridge 2011; Laskowske 2016; Quick 2007), although these analyses are controversial (see Chen & McDonnell 2019). In any case, the constructions in question are verbal derivations that also occur in main clauses, and are not of the analytic, syntactically restricted type described here for Movima.

(7)senyo:ra] di' vel-na nosdé no-kos [i'nes kwev ART.F lady watch-DR over there OBL-ART.N.AB.N REL DETR asna=Ø home=1sg 'the lady who looks after my home' [EAO Cbba 244]

The construction in (7) complies with mainstream definitions of prototypical antipassives cross-linguistically (see Dixon 1994: 146; Heaton 2017: 63), as shown by the features listed in (8).

- (8) Properties of the Movima antipassive that correspond to the prototype:
 - a) the construction is overtly marked (in Movima, by a particle);
 - b) the construction is productive, i.e. there are no lexical restrictions;
 - c) the single argument of the derived intransitive clause encodes the actor;
 - d) the undergoer is encoded by an oblique phrase, which can be omitted;
 - e) the construction is based on the ergative construction.

In addition, the Movima antipassive has two properties that are less common crosslinguistically. First, it has an exclusively syntactic function: It is only used for extraction (i.e. relativization, referentialization, topicalization; see 2.2) and cannot be employed in basic clauses for semantic or pragmatic purposes. This identifies the construction as a "structural antipassive" (Cooreman 1994: 72), used for syntactic purposes only. Second, in Movima, the antipassive is only one (though the most frequent and productive) function of a more general valency-decreasing operation (see 2.3), which, when applied to inverse verbs, functions as a passive, and when applied to nominal predicates, serves to extract the possessor (see Haude 2010). (This latter property, however, will not be treated in this article.)

2 Basic clauses, extraction, and the antipassive

2.1 The structure of Movima basic clauses

The term "basic clause" is used here to refer to Movima simple affirmative main clauses. The major predicate types that can be distinguished in basic clauses are transitive (verbal) and intransitive (verbal or nonverbal) predicates. There is no agreement or morphological case marking in Movima. Core arguments are distinguished by constituency, which is signalled by linear position and the type of phonological connection to the predicate. All non-core arguments or adjuncts are marked by the oblique prefix n(V)-.

Transitive verbs are overtly marked as either direct or inverse, indicating the semantic (macro-)roles, actor and undergoer, of the two syntactic arguments. I will first focus on direct-marked verbs. These are by far more frequent than inverse-marked ones and – since the actor role coincides with the referent higher in the referential hierarchy – can be considered the default transitive verb form (see Haude 2014).⁹

Direct verbs are marked by the suffix *-na* (or its base-internal allomorph *-a-*). A direct clause with two full RPs was already presented in (2) above. A more typical example, in which the internal argument is represented by a bound pronoun and the external argument by an RP, is given in (9) (on the accent symbol, see further below).

(9)	Ji:sa-ná=us	[os	kamaro:te].	
	make-DR=3M.AB	ART.N.PST	cabin	
	'He made the cabi	in (of the oxe	cart).'	[EAO Cbba 152]

Basic transitive clauses have two core argument positions, which, based on their morpho-phonological connection to the predicate and on their extraction possibilities, can be analyzed as internal vs. external to the predicate phrase. The actor of a direct-marked predicate is obligatorily encoded by an element in the internal position, directly right-adjacent to the predicate. The internal position is marked by the cliticization of

⁹ This, too, is reminiscent of Tagalog, where the actor voice can be considered a "marked choice" for two-participant predicates (Himmelmann 2005b: 368).

the pronoun or (if the actor is expressed lexically, as in (2) above) of the determiner of an RP. The internal cliticization (marked by an equals sign; see Haude 2006: 97–101) of a pronoun or determiner leads to a stress shift (marked by an accent symbol in this section), to the shortening of an open penultimate syllable (as in (9) above), and to the insertion of the vowel -*a* if the host ends in a consonant (examples of the linking vowel will be seen further below). Furthermore, the internal argument is obligatorily realized. The absence of an overt internal enclitic on a transitive predicate is a zero morpheme indicating the first-person singular internal argument, as shown in (10).

(10) Ja' jo'mi rey ji:sa:-na=Ø [kos ro:ya].
just recently EPIST make-DR=1SG ART.N.AB house
'Only then (will) I build a house.' [EAO Buscar vivienda 043]

The undergoer of a direct transitive predicate is encoded in the so-called "external" argument position (represented by square brackets in this paper). The external argument is not (if expressed by an RP) or less tightly (if expressed by a pronoun) attached to the predicate (see Haude 2006: 101–103 for this so-called "external cliticization"). This could be observed in the examples above, where the articles of the RPs representing the undergoer are not cliticized to the preceding element.

Furthermore, the external argument can remain unexpressed, as in (11). In that case, its referent can be retrieved through the verb semantics, the context, or through world knowledge; its identity may also be simply irrelevant. The presence of the direct marker makes clear that the clause is transitive and that the undergoer can, if necessary, be overtly expressed by a non-oblique RP or pronoun.

(11) Ji:sa-ná=as, che tarał-ná=as.
make-DR=3N.AB and heal-DR=3N.AB
'It (i.e. the toad) achieved (the healing of the bone), and it cured (the wound).'
[ERM Sapo 018]

The external argument of a transitive basic clause (i.e. the undergoer of a direct predicate) shares its encoding pattern with that of the single argument of an intransitive

clause (Haude 2019). The single argument of the intransitive clause shows the same morphophonological features as the external argument of the transitive clause: no cliticization of the determiner of an RP, external cliticization of a pronoun, lack of obligatory expression. Consider (12), which contains three intransitive predicates. The first two are not accompanied by overt arguments, whose referents can be inferred from the context. The argument of the third predicate is encoded by a free-standing RP (*kos wa:ka*).

(12) Tami:tik, che kayni; o'chołyemajcho [kos wa:ka].
 give_birth and die abort ART.N.AB cow
 '(It, i.e. the cow) gives birth and (they, i.e. the calves) die; the cow miscarries.'
 [EAO Abuelo 041]

These formal parallels between the undergoer argument of a direct predicate and the single argument of an intransitive predicate show that the direct transitive clause has an ergative alignment pattern.

Inverse verbs, which are marked with the suffix *-kay*, are transitive as well, but here the semantic roles of the arguments are reversed: The internal argument is the undergoer and the external argument is the actor. The alignment pattern of the inverse clause, therefore, is accusative. An inverse clause is illustrated in (13), where the undergoer is encoded by an internally cliticized pronoun (signalled by the insertion of the linking vowel *-a* to the consonant-final host) and the actor is expressed by a phonologically independent RP.

(13) Jommi-kay-á='ne [is ka:wup].
devour-INV-LV=3F ART.PL mosquito
'The mosquitos devour her.' [EAO Alojamiento 033]

Direct and inverse marking is chosen depending on the ranking of arguments in a referential hierarchy. The internal argument encodes the event participant that ranks higher in terms of person (1>2>3), animacy (human > non-human animate > inanimate), and/or discourse status (topical > less topical), and the external argument

encodes the lower-ranking event participant. The present study only deals with thirdperson arguments, so the person hierarchy will not be further discussed here.

The role of animacy could already be observed above. In the direct clause in (9), the actor is human and the undergoer is an inanimate object. In the inverse clause in (13), the actors are insects and the undergoer is a human being. The examples also illustrate the difference in discourse status between the referents of the two arguments, as the internal argument is usually represented by a pronoun (referring to a discourse-given entity), whereas this is only rarely the case for the external argument (Haude 2014).

The direct voice can be seen as the default transitive construction. It is used when the actor outranks the undergoer in the referential hierarchy – which is the most common situation in descriptions of two-participant events, as animates, and particularly humans, are typical actors, and inanimates tend to be undergoers (see Silverstein 1976: 123). The direct voice is also more frequent when both referents are equal (as e.g. in (2), where both argument RPs refer to humans), and sometimes, it is even used in opposition to the hierarchy. This preference for the direct voice, in which the actor is treated as high-ranking independently of its referential properties, corresponds to a probably universal tendency to describe two-participant events from the perspective of the agent (see e.g. DeLancey 1981). The inverse, by contrast, is never used to express an action that goes from a high-ranking to a low-ranking entity, and it is rarely used to express equal scenarios. As shown by Haude (2014) on the basis of a sample of 1,300 basic transitive clauses describing third-on-third scenarios, 93% of these clauses are direct, while only 7% are inverse.¹⁰

Transitive predicates have only two syntactic argument slots (internal and external), intransitive predicates have only one (external). Any event participant that is not expressed in the clausal core can optionally be expressed by an oblique-marked RP or pronoun, which is marked by the prefix n(V)-. (On the status of oblique-marked phrases as oblique arguments vs. adjuncts, see Haude 2019). In the direct transitive clause in (14) and in the intransitive clause in (15), the oblique phrases refer to locations.

¹⁰ A reviewer points out that this bias is much stronger than the distribution of actor and undergoer voice in Austronesian symmetrical voice systems. Presumably, this is because the use of the Movima inverse is restricted by the referential hierarchy.

- (14) Bat-na=us [os bebetkwa] n-os kamaro:te.
 put-DR=3M.AB ART.N.PST leather OBL-ART.N.PST cabin
 'He put the leather on the cabin (of the oxcart).' [EAO Cbba 153]
- (15)Jaynawele:le[oskare:ta]n-isikamba.DSCclimb_upART.N.PSToxcartOBL-ART.PL anthill'Then the oxcart climbed up the anthills.'[EAO Ay'ku I 021]

Oblique arguments or adjuncts can also be represented by a pronoun, as in (16). The pronoun then occurs in its free (i.e. uncliticized, long) form, glossed 'PRO'.

(16)*Yev-na=sne [as* jov-wa='ne n-isne want-DR=3F.AB go-NMZ.EVT=3F OBL-PRO.3F.AB ART.N *Kurus*], *jankwa=sne*. nosdé n-as Santa over there OBL-ART.N Santa Cruz said thing=3F.AB 'She wants her to go with her to Santa Cruz, she said.' [EAO Visita 101]

Typically, oblique phrases are RPs rather than pronouns: 83% of the oblique phrases in the corpus – representing all kinds of event participants – are RPs, while only 17% are pronouns.¹¹ Oblique phrases are never grammatically obligatory.

2.2 Extraction: a process restricted to the external argument

The three processes subsumed under the label "extraction" here are (headed) relativization, referentialization, and topicalization. I chose the term extraction because it is used in descriptions of similar phenomena in other languages that share typological features (e.g. predicate-initial clause structure) with Movima, such as Tagalog

¹¹ This finding is based on a rough corpus search on non-neuter oblique phrases (neuter oblique phrases commonly represent adverbial clauses, and they often appear as pronouns referring to events). The finding was: 1263 non-neuter oblique RPs and 259 non-neuter oblique pronouns.

(Kaufman 2009) or Mayan languages (Clemens et al. 2015).¹² Extraction is taken in a metaphorical sense here: the referential expression representing an argument can be considered as being "removed" from its post-predicate position, and the reference is expressed by an element (an RP, a free pronoun, or a determiner) preceding the predicate; the predicate, in turn, loses its status as main predicate and functions as an attribute characterizing the referent.¹³ Discussing the internal structure and the pragmatic functions of each of these constructions would be beyond the scope of the present paper (see Haude 2019: 228–235 for more details). For the present purpose, all that matters is that extraction constructions, and only these, permit the use of the antipassive voice.

The three extraction constructions in Movima share the following features, which distinguish them from basic clauses:¹⁴

- a) The predicate is preceded by a referential expression or reference marker representing the external argument, while the external argument is "gapped".
- b) The predicate is negated differently than a main-clause predicate, which reveals its subordinate status.
- c) A detransitivizing operation is needed to extract the internal argument.

The three extraction constructions will now be illustrated in turn.

Headed relative clauses – already illustrated in 1.1 – are the main means for modification in Movima. They follow the content word they modify and are introduced by the particle *di*'. The examples in (17)a-c show the relativization of the single argument of an intransitive, of the undergoer of a direct, and of the actor of an inverse

¹² The term is also employed for these and related constructions in typologically oriented theories (Van Valin & LaPolla 1997; Croft 2001; Goldberg 2006), although the choice of the term is usually not further justified.

¹³ This loss of finite features of a non-initial predicate is common for predicate-initial languages (Myhill 1985; Clemens & Polinsky 2017). The characterization of the non-initial predicate as an "attribute" corresponds to Launey's (2004: 63) analysis of similar phenomena in Classical Nahuatl.

¹⁴ Note that these constructions (especially RPs) also commonly host nouns. However, including nominal predicates in the discussion would go beyond the scope of the present study.

predicate, respectively. The relativized RP, which represents the extracted external argument, is inserted in square brackets.

(17) Relativization

a. intransitive

che [kinos ney jayna majniwa=sne] **di'** jo'yaj and ART.F.AB DEF DSC offspring=3F.AB REL arrive 'and that daughter of hers who arrived already ...' [EAO Ay'ku II 028]

- b. transitive direct (relativization of undergoer; repeated from (5))
 Ka:w-e [is majni=Ø] di' vel-na=us.
 much-CLF.person ART.PL offspring=1SG REL watch-DR=3M.AB
 'I had many children, whom he looked after.' [ERM_150806 146]
- c. transitive inverse (relativization of actor)

Ban	jo'yaj	[is,	eney,	so:t-e	di'	kwe:ya]	di'
but	arrive	ART.PL	(filler)	other-CLF.person	REL	woman	REL
dul -kay -a=sne.							
visit-INV-LV=3F.AB							

'But other women, who visited her, arrived.' [JGD_130907-01 055-056]

What is termed referentialization here is the creation of an RP by the combination of a content word – in the present context, a verb – with a determiner, a construction that can also be considered a light-headed relative clause or a participant nominalization (Haude 2019).¹⁵ The resulting RP refers to a participant in the situation denoted by the verb. The semantic role of this participant is specified by the verb's argument structure:

¹⁵ Characterizing this construction in terms of relativization or nominalization is infelicitous, however, since it has the form of a simple RP, without any derivational material (see Himmelmann 2008: 268 for a similar argument in Tagalog). The term "referentialization" is borrowed from Alvarez González (2012). This construction is also used in Wh-questions, where the question word is the main predicate (Haude 2019), and in focus constructions, where an RP containing a verb is preceded by a topicalization construction (Haude 2021).

An RP containing an intransitive verb refers to the verb's single argument, (18)a; an RP containing a direct-marked verb refers to the undergoer of the event expressed by the verb, (18)b; and an RP containing an inverse-marked verb refers to the actor of the event expressed by the verb, (18)c. Here, the determiner, which is interpreted as representing the external argument, is inserted in square brackets.¹⁶

(18) Referentialization

a.	intransitive			
	O:kakara	[is]	chi:~chi.	
	all_kinds	ART.PL	MD~go_out	
	'All kinds (of anima	ls) (were what) came out.'	[AMY_180806 236]

- b. transitive direct (undergoer referentialization)
 O:kakara [os] ji:sa-na=sne.
 all_kinds ART.N.PST make-DR=3F.AB
 'All kinds (of things) (was what) she made.' [EAO Ay'ku II 007]
- c. transitive inverse (actor referentialization)¹⁷ *Che rey [kus] vatpa-kay-a=u jema' sit-lo:to.*and EPIST ART.M.AB teach-INV-LV=3M also without-ear
 'And the (man who) teaches him is deaf, too.' [CCT_120907_2 113]

Topicalization, finally, involves the placement of a free pronoun before the predicate. The pronoun and the predicate form a sentence together, and there is no intonation break between them.¹⁸ The free pronoun in this construction refers to a participant that is not

¹⁶ In the examples of referentialization, only the determiner is presented inside brackets, similar to the RP that heads a relative clause; in fact, however, the verb is part of the referring expression, just like a headed relative clause belongs to the RP that includes the head.

¹⁷ This example shows non-prototypical constituent order, with the predicate (*sit-lo:to* 'deaf') preceded by the external argument RP. This does not affect the argument structure of the predicate.

¹⁸ The pronoun is actually the syntactic predicate of this sentence (Haude 2018), which can be characterized as a copular construction.

the discourse topic and that is usually newly introduced immediately before, e.g. in the preceding clause or by a left-detached RP (Haude 2018). The pronoun represents the sentence topic; the verb, in turn, functions like the predicate of a headless relative clause in that it characterizes the referent with respect to the state or event the referent is involved in. Example (19)a shows the topicalization of the single argument of an intransitive clause; (19)b shows the topicalization of the undergoer of a transitive direct clause; and (19)c shows the topicalization of the actor of a transitive inverse clause. The free pronoun, which represents the extracted external argument, is inserted in square brackets.

(19) Topicalization

a. intransitive

[U'ko] ja' di:ra jo:'yaj. PRO.3M just ATT arrive 'He at least arrived.' [Cabildo_020907 051]

- b. transitive direct (undergoer topicalization)
 [Asko] jayna vel-na=kus pa:pa=n.
 PRO.3N.AB DSC watch-DR=ART.M.AB father-of=2
 'Our father watched it.'¹⁹ [JGD_160808-Fundacion_1 462]
- c. transitive inverse (actor topicalization)
 [Isne] bawchoł-kay-a=sne.
 PRO.3F.AB replace-INV-LV=3F.AB
 'She replaces her.' [EAO Barredoras 023]

Extraction constructions have in common that the predicate is negated with the particle *loy* (accompanied by nominalization of the predicate when the predicate is intransitive). The following examples illustrate this negation with a direct transitive

¹⁹ The second-person enclitic =n also marks the first person inclusive.

clause: a relative clause (20), a verbal RP (21), and a topicalization (22). When a basic main clause is negated, by contrast, the predicate is nominalized and preceded by a negative copula ka (see (30) and (44) below).

(20) Jo'yaj [kos juyeni] di' loy ona-ye-na=i
arrive ART.N.AB person REL NEG.SUB know-CLF.person-DR=3PL
'A person arrives whom they don't know.'
[HRR_Erlan Rojas 127]

(21) Lew-na=is [os] loy rey lew-na=y'łi read-DR=3PL.AB ART.N.PST NEG.SUB EPIST read-DR=1PL n-os rey eskwela-na-wa=y'łi. OBL-ART.N.PST EPIST school-DR-NMZ.EVT=1PL
'They read what we did not read when we went to school.'
[JMH 160806 2 120]

(22) [A'ko] loy ona-ra-na=y'li.
PRO.N NEG.SUB know-CLF.NTR-DR=1PL
'We don't know that (lit.: That [is what] we don't know).'
[EGA_EAO Dialogue 103]

Thus, there is a family of constructions in Movima to which only the external argument has access. Their characterizing formal features are summarized in (23).

(23) Formal features of the three extraction constructions
 Relativization: predicate preceded by *di*' 'REL'
 Referentialization: predicate preceded by a determiner
 Topicalization: predicate preceded by a free pronoun representing the external argument²⁰

²⁰ The specification of the argument is necessary here: also the internal argument may be encoded by a preceding free pronoun. This, however, is a case of left dislocation (Haude 2019).

2.3 The antipassive: a general detransitivizing operation

Apart from the negation pattern illustrated in (20)–(22), the extraction constructions share the property that transitive predicates can undergo detransitivization, under conditions that will be examined in the remainder of this paper. The extracted internal argument then becomes the single argument of a derived intransitive clause. In spontaneous speech, detransitivization almost exclusively involves direct-marked verbs, where it has an antipassive effect. Before discussing the conditions of use of the antipassive in Section 3, I briefly present the formal properties of the detransitivizing operation.

Detransitivization is marked by a particle, which has two speaker-dependent variants: kaw and kwey.²¹ The particle does not seem to be related to any other morpheme in Movima, either synchronically or diachronically. It occurs between the predicate and the extracted constituent, but it does not have to be directly adjacent to either of them: other particles can precede or follow it. For instance, in (24), the particle *kwey* is followed by the durative particle *buka*'; in (25), *kwey* is preceded by the negative particle *loy*, which is also attested after the detransitivizing particle.

- (24) [Usko] kwey buka' jisa:-na ni-kis sił-kwa.
 PRO.3M.AB DETR DUR.MOV make-DR OBL-ART.PL.AB hole-ABST
 'And the man, he (is the one who) makes the holes.' [EAO Chaco I 053]
- (25) Alpa-n-ele [n-is juyeni] di' loy kwey help-LN-AGT OBL-ART.PL person REL NEG.SUB DETR ten<a>panle. be_able_to<DR> '(I) help people who cannot (do it/something).' [GCM 290806 3 318]

²¹ A systematic speaker-based variation of this kind has not been observed for any other particle, and it is unclear where the variation comes from. When, during a translation session, a speaker repeated a sentence from a recording by a different speaker, he or she would use his or her own variant.

The above examples illustrate the antipassive function of the detransitivizing particle, already described in 1.2: A direct-marked predicate becomes syntactically intransitive, its single (extracted) argument bears the actor role, and the undergoer is expressed by an oblique-marked constituent, as in (24), or remains unexpressed, as in (25).

The detransitivizing particle can also be combined with inverse-marked verbs, as in (26). Here, detransitivization functions as a passive: The undergoer is expressed as the single argument of the derived intransitive clause, and the actor is demoted to oblique and may remain unexpressed.

(26)Ona-ye:-na=Ø *[us* itila:kwa] di' kwev tikoy-kay know-CLF.person-DR=1SG kill-INV ART.M man REL DETR mimi:di. n-os OBL-ART.N.PST snake 'I knew the/a man who was killed by the/a snake.' [EAO 20, Eli014c]

Apart from cases involving one lexicalized inverse form (*jirampojkay* 'to please', *kaw jirampojkay* 'to like'; from *jiram-poj-kay* 'nice-CAUS-INV'), this passive construction is not found in the corpus. All examples of inverse transitive predicates with the detransitivizing particle, like (26) above, were elicited (by proposing the detransitivization is not used to extract the undergoer because the direct construction does the job just as well: As was outlined in Section 2.1, in third-on-third scenarios the direct-inverse alternation is determined by the relative ranking of the arguments in the referential hierarchy. While the inverse is restricted to scenarios in which the undergoer outranks the actor in the animacy hierarchy, the direct construction can be used to describe these scenarios as well. This is shown by the elicited example (27), which is propositionally equivalent to (26) above.

(27)	Ona-ye:-na=Ø	[us	itila:kwaj	l di'	tikoy -na =os
	know-CLF.person-DR=1SG	ART.M	man	REL	kill-dr=art.n.pst
	mimi:di.				
	snake				
	'I knew the/a man whom the	[EAO 20, Eli014]			

To sum up, with direct-marked verbs, detransitivization results in an antipassive, deriving an intransitive clause whose single argument is the actor. With inverse-marked verbs, detransitivization results in a passive, allowing the extraction of the undergoer argument. The passive is not found in spontaneous usage, however, probably because the same function is achieved by the direct construction, which covers a broader range of situations than the inverse.²²

3 Inverse vs. antipassive: competing for actor extraction?

We have seen above that there are two mechanisms that can be used for actor extraction: the inverse voice (2.2), in which the actor is the external argument of a transitive clause, and the antipassive (2.3), in which the actor becomes the single argument of the derived intransitive clause.²³ The remainder of this paper seeks to give a detailed account of the factors governing the choice between the inverse and the antipassive in actor extraction. The study is based on a quantitative analysis of all instances of actor extraction

²² Intransitive verbs are usually not found with the detransitivizing particle. When they do occur – there are three examples of this in the corpus, which were rejected in elicitation – this does not have any syntactic effect.

²³ In addition, there is also a suffix *-ele* 'agentive', which derives an intransitive verb whose single argument is the actor, while the undergoer is optionally expressed as oblique (Haude 2012a). Unlike the antipassive discussed here, however, the primary function of this agentive derivation is semantic rather than syntactic: The derived verb denotes a habitual or typical action. Furthermore, it is not productive with all bivalent bases, and it is not employed for the purpose of actor extraction. Therefore, this derivation is not discussed here. The same is true of argument incorporation, which also derives an intransitive, actor-oriented verb.

involving a third-on-third-person scenario in a corpus of spontaneous oral discourse.²⁴ The counts and the criteria according to which the data were analyzed are provided in Table 1.

²⁴ The corpus consists of roughly 26,220 annotation units (which correspond partly to intonation units, partly to sentences) with a total duration of approximately 30 hours. It is composed of mostly monologic narratives as well procedural texts and dialogues The Archive as some and stored at Language (https://archive.mpi.nl/tla/islandora/object/tla%3A1839 00 0000 0000 0007 FB73 F , accessible for registered users; last accessed on November 22, 2022). The analyzed data were identified through systematic tagging for each extraction construction and for the criteria listed in Table 1. The resulting sample stems from 75 texts produced by 20 different speakers (ten male, ten female).

Scenario	Animacy of A & P	P expression	Antipassive	Inverse	Total
-	HUM > INANIM		55 (98%)	1 (2%)	56
	HUM > ANIM	RP	9	0	9
High	ANIM > INANIM		5	0	5
	HUM > INANIM		1	0	1
>	HUM > ANIM	pronoun	0	1	1
	ANIM > INANIM		0	0	0
Low	HUM > INANIM		39	n.a.	39
	HUM > ANIM	zero	7	n.a.	7
	ANIM > INANIM		1	n.a.	1
			117 (98%)	2 (2%)	119
	HUM > HUM		23 (92%)	2 (8%)	25
	ANIM > ANIM	RP	2 (67%)	1 (33%)	3
	INANIM > INANIM		8 (53%)	7 (47%)	15
	HUM > HUM		7 (18%)	31 (82%)	38
Equal	ANIM > ANIM	pronoun	0	1	1
	INANIM > INANIM		0	8	8
	HUM > HUM		14	n.a.	14
	ANIM > ANIM	zero	4	n.a.	4
	INANIM > INANIM		0	n.a.	0
			58 (54%)	50 (46%)	108
-	INANIM > HUM		0	6	6
	INANIM > ANIM	RP	1	0	1
Low	ANIM > HUM		0	0	0
	INANIM > HUM		0	15	15
>	INANIM > ANIM	pronoun	0	5	5
	ANIM > HUM		0	5	5
High	INANIM > HUM		0	n.a.	0
	INANIM > ANIM	zero	0	n.a.	0
	ANIM > HUM		0	n.a.	0
			1 (3%)	31 (97%)	32
TOTAL			176 (68%)	83 (32%)	259

Table 1. Distribution of antipassive and inverse in the corpus according to scenario and encoding of the undergoer (percentages are included unless 100% or 0%) (> = 'acting on')

The corpus contains 259 instances of actor extraction describing an event involving two third persons.²⁵ Of these, 176 (i.e. 68%) are antipassive and 83 (i.e. 32%) are inverse. The proportion of the inverse construction, therefore, is much higher in extraction than in basic transitive clauses: As mentioned in 2.1, only 7% of the transitive basic third-on-third clauses in the corpus are inverse. Given this contrast, a first hypothesis could be that indeed, the inverse does have a pivot-maintaining function, making the choice between direct and inverse in Movima similar to voice choice in Tagalog. However, a closer look at the Movima data shows that it is not as simple as that: In most cases, the choice of either the inverse or the antipassive voice can best be explained by taking into account ontological and/or discourse-related properties of the event participants.²⁶

Example (28) gives an idea of how these properties of the event participants govern the choice of either one or the other voice. Here, both the inverse and the antipassive cooccur within the same utterance and with the same verb base, *ew*- 'hold, grab'. The first, inverse clause describes a scene with an inanimate entity (a fence) acting on a human being (the speaker's daughter). After a short hesitation, the speaker corrects herself by presenting the same scene in a more accurate way, stating that it was the *dress* of the girl that got caught by the wire. Here, the inverse predicate is replaced by the antipassive. (From the intonation pattern of the utterance it is clear that the antipassive belongs to the topicalization with the pronoun *asko*, just like the preceding inverse predicate.)

²⁵ Of these, 68 represent relativization, 105 topicalization, and 86 referentialization.

²⁶ Other factors that were examined were i) the distribution of the different extraction constructions and ii) the occurrence of individual verbs in either the antipassive or the inverse. Regarding i), while the antipassive is more frequent in topicalization, this can be explained with a higher number of RPs occurring in topicalization (see 3.2 below). Regarding ii), investigating the role of lexical factors might be more promising, but the sample is not large enough to allow conclusive results. Of the 119 verb lexemes in the sample, 60% occur in the antipassive and 40% in the inverse construction, with 22 verbs occurring in both. In addition, note that all speakers who provided the data were found to employ both constructions, so ideolectal factors do not seem to play a role.

(28)[asko] Che *os* alamre. *ew-kay-a='ne* jayna, PRO.3N.AB hold-INV-LV=3F and ART.N.PST wire DSC ew-na –, kwev ew-na dokwe='ne. n-os hold-DR DETR hold-DR OBL-ART.N.PST dress=3F 'And the barbed wire, that (was what) withheld her then, (that was what) caught - caught her dress.' [EAO Escape Marivel 062]

Examples like this one suggest that animacy plays a role in the choice of the construction, an undergoer higher in the animacy hierarchy than the actor favouring the inverse. At the same time, while being different in animacy, the undergoer referents of the two predicates also have a different discourse status. The human undergoer in the first clause is the discourse topic: The story is about the speaker's daughter who, as a child, left the house at night and got lost. Hence, this is another reason for referring to this participant by a pronoun (='ne) and using the inverse. By contrast, the dress is mentioned here for the first time, which may also be an explanation for why it is referred to with an RP in the antipassive. Thus, the choice between the inverse and the antipassive may be due to animacy, but also to the discourse status (here, givenness) of the undergoer.

This example, then, illustrates the well-known fact that especially in natural discourse, animacy and a higher discourse status tend to go together. Still, in the following sections I will seek to tease apart the two factors by exploring the conditions for the choice of either one or the other voice more systematically. Section 3.1 shows that the choice between antipassive and inverse in the third-person domain is largely governed by the relative position of the two event participants in the animacy hierarchy. Section 3.2 looks at the expression of scenarios where both participants rank equal in animacy and explores the significance of the linguistic expression of the undergoer, which is supposed to reflect the discourse status of the undergoer.²⁷

²⁷ Scenarios involving a first or second person are not considered in this study. This is because these persons have different properties than third persons: i) a first or second person can only be expressed pronominally; ii) a first- or second-person pronoun is rare in relativization and absent in referentialization; iii) a first or second person can be topicalized without detransitivization, allowing the expression of a third person in internal argument position (see Haude 2012b).

3.1 Animacy

Table 2 (which, like the other tables below, is based on the numbers in Table 1) gives an overview of the distribution of the 151 extraction constructions that describe asymmetric two-participant scenarios, i.e. scenarios whose participants occupy different positions in the animacy hierarchy. There are 119 descriptions of a high-onlow scenario, i.e. a scenario in which the actor ranks higher in the animacy hierarchy than the undergoer. Of these, 117 are in the antipassive and only two in the inverse. (In one of the two exceptional inverse examples, the undergoer is as lo:los 'the village' and the actor refers to the visitors of the village; in the other one, the undergoer is a human who transformed into an animal, and so, its categorization as human or non-human is unclear). The remaining 32 instances of asymmetric actor extraction constructions depict a low-on-high scenario. Of these, 31 are in the inverse and only one in the antipassive. (The exceptional antipassive describes a scenario in which animals are killed by a disease; the disease might be considered a natural force, and natural forces sometimes pattern with non-human animates; see Haude 2014: 306). As these numbers show, the relative ranking of the event participants in the animacy hierarchy is an excellent predictor for the choice of either the antipassive or the inverse voice.

	Antipassive	Inverse	Total
High-on-low	117 (98%)	2 (2%)	119
Low-on-high	1 (3%)	31 (97%)	32
Total	118 (78%)	33 (22%)	151

Table 2. Voice choice and relative ranking in the animacy hierarchy in asymmetric scenarios

It is important to note that it is the relative ranking of actor and undergoer in the animacy hierarchy that is of relevance here, not the animacy of the undergoer alone. If the animacy of the undergoer alone governed the choice, human undergoers would always occur in the inverse, while inanimate undergoers would always occur in the antipassive, independently of the animacy of the actor. If this were the case, also equal scenarios, in which both participants occur on the same position of the animacy

hierarchy, would be expressed with the inverse if the undergoer is human, and with the antipassive if the undergoer is inanimate. However, Table 3 shows that this is not the case (rather the contrary).²⁸ Thus, voice choice is independent of the animacy of the undergoer alone: The relevant criterion is the relative position of actor and undergoer in the animacy hierarchy, a phenomenon that has been described as "co-argument sensitivity" (Witzlack-Makarevich et al. 2016) and "scenario split" (Haspelmath 2021), and which is referred to here as "animacy scenario".

Table 3. Distribution of inverse and antipassive in equal scenarios with a human vs. inanimate undergoer

	Antipassive	Inverse	Total
human P	44 (57%)	33 (43%)	77
inanimate P	8 (35%)	15 (65%)	23

An alternative to the analysis that the voice choice is scenario-based might be to consider the pattern found for asymmetric scenarios an epiphenomenon of the fact that entities higher in animacy tend to be more "topic-worthy" (Comrie 1989) than lower-ranking ones. This was already apparent in (28) above, where the human undergoer (the girl) is the discourse topic and therefore referred to with a pronoun, while the non-human undergoer (the girl's dress) is mentioned for the first time and, hence, encoded by an RP. Not surprisingly, the pattern is also confirmed by quantitative data, shown in Table 4: In the corpus, human undergoers are referred to with a pronoun in 56% of their occurrences (and hence, mostly in the inverse voice), while the same is true of only 7% of the inanimate undergoers. Inanimate undergoers are instead more often encoded as RPs or left unexpressed. This, again, is not surprising, as RPs rather than pronouns tend to be used with "inactive" discourse referents (Ariel 1990; Chafe 1994; Gundel, Hedberg & Zacharski 1993; Kibrik 2011); and zero encoding of the undergoer, which in a Movima extraction construction is only possible in the antipassive, has the effect

²⁸ Nothing conclusive can be said about non-human animates, which only occur in eight equal scenarios in the sample. For the time being, non-human animates are kept as a separate category (see Table 1), and further research may show whether they can be grouped with humans or with inanimates.

of backgrounding a referent that is unimportant for the transmitted information (see 3.2.3).

Table 4. Animacy and encoding of the undergoer (all scenarios; non-human animates excluded)

				Percentage	per
	Antipassive	Inverse	Total	expression	
human RP	23	8	31	30%	
human pronoun	7	51	58	56%	
human zero	14	0	14	14%	
total human	44	59	103		
inanimate RP	68	8	76	61%	
inanimate pronoun	1	8	9	7%	
inanimate zero	40	0	40	32%	
total inanimate	109	16	125		

Nevertheless, the encoding of the undergoer is a less clear predictor for the use of either one or the other voice than animacy. When argument expressions are considered independently of animacy, as in Table 5, we find that, despite the clear tendencies, 11% of the pronouns occur in the antipassive and 14% of the RPs occur in the inverse. This is a higher score of exceptions than the three exceptions to the animacy tendencies shown in Table 2. Therefore, while the formal encoding of the undergoer (which reflects its discourse status, see 3.2) may be an important factor, it accounts less strongly for the use of either one or the other voice than the animacy scenario.

Table 5. Undergoer encoding and construction choice (all scenarios)

	Antipassive	Inverse	Total
pronoun	8 (11%)	66 (89%)	74
RP	103 (86%)	17 (14%)	120
zero	65	n.a.	65
Total	176 (68%)	83 (32%)	259

Thus, the relative ranking of the event participants in the animacy hierarchy is the clearest predictor for voice choice. When the actor outranks the undergoer in the animacy hierarchy, this is expressed with the antipassive. When the undergoer outranks the actor in the animacy hierarchy, this is expressed with the inverse.

This observation, of course, is only valid for scenarios in which the participants occupy different positions in the hierarchy. Examples presenting these scenarios constitute 58% of the sample (151 cases). In Section 3.2. we will look at the remaining 42% (108 cases) of the sample, in which there is no difference in animacy ("equal scenarios").

3.2 Voice choice in equal scenarios

In the 108 actor extraction constructions describing equal scenarios, the distribution of antipassive and inverse is almost fifty-fifty: The antipassive occurs 58 times, the inverse 50 times. At first glance, this distribution is unexpected given that in the overall corpus, the antipassive is more frequent (68% of the sample). However, the high frequency of the inverse is mostly due to the high proportion of pronouns expressing the undergoer.

As a rule of thumb, the discourse status of a referent can be read off the way in which it is expressed: Pronouns can be assumed to refer anaphorically to a discourse-given or topical entity, while RPs can be used to (re)introduce an inactive discourse referent. The correlations between encoding patterns and voice choice are presented in Table 6. As expected, undergoer pronouns are more common in the inverse, where the undergoer is encoded as the internal argument, and undergoer RPs are more common in the antipassive, where the undergoer is encoded as oblique. (The function of zero encoding cannot be assessed directly and is only included here for the sake of completeness; see 3.2.3.)

	Antipassive	Inverse	Total
pronoun	7 (15%)	40 (85%)	47
RP	33 (77%)	10 (23%)	43
zero	18	n.a.	18
total	58 (54%)	50 (46%)	108

Table 6. Undergoer encoding in equal scenarios

The correlation between pronominal encoding and the inverse shown in Table 6 explains the relatively high proportion of the inverse in equal scenarios observed above: In 47 of the 108 clauses, the undergoer is expressed by a pronoun, which favours the inverse.

Now, one may ask why the inverse is so much more frequent in extraction than in the corresponding basic clauses describing equal scenarios. One likely reason is that in a basic transitive clause, two arguments compete for the internal argument position; here, usually the actor succeeds, and the direct voice is chosen (see Section 2.1). When the actor is extracted, by contrast, there is no such competition, so that the undergoer can take the internal argument position and the verb is marked as inverse.

In addition, the use of a pronoun encoding the undergoer, and hence the inverse construction, may be facilitated by the fact that in the extraction constructions, the actor referent is in principle low in discourse topicality. Modification by a headed relative clause tends to involve discourse referents that require specification because they are not discourse-given (Fox 1987). Indeed, in most of the relative clauses in the sample, the referent of the relativized RP is newly introduced, while the undergoer expression within the relative clause refers to a discourse-given entity. Regarding topicalization, I have demonstrated in an earlier study (Haude 2018) that the fronted pronoun refers to an entity that is not the discourse topic and that was introduced immediately before. Referentialization, finally, results in an RP; RPs, being lexical designations for an entity, encode less discourse-prominent referents than pronouns.²⁹

²⁹ This is not to say that there are no functional-pragmatic differences between the extraction constructions. However, if there are, they are not directly reflected in the distribution of antipassive and inverse. While the antipassive is particularly frequent in topicalization (82% of the equal scenarios), this is correlated with a particularly low number of undergoer pronouns in this construction (21% in topicalization, as opposed to 54% in relativization

For these reasons, when exploring the choice of either the inverse or the antipassive to express equal scenarios, the following subsections focus exclusively on the undergoer argument. Section 3.2.1 deals with the pronominal, 3.2.2 with the lexical, and 3.2.3 with the zero expression of the undergoer.

3.2.1 Undergoer as pronoun: givenness

Of the 47 extraction constructions with a pronominal undergoer in an equal scenario, 40 are in the inverse and only seven in the antipassive. This corresponds to the fact, already observed in basic transitive clauses, that discourse-given referents are typically encoded by a pronoun in internal argument position. For instance, in (29), the woman referred to by the bound pronoun =*sne* was introduced in the preceding context (see the translation).

[NAO FSG 300706 1 334]

The undergoer can also be expressed by an oblique-marked free pronoun in the antipassive; these occurrences are rare, however (only eight instances in the entire corpus, of which seven occur in examples of equal scenarios). Like the pronominal enclitic in the inverse, the oblique-marked pronoun is an anaphoric element referring to a previously introduced discourse referent. For instance, in (30)c, the referent of *n*-isne

"another

and 68% in referentialization) and therefore in line with the results presented here. Why pronouns are more frequent in topicalization than in the other extraction constructions is a matter of further research, which has to involve undergoer extraction as well.

³⁰ The use of neuter forms (os and asko) to refer to the man has a derogatory connotation here (Haude 2006: 149).

in the antipassivized clause is the protagonist of the preceding and subsequent discourse.

(30) a. Ka=s ona-ye-na-wa=sne [os COP.NEG=DET know-CLF.person-DR-NMZ.EVT=3F.AB ART.N.PST juyeni] n-as Tirinra. person OBL-ART.N Trinidad 'She_i didn't know anyone in Trinidad.'

- b. Che kinos ney senyo:ra, Roxana Suárez, and ART.F.AB DEF lady R. S.
 'And this lady_i, Roxana Suárez_i,'
- c. [isne] kwey joy-a:-le n-isne PRO.3F.AB DETR go-DR-CO OBL-PRO.3F.AB 'she_j (was the one who) took her_i'
- d. *n-os* jayna joy-wa=sne *n-as* Tirinra
 OBL-ART.N.PST DSC go-NMZ.EVT=3F.AB OBL-ART.N Trinida *jokmi*recently
 'when she_i first went to Trinidad.' [EAO Llegada hija 010-012]

Example (31) shows that apparently, the bound pronoun in the inverse and the obliquemarked free pronoun in the antipassive can be employed under similar circumstances. The example stems from a description of a nursing home, in which the speaker expresses the same kind of scenario first with the inverse, (31)a, and later with the antipassive, (31)c. (The segment in between, (31)b, only contains RPs with intransitive predicates.)

'There are (people who) look after them, women who look after them (lit.: (ones who) look after them, (who) look after them, who (are) women),'

'and there are (people who) cook, there are washerwomen,'

These examples show that speakers can freely choose between the two voices in these cases, as both permit the use of a pronoun. Generally, however, pronouns are expressed as the internal argument of a transitive predicate (e.g. in the inverse) rather than as an oblique phrase, a tendency that is clearly reflected by the quantitative data (Table 5).

3.2.2 Undergoer as RP: identifiability

As is shown in Table 6, 77% of the RPs that occur in actor extraction constructions describing an equal scenario occur in the antipassive. This is partly due to the fact that oblique phrases tend to appear as RPs rather than as pronouns anyway (see 2.1). Therefore, when particular discourse conditions require the lexical expression of the undergoer, the antipassive is more likely to occur than the inverse. In the inverse, by

contrast, the undergoer is encoded as the internal argument, and the internal argument position favours pronouns rather than RPs (just as in basic clauses).

However, there is no structural restriction on RPs to occur in internal argument position, and the sample contains ten inverse clauses describing an equal scenario in which the undergoer (i.e. the internal argument) is represented by an RP. The RP in internal argument position can even be complex, as in (32), where the undergoer is possessed ('the utensiles of the church'), or as in (33), where the undergoer RP (*kis batbetel* 'the registered (ones)') is modified by two consecutive relative clauses.

(32) Asko jeyna=[os rey pola:ta] di'
PRO.3N.AB origin=ART.N.PST EPIST money REL
rimel-kay-a=os tijkakara=as ele:siya.
buy-INV-LV=ART.N.PST utensils=ART.N church
'That (was) the source of the money that bought the utensils of the church.'

[GBM Ganado 112]

[kus (33) kasi:ki] di' chinachowe: le. di' ART.M.AB cacique REL rule REL chincho-kay-a=kis *batheteł* di' kwe:ya di' order-INV-LV=ART.PL.AB subscribe REL woman REL afilya:da affiliated

> 'the cacique, who rules over the registered women (lit. the registered ones who are women who are affiliated)' [EAO Vaya al cabildo 010]

In these examples of the inverse with an RP, the referent of the RP is mentioned for the first time in the text; therefore, givenness of the undergoer does not seem to be the reason for choosing the inverse. However, in all the inverse examples of actor extraction in the corpus, the undergoer referent is definite, i.e. identifiable through the linguistic

or extralinguistic context.³¹ For instance, in (34), the proper name refers to a particular person known to both speaker and addressee; in (35), the RP refers to a body part of the speaker's, i.e., to a uniquely identifiable entity. Therefore, these RPs can be interpreted as definite. Definiteness is not grammatically marked in Movima, but sometimes it is overtly marked by the particle *ney*, as in (36).

(34) Che kinos majniwa=sne di' tolkosya,
and ART.F.AB offspring_of=3F.AB REL girl
[isne] bawchol-kay-a=kinos ma:ma Ju:liya.
PRO.3F.AB replace-INV-LV=ART.F.AB lady Julia
'And her_i daughter_j, who is a young woman, she_j will replace Ms. Julia_i.'

[EAO Barredoras 025]

(35) Ban oso' [os ye:pit] di' jolowes-kay-a=as ja'
but DEM.N.PST ART.N.PST bandage REL wrap-INV-LV=ART.N just chodo:wi=Ø.
stomach=1SG
'But there was a bandage that held my stomach together.' [EAO Cbba 261]

(36)[Asko] merek tojel-kay-a=isney juyeni.PRO.N.AB bighappen_to-INV-LV=3PL.ABDEFperson'This was the big (event that) happened to those people.'

[JGD_160808-Fundacion_2 467]

The antipassive can be used with a definite undergoer as well. The following examples show parallels with the ones above: In (37), the oblique RP contains a proper noun; in (38), the oblique RP refers to the speaker's arm; and in (39), the oblique RP contains the definiteness marker *ney* (note, however, that this example describes a high-on-low scenario, which rules out the inverse anyway).

³¹ I use the term "definiteness" as a property pertaining to the discourse referent, not as a grammatical category (see also Croft 2003: 132).

(37)[kis]kawya:lowe-poj-nanu-kusBuschaART.PL.ABDETRdrink-CAUS-DROBL-ART.M.ABBuscha'the (ones who) madeBuscha drink'[HRR_120808-tigregente536]

(38) *bat-na=is* dotor [kos] neyru put-DR=ART.PL doctor ART.N.AB here kaw rom<a:>cho $bo:sa=\emptyset$ **n-**as squeeze<DR> OBL-ART.N arm=1SG DETR 'The doctors install the (thing that) squeezes my arm here.' [ERM 140806 1 0178-0179]

(39) [Isne] kaw aj<a>lo:maj n-os ney
PRO.F.AB DETR speak_about<DR> OBL-ART.N.PST DEF
rulrul-ni:-pa.
tiger-PRC-HAB
'She (was the one who) spoke about that tiger-person.'
[HRR_120808-tigregente 308-309]

However, in many examples of the antipassive, the oblique RP can be interpreted as indefinite. In (40), for instance, the RP referring to a human contains a neuter article (*n*-os kwe:ya). In Movima, the use of a neuter article when referring to a nonspecific human leads to an indefinite reading (when the referent is specific, the use of the neuter form implies derogatory reference; see (29)). Similarly, in (41), the RP *no-kos sotakpoy* di' wa:ka refers to a non-specific cow, as may be inferred from the use of the numeral term (one out of several cows).

[kus (40)Che usko buka' joy-cheł] di' neyru PRO.3M.AB ART.M.AB DUR.MOV go-R/R and here REL kaw sal**-na** kwe:va di' n-os search for-DR OBL-ART.N.PST woman REL DETR as-tomaj-a=us, di' alwaj-a=us. sit-CLF.side-LV=3M.AB spouse-LV=3M.AB REL 'And he, the one here went to look for a woman as company, as his wife.'32 [ERM 150806 202-205]

(41)	[I'ko]	kwey	nokowa,	kwey	res	ibir -na	no-kos	
	pro.3pl	DETR	FUT	DETR	rec	eive-DR	OBL-ART.N.AB	
	ene	y,	sotak-poy		di'	wa:ka.		
	(fil	ler)	one-CLF.ani	imal	REL	cow		
'They will now, (they will) receive, er, o						ne cow.'	[EAO Barredoras 028]

Thus, the inverse is only used when the undergoer is definite, i.e. uniquely identifiable. The antipassive, by contrast, is used with both definite and indefinite undergoers. As with pronouns, therefore, with RPs having a definite referent speakers can choose between either one or the other voice.

3.2.3 Unexpressed undergoer (antipassive only): lack of importance

In contrast to the inverse, in which the undergoer is the internal argument and therefore obligatorily realized, in the antipassive the undergoer is not obligatorily realized. Consequently, only the antipassive allows the speaker to leave the undergoer unexpressed in extraction, and this may be yet another reason why speakers use it.

Cross-linguistically, the absence of an overt argument expression is usually explained in two ways: Either the argument is not expressed because there is a zero anaphor with definite reference (see Ariel 1990: 73; Givón 2001: 463; Kibrik 2011: 43), or the argument is not expressed because its referent is unimportant, unknown, or obvious – properties that were proposed specifically in relation to the so-called "backgrounding"

 $^{^{32}}$ The syntax of the first part of this example, preceding kaw, is not entirely clear, mainly for acoustic reasons.

effect of antipassives (Cooreman 1994; Foley 2007: 434). Regarding the undergoer of the Movima antipassive in the corpus data, it seems that the absence of an overt referential expression can be due to either of the two factors.

On the one hand, the unexpressed undergoer can be identifiable from the linguistic or extralinguistic context, as in (42). The example stems from a story in which two hunters find the head and claws of an anteater, and one hunter asks the other one who or what might have done that. The undergoer is not mentioned in (42), but it is obvious to both the speaker and the addressee of the direct speech that the victim of the catching event was the anteater whose remains they see.

(42) Di' jan-ra [kos] kwey yok-na?
HYP which-CLF.NTR ART.N.AB DETR catch-DR
'What (might have been) the (one that) caught (it, i.e. the anteater)?'
[EAO Jaguar 075]

In (43), the undergoer is not overtly expressed either (the oblique RP in this clause encodes the goal of the motion event), but the referent was known from the preceding context and is also mentioned in the subsequent clause.³³ Therefore, the unexpressed undergoer is identifiable here as well.

(43) [Isne] joy-cheł joy-a:-łe kwev n-os asna=sne PRO.3F.AB DETR go-R/R go-DR-CO OBL-ART.N.PST home=3F.AB ka=s $majni = \emptyset$. bo as<ak>na=kinos because COP.NEG=DET home<IRR>=ART.F.AB offspring=1SG 'She went and took (her) to her home because my daughter didn't have a place to stay (lit.: 'my daughter's house didn't exist').' [Llegada hija 009]

Sometimes, however, the referent of the unexpressed undergoer argument is not clearly identifiable. In the examples of equal scenarios in the present sample, the zeroencoded undergoer is usually identifiable from the context, but examples of

³³ The verb *joychel* 'go' can form a serialization with a transitive verb (Haude 2006: 311–312).

unidentifiable undergoers are found when asymmetric scenarios are included (see 3.1). Here, we see that the oblique phrase is often omitted with verbs of low semantic transitivity (Hopper & Thompson 1980) like *onarana* 'know' or *tenapanle* 'be able to (do something)'. In the antipassive, these verbs express that the referent of the extracted actor argument has some particular knowledge or ability, while what is known or what this referent is capable of is irrelevant. This reduction of transitivity is a typical characteristic of antipassives crosslinguistically (Tsunoda 1985; Cooreman 1994). Note, however, that in Movima, the effect of reduced transitivity results from the omission of the undergoer expression and not from the use of the antipassive itself: These verbs have an animate actor and an inanimate undergoer, and so, it is for semantic reasons that the inverse cannot be used as an alternative. Still, the antipassive has the convenient property of permitting the suppression of an unimportant undergoer, and thereby corresponds to the crosslinguistic prototype.

- (44)Ka = srev $il joy-a-le:-wa=\emptyset$ [n-is rey COP.NEG=DET EPIST 1 go-DR-CO-NMZ.EVT=1SG **OBL-ART.PL EPIST** bispa] di' kaw ona-ra:-na. wise REL DETR know-CLF.NTR-DR 'I didn't take him to the wise (people) who know (how to cure).' [ERM Sapo 020]
- (45) [U'ko] sokakte di' kaw ten<a>panle.
 PRO.3M only:person REL DETR able<DR>
 'He (i.e. God) (is) (the) only one who can do (it/something/everything).'
 [Erlan Rojas 403]

Most unexpressed undergoers (40 out of 65 zero undergoers in the sample) can be identified as having an inanimate referent; furthermore, 47 antipassives with an unexpressed undergoer depict a high-on-low scenario. As referents lower in the animacy hierarchy tend to be less discourse-relevant than higher-ranking referents, these numbers suggest that in Movima, zero argument encoding has to do with a lack of importance, rather than with identifiability, of the referent.³⁴

3.2.4 The antipassive as the more versatile construction

When two constructions are functionally equivalent, as is the case with the inverse and the antipassive when the undergoer is definite, it is possible that in the course of time, one construction will become dominant. In the present case, there are signals pointing towards a preference of the antipassive over the inverse, so that, if the language were to survive longer, the antipassive would eventually outwin the inverse, except for some fossilized constructions.

This hypothesis is based on observations like the one made during a text-writing workshop in 2012, at which language activists (who had learned Spanish as their first language, but had some knowledge of Movima from overhearing their parents) translated stories from Spanish into Movima with the help of fluent native speakers. In several independent work teams, the Spanish sentence 'I'll look for the one who killed my father!', in which the undergoer is definite, was spontaneously translated by the participants in the antipassive, (46)a. Only when I asked about the inverse, people considered the inverse construction (46)b as equally fine.

(46) ił sal-na lov tikov-na n-uł [kus] kwey a. ITN 1 look for-DR ART.M.AB DETR kill-dr OBL-ART.M:1 pa' my father 'I will look for the one who killed my father.'

b. loy il sal-na [kus] tikoy-kay-a=ul pa'
ITN 1 look_for-DR ART.M.AB kill-INV-LV=ART.M:1 my_father
'I will look for the one who killed my father.' [taller idioma 22, 051]

³⁴ In order to fully understand the reasons for argument omission in Movima, one would have to investigate the phenomenon in basic clauses as well, where the external argument can remain unexpressed; so far, it seems that the reasons for omitting the external argument in a basic clause are the same as those for the omitting the oblique undergoer in the antipassive.

In (47) as well, which stems from a mythological text, both the actor and the undergoer are definite and equal in the animacy hierarchy: They are both statues of a saint. *Wa:ki* (Spanish *Joaquín*) refers to the statue of Saint John, which has a high value in the Movima mythology and which was a discourse topic from the beginning of this narrative. The extracted pronoun *asko* refers to a copy of this statue, which is going to replace the original one. After a hesitation at the moment at which he would have had to use the inverse verb form, the speaker chose the antipassive to express this situation. When I asked another speaker, who translated the text with me, whether the inverse would be possible as well, he responded: "Yes – it would mean the same, but it would be more respectful". According to this speaker, the inverse would have been more appropriate here.

(47)[asko] bawchoł – bawchoł-na che kwey and PRO.N.AB replace DETR replace-DR Wa:ki di' *suy*<*ie*~>*-ie*=*nkwei* n-us jayna enev OBL-ART.M DSC Joaquín rob<INV~>-CO=2PL REL FILLER 'And that (is what) replaces (Saint) John, whom (they) have taken away from you.' [JGD 160808-Fundacion 1 481]

The speaker's comment on the above example is a further signal that the inverse is highly sensitive to properties of the undergoer referent, which apparently also include the speaker's "empathy" (Kuno & Kaburaki 1977); the antipassive, by contrast, is neutral in this regard and, hence, more easily employed.

That the antipassive may be conceived of as more accessible by the speakers is also supported by its formal properties. First of all, the antipassive is based on the direct verb form, which occurs by far more frequently than the inverse and can be considered the default transitive verb form.³⁵ Speakers are, therefore, much more exposed to direct-marked verbs than to inverse-marked ones, so that the direct verb form may appear more familiar.

³⁵ This accounts for the seemingly surprising fact that in Movima, the antipassive is more frequent than the functionally equivalent transitive construction, the inverse (cf. Seržant et al. 2021).

Furthermore, the inverse forces the speaker to express the undergoer as a bound element in an early position of the utterance. In the antipassive, by contrast, the undergoer is expressed by a morphologically independent constituent towards the end of the clause, and it can even remain unexpressed, thereby giving speakers more freedom when organizing their utterance. For instance, the antipassive allows for the undergoer to be expressed in an antitopic-like manner (Lambrecht 1994), as in (48), where the undergoer RP is uttered after a brief pause (and in terms of intonation, after the end of the intonation unit). Incidentally, the referent of the oblique RP in (48) is the main protagonist of the narrative from which the example is taken, which shows once again that the undergoer in the antipassive construction does not have to be low in terms of discourse topicality.

(48)ospital, dotor. [isko] kwev Javna n-as is DSC OBL-ART hospital ART.PL doctor PRO.3PL.AB DETR lawajes**-na** jayna, jmmjm, **n-**us *majni=Ø*. heal-DR DSC OBL-ART.M offspring=1SG yes 'Then, at the hospital, the doctors, they healed (him) then, yes, my son.' [EAO 240807 vibora 148-149]

Thus, it is the relative neutrality of the antipassive with regard to the properties of the undergoer, but also the structure of the antipassive construction that facilitates its use. If Movima were still transmitted to children, one might hypothesize that the antipassive would become the default way to extract the actor – and thereby, Movima would develop a more straightforward syntactically ergative morphosyntax.

4 Summary and conclusion

Movima has two transitive constructions, direct and inverse, which are reminiscent of the symmetrical voices of Western Austronesian languages: The Movima direct voice is similar to a Tagalog undergoer voice and the inverse voice is similar to the Tagalog actor voice. Like a Tagalog undergoer voice, the Movima direct voice allows for the undergoer to be extracted (e.g. relativized), and like the Tagalog actor voice, the Movima inverse voice allows for the actor to be extracted.

In contrast to an Autronesian-type voice system, however, the Movima direct-inverse alternation is heavily constrained by a referential hierarchy: The inverse can only be used if the undergoer ranks at least as high as the actor in the animacy hierarchy; and when there is no difference in animacy, the inverse can only be used if the undergoer is definite, i.e. discourse-given or otherwise identifiable. This restriction also limits the use of the inverse in extraction: The actor of an inverse clause can only be extracted if it does not outrank the undergoer in terms of animacy and definiteness.

This limitation of the inverse in extraction is remedied by the existence of a detransitivizing operation, which can theoretically be applied to both the direct (ergative) and the inverse (accusative) construction. This operation is usually only found with the direct construction, where it functions as an antipassive: Through the insertion of a detransitivizing particle, the actor becomes the single argument of the clause and is therefore extractable, while the undergoer is demoted to oblique.

Since the detransitivizing operation is restricted to extraction, it can be characterized as a "structural" antipassive, a cross-linguistically rare phenomenon that is usually only found in "deep ergative" languages like Dyirbal (Heaton 2017; Janic & Witzlack-Makarevich 2021b). This means that the distribution of the Movima antipassive cannot be compared to that of the corresponding ergative (in Movima, the direct) construction, as is usually done in studies on the functions of antipassives (e.g. Cooreman 1994; Fleck 2006). Instead, the Movima antipassive shares its distributional domain with a co-existing accusative construction, the inverse. This coexistence of two actor-extracting mechanisms – one based on a symmetrical voice alternation, the other one being an antipassive – has, to my knowledge, not been described for any other language so far.

Regarding the choice of either the antipassive or the inverse, the antipassive is used when the actor outranks the undergoer in the animacy hierarchy (which impedes the use of the inverse), and unlike the inverse the antipassive can be used with definite and indefinite undergoers alike. In the antipassive, furthermore, the undergoer can remain unexpressed, either because the referent is retrievable from the context or because it is unknown or considered unimportant. Hence, the Movima antipassive shares the crosslinguistically established function of backgrounding inanimate or informationally unimportant undergoers, which are most readily peripheralized (Cooreman 1994).

To conclude, the study has revealed some important differences between the Movima direct-inverse system and the symmetrical-voice system of languages like Tagalog. In Tagalog, the use of the actor voice in main clauses is determined by a number of factors, but these factors are not relevant for voice choice in extraction, which is fully productive with all verb roots (Himmelmann 2005b: 368). In Movima, by contrast, the factors that determine the distribution of the inverse – animacy and definiteness – in main clauses also determine its distribution in extraction, and this restriction on the inverse is the reason why Movima needs the antipassive as an additional mechanism. Finally, the existence of an antipassive and its high pragmatic flexibility lend Movima a strongly ergative trait, which coexists with a symmetrical-voice pattern.

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