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Inverse and symmetrical voice: On languages with two transitive constructions

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Abstract: In voice and alignment typology, a categorical distinction is generally made between inverse systems on the one hand and symmetrical voice systems on the other. A major reason for distinguishing between these two types is the assumption that inverse systems are governed by a hierarchy involving grammatical, semantic, and ontological criteria, while symmetrical voice systems are based on discourse-pragmatic factors. However, the two types also have several important properties in common, in particular the fact that they have more than one nonderived transitive construction. Based on data from three native languages of South America, we show that the line between the two types is not always easy to draw, and that features of the inverse type can coexist with those of the symmetrical-voice type in the same language.

Keywords: inverse, voice, symmetrical voice, referential hierarchy, transitivity

1 Introduction

Traditional alignment typology is based on the assumption that languages make a basic distinction between one transitive and one intransitive construction type, i. e., one construction type that takes two core arguments and another one that can take only one. Consequently, linguistic systems that deviate from this pattern present analytical challenges to alignment typology. This paper deals with systems that deviate from the basic distinction in that they possess more than one transitive construction involving an actor and an undergoer argument, namely direct-inverse systems, on the one hand, and symmetrical-voice (or Philippine-type voice) systems, on the other. In both these systems, the semantic roles (actor and undergoer) of the transitive arguments are not (or not exclusively) indicated by features such as person agreement or case marking, but by

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morphological alternations of the verb that indicate the role(s) of one or more argument(s) in the construction.

In the typological literature, these two types are usually clearly separated (see e. g., Dixon and Aikhenvald 1997; Farrell 2005; Klaiman 1991). Inverse systems are usually characterized as being based on a hierarchy involving factors such as person (SAP > 3), animacy (human > nonhuman animate > inanimate), or grammatical features (possessed > unpossessed): when the direction of action goes from a participant that ranks higher in such a hierarchy towards a lower-ranking one, the direct construction is chosen (with an unmarked or direct-marked verb); when the action goes in the opposite direction, the inverse construction is chosen (with inverse marking on the verb). This means that the choice between the direct and the inverse construction solely depends on the ranking of the event participants on a referential hierarchy.

In symmetrical-voice systems, by contrast, no such hierarchy determines the choice of the construction. At least in principle, any participant in a transitive event can be encoded as the syntactically prominent argument, whose role in the event is then specified by a so-called voice morpheme on the verb.

Against this background, we intend to show that, while the better-known examples (often treated as prototypical) of inverse and symmetrical voice systems are indeed quite distinct typologically, some inverse systems are reminiscent of symmetrical-voice systems in important respects. This concerns, in particular, the domain of “nonlocal scenarios” (Zúñiga 2006: 48), i. e., interactions between two 3rd persons. Here, discourse factors play a central role for the choice of the construction to be used to express a given state of affairs.

Since our point of departure is the general debate on the typology of alignment, we do not pretend to provide a comprehensive overview of all existing types of inverse and symmetrical-voice systems. Rather, in line with the method usually applied in the typological literature, we start out (Section 2) by describing each type with one familiar example often used in the discussion, viz. Plains Cree (2.1) for the inverse and Tagalog (2.2) for the symmetrical-voice type.¹ This does not mean that we regard these languages as “canonical” examples comprising all and only the defining features of each system. Nor did we choose the examples given in the remainder of the paper to provide an exhaustive overview of languages with inverse systems;² we merely use them to

¹ Other often-cited languages include Nocte (Tibeto-Burman) for inverse systems (e. g., Siewierska 2005: 55; Croft 2003 [1990]: 172) and Cebuano (Austronesian) for symmetrical-voice systems (e. g., Shibatani 1988).

² Such an overview would have to include, among others, languages from Mesoamerica such as Huastec (Mayan; Zavala Maldonado 1994) or Olutec (Mixe-Zoquean; Zavala Maldonado

illustrate different steps along what we believe to be a continuum of systems with two transitive constructions between a “rigid” pole, where the choice of the construction is based on inherent properties of the arguments and a “flexible” pole, where the construction can be chosen on the basis of discourse pragmatics.

After summing up the differences between the systems as represented by Plains Cree and Tagalog (2.3), we turn to languages – all of them from South America – that seem to combine properties of both systems, albeit to varying degrees. All of them have been described as displaying two transitive constructions. The inverse system of Mapudungun (3.1) is very similar to the one of Plains Cree, but, like a voice system, it is also related to the syntactic status of the arguments. Movima (3.2) clearly displays a direct-inverse opposition as well, but it also shows many traits of a symmetrical voice system. Finally, Jarawara (3.3) was initially described as a symmetrical-voice language (Dixon 2000, 2004), but was shown to be compatible with an inverse analysis, too (Farrell 2005).

In Section 4 we conclude that the differences between inverse and symmetrical-voice systems are less clear than typological accounts may lead one to believe. We thereby hope to open a path towards a better understanding and, consequently, a better integration of these systems into the more general typology of alignment.

2 Illustrating the inverse and the symmetrical-voice type

2.1 The inverse type: example Plains Cree

In order to characterize the notion of inversion, we will follow the standard typological literature by recurring to Plains Cree, one of the languages most frequently cited to illustrate the phenomenon. Plains Cree is an Algonquian language spoken by a few hundred speakers in the Canadian Prairies (Lewis et al. 2013). Plains Cree nominals are unmarked for case, but they take a zero suffix when proximate and a suffix $-(w)a$ when obviative. Among other inflectional affixes, verbs take a so-called thematic suffix that is customarily analyzed as showing an opposition between direct ($-\hat{a}$ or $-\hat{e}$) and inverse ($-iko$ or $-ikw$).

2002), as well as Tibeto-Burman languages such as Nocte (DeLancey 1981), Belhare (Bickel 1995), or Japhug Rgyalrong (Jacques 2010).

Direct forms are used when a “higher” participant acts on a “lower” one (i. e., a speech-act-participant on a 3rd person, or a 3rd person proximate on a 3rd person obviative), while inverse forms are employed if it is the other way round. Consider the examples in (1).

- (1) Plains Cree (Algonquian)³
- a. *Ni-sêkih-â-nân atim.*
 1-scare.TA-DIR-1PL.EXCL dog
 ‘We scare the dog (PROX).’
- b. *Ni-sêkih-iko-nân atim.*
 1-scare.TA-INV-1PL.EXCL dog
 ‘The dog (PROX) scares us.’
- c. *Sêkih-ê-w nâpêw atim-wa.*
 scare.TA-DIR-3 man dog-OBV
 ‘The man (PROX) scares the dog (OBV).’
- d. *Sêkih-ikw-w nâpêw atim-wa.*
 scare.TA-INV-3 man dog-OBV
 ‘The dog (OBV) scares the man (PROX).’
 (adapted from Wolfart 1996: 410)

The pair (1a)–(1b) shows inversion in so-called “mixed scenarios” (Zúñiga 2006: 48), i. e., interactions between a speech act participant (SAP) and a 3rd person, and the pair (1c)–(1d) shows inversion in “nonlocal scenarios”, i. e., interactions between 3rd persons only. In mixed scenarios, inversion is obligatory: the speaker has no choice and must grant the 1st or 2nd person morphological,

3 Abbreviations: 1 first person, 3 third person, A agent-like argument of a transitive verb, AB absential, ANIM animate, APPL applicative, ART article, AV actor voice, BV benefactive voice, CNJ conjunct, CO co-participant, DECL declarative, DETR detransitivizer, DIR direct, DITR ditransitive, DUR durative, EP epenthetic vowel, EXCL exclusive, F feminine, FOBV further obviative, FUT future, GEN genitive, G goal or recipient-like argument of three-participant verb, IA intransitive inanimate, II intransitive inanimate, INAN inanimate, IND indicative, INTR intransitive, INV inverse, IPFV imperfective, LK linker, LV locative voice, M masculine, MOD modal, MOV moving, N neuter, NOM nominative, NSG nonsingular, OBV obviative, P patient-like argument of a transitive verb, PASS passive, PFV perfective, PL plural, PROX proximate, PSR possessor, PST past, Q question, REL relativizer, R/R reflexive/reciprocal, SBJ subject, SDIR strong direct, SG singular, SIMUL simulfix, SUB subordinator, T theme-like argument of three-participant verb, TA transitive animate, TAM tense-aspect-modality, TI transitive inanimate, TR transitive, UV undergoer voice

Morpheme boundary symbols: - default affix boundary; ~ reduplicative affix boundary; <> infix boundaries; = default/“internal clitic” boundary; -- “external clitic” boundary; # (phonological) word boundary

and to some extent also syntactic, pride of place (note that the 1st- and 3rd-person indexes on the verb are unaltered in [1a] and [1b]). In nonlocal scenarios, roughly speaking, inversion is optional: the speaker has the choice of portraying a particular 3rd person as the protagonist (the PROXIMATE; in [1c] and [1d], *nâpêw* ‘[the] man’) of (this passage of) the narrative if both are animate and unpossessed by a 3rd person; all other 3rd persons are construed as less salient (the OBLIQUES; in [1c] and [1d], *atim* ‘[the] dog’). Direct or inverse marking on the verb depends on the semantic role of the participants: when the proximate argument is the actor, the verb is marked as direct, and when the proximate argument is the undergoer, the verb is marked as inverse.⁴ Both the direct and the inverse construction are morphosyntactically transitive, and none of them is morphologically derived from the other.

As far as constituent order is concerned, the literature has frequently mentioned that Cree has “free word order,” which is indeed true in the sense that all the six traditional patterns VSO, VOS, SVO, SOV, OSV, and OVS are possible and attested (cf. e. g., Dahlstrom 1986: 1–2 and Wolfart 1996: 392). The whole picture is more complicated, however, since not all orders are equally frequent, and they differ rather markedly as to their information-structure properties. There are two recent studies that clearly suggest that both topicalization and focalization play a central role in the ordering of pre- and post-clausal nominal constituents, viz. Mühlbauer (2007) and Wolvengrey (2011). Both studies state that the neutral intra-clausal pattern consists in argument NPs being post-verbal, and the latter work also observes that any topics tend to precede contrastive foci (and that proximates are topics). In any case, since the traditional view has been that constituent order is basically free in Plains Cree, no particular order patterns have been postulated.

The analysis of the proximate as a topic is crucial in the present context. While not all scholars agree on the function(s) of obviation in Plains Cree, we will join Dahlstrom (1986) and Wolvengrey (2011) in following Bloomfield’s (1962: 38) well-known tentative approximation: “The proximate third person represents the topic of discourse, the person nearest to the speaker’s point of view, or the person earlier spoken of and already known.”⁵

⁴ In this paper, we make a basic distinction between “actor” and “undergoer” (see Van Valin and LaPolla 1997: 141–146), and refer to semantic roles such as “agent”, “patient”, “beneficiary”, etc. only when it is necessary to make a more fine-grained distinction between these event participants. The terms “A” and “P” (or “O”) for the more agent-like and the more patient-like argument, respectively, are only used in the context of syntactic functions in transitive constructions.

⁵ Recently, slightly different views of obviation have been advanced in the Algonquian context: Déchaine and Wiltschko (2002), e. g., see proximate indexing as marking topic continuity but

Inverse systems are often described as being governed by ontological factors such as animacy (see e. g., Klaiman 1991: 235–236). In Plains Cree, only animate participants can be proximate: referents possessed by a 3rd person are automatically and obligatorily obviative, and inanimate referents lie outside the proximate-obviative opposition. Furthermore, only a subset of referents that are treated as animate by Algonquian lexicon and grammar can be actors of transitive direct verbs with animate undergoers, namely sentient ones (typically, human or anthropomorphic entities).⁶ A consequence from this is that interactions where an inanimate participant acts upon an animate one cannot be expressed by simple direct clauses; a special paradigm (“inanimate agent”) with inverse-like forms is used in such instances.

Furthermore, it should be noted that obviation works in a slightly less mechanical fashion than what the examples above suggest. While only one NP can be proximate in a given clause, with all the others being obviative (2a), there is an additional potential distinction between different types of obviatives (the so-called further obviative being marked with *-iyi* in addition to obviative *-wa*):

(2) Plains Cree

a. *Akâwâtamaw-ê-w ôma kâ-nipah-â-yi-t*

desire.TI-DIR-3 that.PROX.SG SUB-kill.TA-DIR-OBV.SBJ-ANIM

mostos-wa o-wîkimâkan-wa.

buffalo-OBV 3-spouse-OBV

‘He_i (PROX) envied his_i (PROX) wife_j (OBV) the way she_j (OBV) had killed the buffalo_k (OBV).’

(Wolfart 1996: 400)

b. *Wâpam-im-ê-w o-kosis-iyi-wa.*

see.TA-SDIR-DIR-3 3-son-FOBV-OBV

‘He_i (PROX) sees his_j (OBV) son_k (FOBV).’

(Dahlstrom 1986: 55)

In (2a), there are three participants, viz. a man, his wife, and the buffalo; the former is granted proximate status, while his wife and the buffalo – both secondary characters – are then obligatorily obviative. In (2b), by contrast, the three

obviative marking as signaling disjoint reference. (The connection between obviation and disjoint reference was already touched upon by Aissen 1997, albeit in an Optimality Theory framework.) Mühlbauer (2007: 21) argues that obviation “plays a more crucial role in scope construal and argument predication in the syntax than it does as a topic-maintenance device.”

⁶ This and related constraints in Algonquian grammar have not received all the attention they deserve. See Bliss (2007, 2010) for details on these issues in the context of Blackfoot grammar.

participants differ as to their obviation status: the protagonist (he_i) is proximate, the secondary character (he_j) is obviative, and the latter's possessum ($his\ son_k$) is not merely obviative but, because its possessor is obviative, further obviative.⁷

Also note in this context that Plains Cree has a verbal suffix *-im* (glossed “strong direct” here) that denotes that the referents of the arguments in A and P functions actually skip a person on the hierarchy $SAP > 3_{PROX} > 3_{OBV} > 3_{FOBV}$ – which happens either when both of them are 3rd persons (in case the A is proximate and the P is further obviative, like in 2b above) or when an SAP acts on an obviative (like in 3 below).⁸ (These cases depict low-transitivity predicates, viz. *akâwâtamaw-* ‘desire’ and *wâpam-* ‘see’, so the expression ‘A acts on P’ is to be understood like in English, in a broad sense.)

(3) Plains Cree

Ni-wâpam-im-â-w-a o-kosis-a.

1-see.TA-SDIR-DIR-3-OBV 3.PSR-SON-OBV

‘I see his_i (PROX) son_j (OBV).’

(Dahlstrom 1986: 43)

Two features of the Plains Cree (and in fact, overall Algonquian) direct-inverse opposition have been considered particularly important. The first is morphological: both the direct and the inverse verb forms are overtly marked. The second is syntactic: both the direct and the inverse clauses are syntactically transitive. Cross-linguistically, zero-marked directs (as they occur, for example, in Nocte; see DeLancey 1981) are sometimes considered atypical, and passives (i. e., intransitive constructions) that behave like Algonquian inverses in terms of a referential hierarchy (as, for instance, in Southern Tiwa; see Klaiman 1991) are frequently not regarded as inverses at all. Often, the inverse construction is not considered a voice in its own right (although see, for instance, Croft 2003 [1990];

⁷ An anonymous referee aptly points out that the ban on proximate possessums with 3rd-person (obviative) possessors is best seen as derivative of two logically orthogonal and independently attested constraints in Algonquian grammar, viz. the stipulation that at most one argument can be proximate in any given clause, and the stipulation that the possessum cannot outrank the possessor on the hierarchy $SAP > 3_{PROX} > 3_{OBV} > INAN$.

⁸ We are glossing over numerous details and complexities here – as does the typological literature when addressing Algonquian inverse systems. Local scenarios are expressed by special subparadigms of their own. The examples given here show so-called independent clauses; the morphology of so-called conjunct clauses (found in subordination, among others) is crucially different in many respects from what the data in (1) and (2) suggest. The interested reader is referred to Dahlstrom (1986), Wolfart (1996), and Zúñiga (2006, 2008) for more information.

Gildea 1994; Givón 1994; Klaiman 1991; Shibatani 2006). While the core of inverse systems is often considered to involve mixed scenarios, i. e., the opposition of SAPs vs. 3rd persons (see in particular DeLancey 1981), as illustrated by (1a)–(1b) above, some inverse systems feature only nonlocal scenarios, i. e., 3rd-on-3rd oppositions (e. g., Athapaskan languages) and yet others combine both (in addition to the place occupied by local, i. e., SAP-on-SAP oppositions), as in the case of Plains Cree described above (1a)–(1c); this has traditionally been regarded as an interesting but non-criterial parameter of variation of such phenomena (see Givón 1994). These two features of inverse systems – more than one transitive construction, each with overt marking on the predicate – are also found in the conceptualization of symmetrical voice systems, illustrated in 2.2 with data from Tagalog.

Portrayals of inverse systems seldom address discourse frequency issues, but it is interesting to note that Plains Cree direct and inverse clauses are probably best regarded as an asymmetric pair: in Dahlstrom’s (1986: 72) words, “the direct form is by far the more frequent, and may be considered the unmarked choice”. Also, so-called “proximate shifts”, which lead to the coding of a topical participant as the proximate argument, seem to be limited to proximate actors (Junker 2004: 348), which implies that there is a preference for the direct construction.

Another interesting feature of Algonquian in general and Plains Cree in particular – which is not usually seen as definitional or criterial for the inverse type – is the fact that syntactic transitivity is overtly marked in these languages.⁹ First, verb roots take so-called final suffixes that indicate whether there is a primary object or not, and whether the argument in S (“intransitive”) or P/G function (“transitive”) is animate or inanimate, thus leading to a four-way classification of verb stems in Inanimate Intransitive (II), Animate Intransitive (AI), Transitive Inanimate (TI), and Transitive Animate (TA). Second, leaving some zero 3rd-person markers aside, both subjects and primary objects are in principle indexed on the verb, either by dedicated morphemes or by portman-teaus, and any coreferential NPs present in the clause are not marked for case or by adpositions. However, there is also an intermediate situation, which displays a systematic mismatch between intransitive stems inflected for only one

⁹ Syntactic transitivity refers here to a syntactic valency of two, i. e., a subject and a primary object in the clause that are canonically marked and are cross-referenced on the verb in a default fashion. Morphological transitivity, by contrast, refers to the number of arguments that are cross-referenced on the verb; see (4) for mismatches between these two kinds of transitivity. We follow Algonquianist practice here rather than using e. g., Hopper and Thompson’s (1980) multi-parameter semantic and morphosyntactic notion of transitivity.

argument even though there can be an overt object NP, typically a nonreferential participant (Bloomfield's "para-transitive" clause type; see [4b]). Examples follow:

(4) Plains Cree

			morphology	syntax
a.	<i>api-w</i>	(sit.AI-3)	's/he sits'	INTR INTR
b.	<i>kimoti-w</i>	(steal.AI-3)	's/he steals (sth.)'	INTR TR
c.	<i>wâpahtam-w</i>	(see.TI-3)	's/he sees it'	TR TR
d.	<i>wâpam-ê-w</i>	(see.TA- <small>DIR</small> -3)	's/he sees him/her'	TR TR
e.	<i>miy-ê-w</i>	(give.TA- <small>DIR</small> -3)	's/he gives it to him/her'	TR DITR

(Wolfart 1996: 403)

The issue of alignment and grammatical relations in Plains Cree is complex, and, at least from a modern functionalist-typological perspective, no agreement on this matter has yet been reached. The question is whether there is an identifiable subject, and if so, how this relation is encoded in the different constructions. The earlier literature focused on the syntactic nature of the inverse construction, proposing either an "active" analysis (i. e., both direct and inverse clauses assign the subject relation to the actor and the primary object relation to the undergoer; Dahlstrom 1986; Wolfart 1973; cf. also Bloomfield 1962 for Menomini) or a "passive" analysis (i. e., the inverse is actually a demotional and therefore intransitive passive construction; Jolley 1982; cf. also LeSourd 1976 for Fox). Some studies proposed that the Algonquian inverse might be analyzed as a re-transitivized passive (e. g., Rhodes 1976 for Ojibwa) – but Dryer (1997) suggested that the choice between an active and a re-transitivized passive might be considered indeterminate. Zúñiga (2006: Ch. 3) reviewed part of the relevant literature to that date for Plains Cree and Ojibwa, which addressed several constructions (floating quantifiers, preverbs, relational and impersonal paradigms) and came to the conclusion that it was not enough to identify the syntactic arguments of the inverse construction as either subject or object: Plains Cree grammatical relations in general are not as homogeneous as they appear (i. e., subjects and primary objects were not defined alike by all constructions), or are assumed to be, in other languages. Lastly, and most radically, Wolvengrey (2011) provides an analysis of Plains Cree grammatical phenomena that dispenses with grammatical relations altogether; this study claims that several patterns previously identified were actually paradigmatically incomplete and that, once all pertinent data are taken into account, neither verb morphology (the direct-inverse opposition) nor obviation nor constituent order nor putative grammatical relations are responsible for the felicitous interpretation of particular simple or complex clauses. In

Wolvengrey's view, semantic notions like agentivity and patientivity on the one hand and pragmatic notions like topic and focus on the other, as well as pragmatic context-based plausibility, suffice to account for all the (ir)regularities observed.¹⁰ Leaving the theoretical intricacies of such discussions aside, and based on the extant literature on the subject, we will assume Plains Cree grammatical relations to be not particularly homogeneous across grammatical phenomena but determinable, at least at a purely descriptive level of alignment patterns.

Consider attributive clauses in the context of the discussion about grammatical relations in Plains Cree. Such clauses feature finite verb forms occurring in a form different from the default form employed in main clauses (i. e., the conjunct order instead of the independent order) with a subordinating prefix *kâ-* (usually called “preverb” in Cree studies). Two simple examples follow; the proximate participant – P in (5a) and A in (5b) – is relativized on in both:

(5) Plains Cree

- a. *Sîsîp ni-nipah-â-w.* > *sîsîp kâ-nipah-ak*
duck 1-kill.TA-DIR-3 duck SUB-kill.TA-1SG→3
 ‘I killed a duck (PROX).’ ‘the duck (PROX) that I killed’
 (Wolfart 1996: 394)

- b. *naha nâpêw kâ-sâkih-â-t Mary-wa*
that.PROX.SG man SUB-love.TA-DIR-ANIM M.-OBV
 ‘that man who likes Mary’
 (Blain 1997: 68)

Like independent verb forms, such conjunct forms distinguish proximate from obviative arguments morphologically. Both proximates and obviatives can actually be relativized upon. What is important is that obviation status of the relativized argument must be consistent across clauses; for instance, in the following example, *ôhi(h)* ‘this/these’ is obviative in the main and the attributive clause. The direct morphology on the superordinate and subordinate predicates makes it clear that the obviative argument is nonagentive in both cases:

10 In particular, Wolvengrey's claim is that the core morphological and distributional regularities related to the direct-inverse opposition can be adequately and exhaustively described by resorting to the actional opposition (agent vs. patient) and the obviation opposition (PROX vs. OBV) alone. See Wolvengrey (2011) for his own account of, and a reappraisal of the literature on, purported pivohood with quantifiers and other phenomena.

(6) Plains Cree

- a. *Êkwah kisiwâh-ê-w ôhîh kâ-kimotamaw-â-t.*
 and anger.TA-DIR-3 these.OBV SUB-steal_from.TA-DIR-ANIM
 ‘He (PROX) angered the ones (OBV) he stole from.’
 (Bloomfield 1930: 280, cited in Dahlstrom 1986: 124)

Thus, relativization is not informed by semantic (macro-)roles (S, A, P, T and G are all relativizable in both matrix and subordinate clauses) but by obviation status instead.

Finally, note that obviation status does not depend on grammatical relation. In particular, this means that S’s can be either proximate or obviative, as shown in (7) below. (This will be relevant when discussing the Tagalog, but especially the Movima data, further down.)

(7) Plains Cree

- a. *Api-w êkota awa oskinîkiw.*
 sit.AI-3 there this.PROX.SG young_man
 ‘The youth (PROX) sat down there.’
 (Wolfart 1996: 402)
- b. *Ôhtâwiw-a êh-okimâw-iyi-t.*
 3.PSR.father-OBV CNJ-be_chief.AI-OBV.SBJ-ANIM¹¹
 ‘His father (OBV) was chief.’
 (Dahlstrom 1986: 116)

2.2 The symmetrical-voice type: example Tagalog

Symmetrical or “Philippine-type” voice systems are a typical property of Western Austronesian languages (see Himmelmann 2005a). We define symmetrical voice systems as follows: they have at least two alternating voices (active and non-active, or actor and undergoer voice), none of which is derived from the other, and none of which leads to a demotion of an argument from the syntactic core to the periphery.

Tagalog, a Western Austronesian language with about 17 million speakers (Himmelmann 2005b: 351), is an often-cited representative of the symmetrical-voice type. A typical Tagalog sentence contains one NP in post-predicate position that is overtly marked by a proclitic *ang* (*si* with proper names; pronouns

¹¹ The suffix *-iyi* marks obviative subjects on verbs (like in [7b]; see Zúñiga 2006: Ch. 3 for details on its occurrence) and further obviatives on nouns (like in [2b]).

take a dedicated form), which we will henceforth refer to as “nominative” (Kroeger 1993).¹² This nominative proclitic occurs with the single argument of intransitive clauses, as shown in (8):

- (8) Tagalog
d<um>atíng na ang aswáng
 <AV.PFV>arrive now NOM vampire
 ‘The vampire came.’
 (adapted from Himmelmann 2005b: 355)

Nominative marking does not imply a particular semantic role. This can be seen in the examples in (9), which show two transitive clauses describing one and the same situation. In (9a), the actor (*bata* ‘child’) is in the nominative, and in (9b), the undergoer (*tinapay* ‘bread’) is in the nominative. (Note that the nominative argument is usually interpreted as definite.) While there is no agreement morphology on the verb, a so-called “voice” morpheme indicates the semantic role of the nominative argument: <um> in (9a) signals that the nominative argument represents the actor, <in> in (9b) signals that this argument represents the undergoer. (In our Tagalog examples, underlining marks the translational equivalent of the nominative argument.)¹³ As illustrated by the examples, a non-nominative NP is typically combined with the “genitive” proclitic *ng* (alternatively with locative *sa*; on the distribution of these two proclitics see Himmelmann 2005b: 357).

- (9) Tagalog
 a. *K<um>ain ang = bata ng = tinapay.*
 <AV.PFV>eat NOM = child GEN = bread
 ‘The child ate some bread.’¹⁴
 b. *K<in>ain ng = bata ang = tinapay.*
 <UV.PFV>eat GEN = child NOM = bread
 ‘The child ate the bread.’
 (adapted from Nagaya 2012: 50)

¹² We use this term as a label only, without entering into the debate of its theoretical adequacy.

¹³ Again, we are glossing over many intricacies here. Firstly, the voice affixes appear in a complex system of allomorphs that mark, among other things, perfective vs. imperfective aspect and realis vs. irrealis mood. See Himmelmann (2005b: 363–364) for more details. Furthermore, we do not discuss the role of zero anaphora in Tagalog (see Himmelmann 1999: 236; Nagaya 2006: 88).

¹⁴ As pointed out by N. Himmelmann (p.c.), this example is rather atypical because the *ang*-phrase does not occur in clause-final position, as it usually does. This does not interfere with what we intend to show here, however.

Moreover, while the basic opposition is generally seen as that between an actor voice, on the one hand, and an undergoer voice, on the other, there are several undergoer voices in Tagalog. Example (10a) illustrates the locative voice, marked by a simulfix consisting of the undergoer-voice infix <in> plus the suffix -an, and (10b) shows the benefactive voice, marked by the prefix *i-* in addition to the undergoer-voice infix <in>.

(10) Tagalog

- a. *K<in>ain-an ng = bata ang = pinggan na iyon.*
 <UV.PFV>eat-LV GEN = child NOM = plate LK that.NOM
 ‘The child ate off that plate.’
- b. *I-k<in>ain ng = bata ang = kapatid = niya.*
 BV-<UV.PFV>eat GEN = child NOM = sibling = 3SG.GEN
 ‘The child ate on behalf of his/her sibling.’
 (adapted from Nagaya 2012: 50)

As these examples show, the locative and benefactive voices can be regarded as complex derivations, consisting of a co-occurrence of the undergoer voice marker <in>, which indicates a patient when occurring alone (9b), with an additional morpheme. Consequently, they can be analyzed as being morphologically derived from the undergoer voice verb by applicative affixes (-an and *i-*, respectively), which allow peripheral arguments to enter the clause core (see [11] below). However, given the complex interactions between voice and aspect-mood morphology, no full consensus on this topic has been reached so far.

Alternations like the ones above are described as voices because the different constructions have the same propositional content, thereby allowing different event participants to be expressed in the nominative. Crucially, however, in contrast to some stricter definitions of voice (e.g. Kulikov 2010), none of them leads to an overt modification of syntactic valency, such as a demotion of an argument to adjunct or oblique status: in both the actor and the undergoer voice, the clause has the same syntactic structure, with identical NP types.

Note that the voice alternations are not fully productive, i. e., not the full range of voice morphemes can be combined with any verb stem, and there is not always a predictable change in meaning; therefore, unlike the clearly inflectional direct-inverse alternations in Algonquian, the Tagalog voice affixes can be considered derivational (Himmelman 2005b: 364, 369). However, given that a voice alternation is required in some syntactic constructions (see below), there is a productive alternation between the actor voice and at least one undergoer voice.

In contrast to direct-inverse systems, the symmetrical voice alternations do not mark the semantic roles of *two* participants, but only that of *one*: regardless

of the number of arguments in the clause, only the semantic role of the nominative argument is indicated. Thus, as shown by (8) above, voice marking also occurs in clauses with only one argument; the examples in (11) show that with the “applicative” (i. e., locative and benefactive) undergoer voices, more than one genitive-marked NP can occur in one clause, and the semantic roles of these NPs can only be inferred from meaning and context. The question of transitivity, i. e., whether a Tagalog clause has one, two, or more syntactic core arguments is therefore not directly relevant for the interpretation of the system, or, as Himmelmann (2005a: 159) puts it: “syntactic transitivity distinctions are largely irrelevant for symmetrical voice [...] systems.”

(11) Tagalog

- a. *B<in>ilh-an ng = lalake ng = isda ang = tindahan.*
 <UV.PFV>buy-LV GEN = man GEN = fish NOM = store
 ‘The man bought (a/the) fish in the store.’
- b. *I-b<in>ili ng = lalake ng = isda ang = bata.*
 BV-<UV.PFV>buy GEN = man GEN = fish NOM = child
 ‘The man bought (a/the) fish for the child.’
 (adapted from Farrell 2005: 91)

While the factors that underlie the Tagalog main-clause voice alternations are complex and have not yet been fully identified (see Himmelmann 2005b: 367–369), it has long been established that discourse-referential factors such as definiteness and specificity play an important role (Himmelmann 2005: 367; Hopper and Thompson 1980: 288; Sabbagh 2012).

In discourse, semantically transitive simple main clauses are described as occurring far more frequently in the undergoer voice than in the actor voice. Hopper and Thompson (1980: 288–290) attribute this to a tendency for undergoers to be introduced by “backgrounded” parts of discourse, so that they are more likely to be marked as definite (i. e., nominative) when occurring in foregrounded passages.

Perhaps the crucial difference between voice and inverse systems is that in the former, the choice of a main-clause voice alternation is not grammatically determined by a person or animacy hierarchy.¹⁵ In Tagalog the same mixed

¹⁵ This is not meant to imply that Tagalog syntax is completely unaffected by person or animacy hierarchies. Certain extraction processes involving embedding are affected by a 1>3 hierarchy (Richards 2005), and the actor voice is lexically disallowed with certain dynamic change of state verbs that take animate undergoers like ‘kill’, ‘frighten’, ‘surprise’ (cf. Schachter and Otnes 1972: 152, 299–300). However, neither extraction nor voice restrictions governed by these factors are uncommon cross-linguistically, and they are largely independent of the predominant alignment system of the language in question.

scenario can be expressed in either the undergoer (here, patient) voice or the actor voice, as shown by (12a) and (12b), respectively.

(12) Tagalog

a. *B<in>asag ko ang baso*
 <uv>break 1SG.GEN NOM glass
 ‘I broke the glass.’

b. *Nag-basag ako ng baso*
 AV-break 1SG.NOM GEN glass
 ‘I broke a glass.’

(adapted from Schachter and Otnes 1972: 299–300)

In contrast to the pragmatic functions, the syntactic properties of the different voices have been explored in considerable detail (see in particular Kroeger 1993; Schachter 1976). In many cases, the voice alternations serve to maintain the nominative NP as the syntactic “pivot” (see Van Valin and LaPolla 1997: 275 for a definition of the term), for example in relativization: only the nominative argument can be relativized, and voice marking is chosen depending on the semantic role of the relativized argument. (In other constructions, it is the actor NP that forms the pivot, irrespective of the verbal voice.) In (13a), the relativized nominative argument is the agent, therefore the actor voice is chosen in the relative clause. In (13b), the nominative argument is the patient, and therefore, the patient voice is chosen.

(13) Tagalog

a. *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.’

b. *Interesante ang = diyaryo = ng b<in>asa ng = lalaki.*
 interesting NOM = newspaper = LK <uv>read GEN = man
 ‘The newspaper that the man read is interesting.’

(adapted from Schachter 1976: 500)

The analysis of symmetrical voice systems has seen many controversies over the last decades. A number of scholars (e. g., Aldridge 2004, 2012; De Guzman 1988; Liao 2004; Nagaya 2012; Payne 1982) argue for an ergative analysis, in which the actor voice would be an antipassive; this view is supported by syntactic tests that show that the actor voice is less transitive than the undergoer voices (Hopper and Thompson 1980: 289; Nagaya 2012). However, the opposite position, which analyzes the undergoer voices as a passive voice, has been defended as well

(Guilfoyle et al. 1992). As is apparent from our above definition, this paper adopts another widespread view that both the actor and the undergoer voices create basic transitive constructions in which the nominative NP is the central argument or “subject” (see also Foley 2008; Himmelmann 2005b; Kroeger 1993; Maclachlan 1996; Paul and Travis 2006; Rackowski 2002; Rackowski and Richards 2005; Riesberg 2014; Schachter 1976, 1996; Shibatani 1988).

An attempt to explain the rise and existence of symmetrical voice systems is the so-called “nominalist hypothesis” (Himmelmann 1991, 2008; Kaufman 2009), which assumes all sentences to be intransitive, headed by predicate nominals that are derived through participant nominalizations. The actor-voice affix would thus derive a noun denoting the actor (like *-er* in English *employ-er*) and the undergoer voice would derive a noun denoting the undergoer (like *-ee* in English *employ-ee*). This analysis is, among other things, supported by the low syntactic noun-verb distinction in Tagalog and the fact that non-subject arguments in a transitive clause are expressed by a genitive NP, i. e., like a nominal possessor. Below we will see that the hypothesis is of interest for typological comparison, since the alignment patterns of Movima may have arisen from a similar source.

2.3 Summary: the defining characteristics of the two types

The literature on morphosyntactic typology has tended to concentrate on those properties that distinguish the Plains Cree type from the Tagalog type. Klaiman’s (1991) “pragmatic voice oppositions,” for instance, make a categorical distinction between her “inverse subtype,” found in Algonquian languages (based on the ontological salience of the arguments, e. g., animacy) and her “focus subtype,” found in Philippine languages (based on the informational salience of the arguments). Similarly, in their typology of construction oppositions, Dixon and Aikhenvald (1997) differentiate between inverse and “argument-focusing” (i. e., symmetrical voice) systems. Like Klaiman, they base this distinction on the observation that the choice of the direct or the inverse construction in inverse systems – which they characterize as “marking the referential status of arguments” – is governed by the potential to control an activity, whereas the “argument-focusing” systems are discourse-based and depend on which event participant is focused upon.

Table 1 summarizes the basic properties of the two systems as they were described in the previous sections. (Recall the comments on variation within, and deviations from, the “prototypes” represented by Plains Cree and Tagalog.) The symbols + and – (to be read as “more” and “less”, respectively, rather than as “yes” and “no”) are intended to show basic tendencies, as discussed below.

Table 1: Overview of properties of “prototypical” direct-inverse vs. symmetrical voice systems.

	Direct-inverse (Plains Cree)	Symmetrical voice (Tagalog)
More than one basic transitive construction	+	+
Nominals overtly distinguished	+ (obv)	+ (proclitics)
Both actor and undergoer roles encoded by dedicated morphemes (direct/inverse or voice)	+	+
More than one participant role encoded by verbal morphemes	+	–
Person agreement	+	–
Alternations can be used for discourse purposes (“flexible”)	+ (nonlocal domain)	+
Alternations are determined by ontological and grammatical factors (“rigid”)	+	–
S aligns with (only) one of the arguments of a transitive clause	–	+ (NOM)
System interacts with syntactic pivot	– (but cf. attributive clauses)	+

Table 1 shows that while the differences between Plains Cree and Tagalog seem to outnumber the similarities, the morphosyntactic systems of these languages also have significant properties in common. There is more than one morphosyntactically basic transitive construction to choose from; in other languages, including most Indo-European ones, this is not the case. In both languages, the arguments are overtly formally marked – in Plains Cree through obviative marking, in Tagalog by the “case” proclitics. In both, the verb contains a marker indicating the participant role of at least one argument. An important common feature, furthermore, is that the discourse-pragmatic status of the participants in nonlocal scenarios plays a central role for the choice of either of the different transitive constructions: like symmetrical-voice languages, many inverse languages also have a domain that, in principle, allows the flexible choice between either the direct or the inverse construction.

Of the many differences that exist between the two languages, we assume the following to be particularly relevant in the present context. It has been stressed in the literature (Klaiman 1991: 151–168, based on Nichols 1986; see also Zúñiga 2006: 18–19) that so-called inverse languages are typically head-marking. Indeed, Plains Cree, head-marking like most native languages of North America, has verbal person (or agreement) markers, which Tagalog lacks, and some of the Plains Cree person markers even encode semantic roles. In general,

however, the person markers are role-neutral, and the direct/inverse morphology indicates the semantic roles of the arguments they index. In Tagalog, where verbal agreement markers are absent, the voice morphemes indicate the semantic role of a separate syntactic constituent. In relation to this, transitivity is usually an overt, clearly discernible feature in Algonquian, and therefore, the direct or inverse marker simultaneously indicates the roles of both core arguments; in Tagalog, in turn, where transitivity is less easy to identify, the verbal voice marker indicates the semantic role of only one argument, be it the single one in an intransitive clause or one out of many in a clause with several arguments.

A further important difference between the two language types (often taken as the defining one for distinguishing between inverse and symmetrical voice systems, e. g., Klaiman 1991) is that the Plains Cree inverse system is partly governed by grammatical and semantic factors (person, possession and animacy), whereas these do not play a central role for the Tagalog voice alternations. We would like to refer to this difference as being one of “rigidity” and “flexibility”: in a rigid system, the choice of the construction is based on grammar or semantics, while in a flexible system, the speaker can use the alternation as a discourse-structuring device.¹⁶ Thus, one might say that an inverse system is characterized by at least some degree of rigidity – typically in the local or mixed domain –, while a symmetrical-voice system is fully flexible.¹⁷

Alignment, in the context of, in particular, a subject relation, and the existence of a syntactic pivot are further criteria that distinguish Plains Cree from Tagalog. As was discussed above, grammatical relations are a complex issue in Algonquian languages, and can be detected only in particular clause types; symmetrical-voice systems like Tagalog, in contrast, are particularly famous for the fact that transitive constructions have a “nominative” (traditionally called “focused”) NP, which is also present in the intransitive construction and which constitutes the syntactic pivot of many syntactic processes (Kroeger 1993), verbal voice being chosen accordingly.

16 For similar proposals, see also Givón’s (1994) opposition of “semantic vs. pragmatic inverse”, Gildea’s (1994) contrast between “inverse alignment” and “inverse voice”, and Bresnan et al.’s (2001) “hard” vs. “soft constraints”.

17 Note, however, that the voice alternations in Tagalog, and symmetrical-voice languages in general, are flexible only in main clauses; in several complex constructions, the alternation has a pivot-maintaining function. This syntactic function is absent in Plains Cree. In the discussion of Movima (3.2 below), it will be suggested that this feature is possibly incompatible with a rigid system.

Note that not all these criteria are equally representative of each linguistic “type”, which appears when other languages from the same families are considered. In particular, while there is no person agreement in Tagalog, agreement is not generally absent from Western Austronesian languages: for instance, Kapampangan (Mithun 1994) has a fully elaborated person-marking system. Thus, a symmetrical-voice system is not necessarily related to the absence of person agreement; likewise, as will be seen below, there are also inverse systems that do not have person agreement.

By turning now to inverse systems that are less clearly delimited than the ones known from Algonquian, the present paper argues in favor of an account that sees Algonquian-type inverse and Philippine-type voice phenomena as less strictly separated, both synchronically and diachronically, than in Klaiman’s (1991) and Dixon and Aikhenvald’s (1997) taxonomies. In particular, we claim that the distinction between voice-related phenomena like the ones found in Plains Cree and Tagalog is best seen as gradual rather than categorical, and that the “prototypical” examples most often discussed in the literature and presented in Sections 2.1 and 2.2 above are best conceived as representing different stages on a revealing continuum.

3 “Voice-like” inverse systems

In this section we present case studies of three languages – all from South America, but genealogically unrelated – which, in the realm of nonlocal scenarios, display both inverse and symmetrical-voice features to different degrees. They all share the feature of having two transitive constructions. In our first example, Mapudungun (3.1), the expression of nonlocal scenarios by either the direct or the inverse construction is exclusively governed by discourse properties of the referents (with the proviso that inanimate actors and animate undergoers cannot co-occur in transitive clauses); in this respect, the assignment of proximate status with corresponding direct/inverse morphology is at least partially comparable to the assignment of the nominative and the corresponding voice morphology in a symmetrical voice system. The second example, Movima (3.2), shows a direct-inverse system that corresponds in many respects to that of Algonquian described above; in particular, the choice of the inverse construction is governed primarily by a person and animacy hierarchy. However, the syntactic alignment properties of Movima are more similar to those of symmetrical-voice systems, because there is one argument that, independently of its semantic role, is syntactically privileged. Jarawara, finally (3.3), seems to be a

hybrid type that can be described equally well in terms of inverse or symmetrical voice. Dixon (2000, 2004) and Dixon and Aikhenvald (1997) explicitly state that, similar to symmetrical voice systems, the two transitive constructions of Jarawara exclusively have a pivot-maintaining function. Farrell (2005), in contrast, analyzes Jarawara as an inverse system because of the opposition between only two transitive constructions.

3.1 Mapudungun

Mapudungun is an unclassified language spoken by some 250,000 people in south-central Chile and Argentinian Patagonia (Zúñiga 2007). It is like Plains Cree in that (i) both mixed and nonlocal scenarios participate in the direct-inverse alternation, (ii) both the direct and the inverse constructions can be considered syntactically transitive.¹⁸ Examples (14a)–(14b) show the direct-inverse opposition in a mixed scenario (1SG↔3SG); (14c)–(14d) show the direct-inverse opposition in a nonlocal scenario.

(14) Mapudungun (unclassified)

a. *Pe-fi-n chi domo.*

see-3P-1SG.IND ART woman

‘I saw the woman.’

b. *Pe-e-n-mew chi domo.*

see-INV-1SG.IND-3A ART woman

‘The woman saw me.’

c. *Chi domo pe-fi-i-Ø chi pichi wentru.*

ART woman see-3P-IND-3 ART little man

‘The woman (PROX) saw the boy (OBV).’

d. *Chi domo pe-e-i-Ø-mew chi pichi wentru.*

ART woman see-INV-IND-3-3A ART little man

‘The boy (OBV) saw the woman (PROX).’

(Zúñiga, personal knowledge)

¹⁸ To our knowledge, it is uncontroversial that the direct clause is syntactically transitive. The inverse clause is best considered transitive as well; like in the salient-P direct, and unlike in the (agentless) passive, the verb indexes two participants, two unmarked NPs can appear in the clause, and there are Q-word and constituent order regularities that are best explained by an analysis in which the inverse clause is the mirror image of the direct one in terms of grammatical relation assignment. See Zúñiga (2006, in prep.) for details.

Mapudungun differs from Plains Cree in that (i) obviation is not overtly marked, neither on nominals nor on verbs,¹⁹ (ii) the direct verb form is zero-marked (i. e., there is no overt direct counterpart of inverse *-e*), (iii) there is differential object indexing (i. e., the 3P suffix *-fi* appears only on some direct forms; cf. Zúñiga 2010; Lemmolo 2011), and (iv) possession by a 3rd person does not seem to automatically imply obviative status (although this issue has not been explored in detail).²⁰

In the following example, there is nothing in the verbal or nominal morphology (or, to be sure, in the clausal syntax) that indicates whether the S in (15a) is proximate or obviative; it could be followed by either (15b) or (15c) in a narrative, depending on the status of *chi witran* ‘the foreigner’ in the passage as a whole:

(15) Mapudungun

- a. *Aku-i-Ø* *chi witran.*
 arrive.here-IND-3 ART foreigner
 ‘The foreigner_i arrived.’
- b. *Mütrüm-fi-i-Ø* *chi domo.*
 call-3P-IND-3 ART woman
 ‘S/he_i (PROX) called the woman_j (OBV).’
- c. *Chi domo mütrüm-e-i-Ø-mew.*
 ART woman call-INV-IND-3-3A
 ‘The woman_j (PROX) was called by him/her_i (OBV).’

Nevertheless, the binding of *iney* ‘who’ in non-polar questions shows no variation (irrespective of linear order, which does show some variation, cf. Arnold 1997). In (16a), *iney* is coreferential with the S, which could be proximate or obviative; in (16b) (direct), it must refer to the obviative P; in (16c) (inverse), it must refer to the obviative A:

(16) Mapudungun

- a. *Iney kam aku-i-Ø?*
 who Q arrive.here-IND-3
 ‘Who arrived here?’

19 Disambiguation is usually possible thanks to context – as is, to some extent, the case in Algonquian as well. In colloquial Plains Cree, the \emptyset ‘PROX’ vs. $-(w)a$ ‘OBV’ opposition can disappear when there is only one overt post-verbal NP in the clause (which is then morphologically unmarked) (Mühlbauer 2007: 21). In Blackfoot, some speakers simply regularly drop the $-(w)a$ ‘PROX’ and $-(y)i$ ‘OBV’ nominal suffixes in allegro speech, especially when there is only one overt post-verbal NP in the clause.

20 We are glossing over the many interesting differences in the SAP-on-SAP subparadigm here. See Arnold (1997) and Zúñiga (2006: 217–218) for details.

- b. Iney kam langüm-fi-i-Ø Peyro?
 who Q kill-3P-IND-3 P.
 ‘Who did Peyro kill?’
- c. Iney kam langüm-e-i-Ø-mew Peyro?
 who Q kill-INV-IND-3-3A P.
 ‘Who killed Peyro?’

As to constituent order and NP-overtness, the exact conditions favoring or triggering specific patterns have not been studied in detail, but some tendencies seem to be quite robust, at least in narrative texts (Zúñiga in prep.). Based upon Salas’ (2006) text collections, V and VS are by far the most frequent patterns (ca. 28% each); then comes VP (direct) (ca. 18%); then SV, VA (inverse) and AVP (direct) (ca. 7% each); all other orders together account for roughly 5% of the clauses (cf. Zúñiga and Herdeg 2010). This means, for our present purposes, that S’s are often overt (but can be proximate or obviative), obviative P’s (direct) and obviative A’s (inverse) can also be overt, and in two-NP clauses, preverbal proximate A together with postverbal obviative P (direct) can also be found. Even though it is not a rigid rule of the grammar, there is a clear tendency for S to align with obviative NPs in any syntactic function.

Finally, it is worth noting that Mapudungun verbs are not overtly marked for syntactic transitivity like their Plains Cree counterparts (except the above-mentioned para-transitive constructions, typically with nonreferential P’s; see example [4]). Mapudungun verbs do show a somewhat imperfect correlate in their personal inflection, however, in such a way that they are at least closer to Plains Cree than to Tagalog with respect to transitivity marking.

3.2 Movima

Movima is an unclassified language spoken by approximately 500 hundred speakers in Amazonian Bolivia. Movima has two basic transitive constructions, illustrated in (17). The two constructions differ in the verbal marking, which indicates which of the arguments represents the actor and which one the undergoer. In (17a), the verb is marked as “direct”, indicating that the first pronominal clitic (= *is*) is the actor and the second (--*k-is*) the undergoer; in (17b), the verb is marked as “inverse”, indicating the reversed constellation. That both constructions are transitive is evident from the absence of oblique marking on any of the pronouns; intransitive clauses, by contrast, allow only one non-oblique nominal constituent.

(17) Movima²¹a. *Sal-na* = *is--k-is*.

look.for-DIR = 3PL.AB--OBV-3PL.AB

‘They (PROX) look for them (OBV).’

b. *Sal-kay-a* = *is--k-is*.

look.for-INV-EP = 3PL.AB--OBV-3PL.AB

‘They (OBV) look for them (PROX).’

Movima morphosyntax shows properties that resemble the Plains Cree inverse, and others that resemble the Tagalog voice system. Like in Plains Cree, the direct and inverse morphemes are fully productive: they can occur with the whole class of bivalent verbal bases (see Haude 2006: 323–332) and have a predictable effect. Furthermore, as is characteristic of inverse systems, the choice of either the direct or the inverse form is determined by a referential hierarchy that includes grammatical, semantic, as well as discourse-pragmatic parameters.

The relative hierarchical position of the referents determines the linear position of the arguments in the clause: the argument with the higher-ranking referent occurs first after the verb, and the one with the lower-ranking referent occurs in the second postverbal position. This reference effect is best illustrated with the person hierarchy, which in Movima shows the ranking 1>2>3. This person hierarchy is basically reflected as follows (see Haude 2011 for details): there is one slot on the predicate for an SAP enclitic, which is in the first position after the predicate and “internally cliticized” to it (entailing a stress shift, insertion of the epenthetic vowel *-a* after a base-final consonant, and shortening of the penultimate vowel of the host); in the expression of a local scenario, this slot is reserved for the SAP ranking higher in the person hierarchy; the other SAP cannot be overtly represented by an enclitic and, unless specified by a free form, has to be inferred from the context (as in [18]). The participant roles are indicated by the verbal morphology, as was already illustrated in (17).

(18) Movima

a. *Sal-na* = *y’i*.

look.for-DIR = 1PL

‘We look for you (or: him/her/it/them).’

b. *Sal-kay-a* = *y’i*.

look.for-INV-EP = 1PL

‘You (or: he/she/it/they) look(s) for us.’

²¹ All Movima data stem from Haude’s fieldwork carried out between 2001 and 2010 in the region of Santa Ana del Yacuma, Bolivia. The source indications in square brackets refer to texts stored in the DoBeS archive (see http://corpus1.mpi.nl/ds/imdi_browser/, last accessed on July 7th, 2015).

When, in a mixed scenario, the 3rd person is overtly expressed, as in (19) below, it occurs in second position after the predicate. In this position, pronouns are attached by “external cliticization” (entailing resyllabification with host-final consonants, but no stress shift and no vowel shortening; this cliticization type is represented by two hyphens). The linear order of the pronouns is automatically 1/2 3, with verbal direct or inverse marking indicating the semantic roles.

(19) Movima

a. *Sal-na* = yʔi--k-is.

look.for-DIR = 1PL--OBV-3PL.AB

‘We look for them.’

b. *Sal-kay-a* = yʔi--k-is.

look.for-INV-EP = 1PL--OBV-3PL.AB

‘They look for us.’

Thus, in scenarios involving an SAP (local and mixed), the argument slots are predictably filled according to a person hierarchy, with the higher-ranking person encoded in the first postverbal position.

In nonlocal scenarios, the situation is slightly different, since 3rd persons can be expressed in either of the two postverbal slots without any formal restrictions. Clauses with two bound 3rd-person pronouns were presented in (17) above (on the marker *k-* ‘OBV’ that occurs on 3rd person pronouns in second position, see Footnote 22); example (20) illustrates a direct clause where both slots are filled by NPs (note that the element in the first slot, which corresponds to the higher-ranking person, is even possessed). Grammatically, therefore, there are no restrictions on the expression of non-local scenarios.

(20) Movima

Rimet-na = us pa:pa = ʔne os ro:ya.

buy-DIR = ART.M father = 3F ART.N.PST house

‘Her father bought a house.’

[Escape Marivel 003]

While corpus and elicitation data show that, like in Plains Cree, the direct construction is preferred to express a nonlocal scenario (see Haude 2014), discourse status and animacy of the nominal referents play an important role in this choice. This is most obvious from the fact that the first argument is typically a pronoun referring to an animate actor already known from the preceding context; the second argument (which can also remain unexpressed) is most often an NP denoting a less accessible referent, often lower in the

animacy hierarchy. Examples (21) and (22) illustrate this with a direct and an inverse construction, respectively.

(21) Movima

- a. *Way-na* = *sne os loto:ba*.
 take-DIR = 3F.AB ART.N.PST jug
 ‘She took the jug.’
 [Ay’ku I 052]
- b. *Bak-kay-a* = *is os sarampiyon*.
 pluck-INV-EP = 3PL.AB ART.N.PST measles
 ‘They got infected by the measles.’
 [JGD_160808-Fundacion-02 447]

These properties of Movima are largely compatible with the patterns found in Plains Cree: there are two transitive constructions, with no difference regarding the marking of the nominal constituents; the two core argument slots are filled according to the position of the event participants in a referential hierarchy, which includes person and animacy; direct and inverse morphology, which is fully productive, indicates the participant roles of the two core arguments. Because of these parallels, the two argument slots of a Movima transitive clause have been labelled “proximate” (for the argument in the first postverbal position; short PROX) and “obviative” (for the argument in the second postverbal position; short OBV) (see e.g., Haude 2009a, 2010). The reasoning behind this terminological choice is that, like in Algonquian, the proximate argument represents the event participant that ranks higher on a scale of animacy or topicality.

An important difference between Algonquian and Movima is that in Movima, the assignment of proximate or obviate status in the nonlocal domain is not absolute, but relative. Every transitive clause contains one proximate and one (possibly unexpressed) obviate argument, and apart from singular SAP pronouns, any nominal can fill either category, depending on its relative hierarchical status with respect to the other one. Unlike what is seen in Algonquian, two obviate arguments cannot co-occur in one clause, and there is no such thing as a “further obviate” (see [3] above).²² The referential hierarchy that is

²² Note that when both participants are expressed by bound pronouns, the second one is preceded by a *k*-, as in (17) and (19). This element is analyzed as an “obviation” marker, since it occurs on the second pronominal enclitic when the first pronominal enclitic is or includes a 3rd person (i. e., 3SG/PL or 1PL exclusive). As such, however, the marker is redundant, since its occurrence is automatic and obviate status is already marked by linear position.

relevant for Movima is therefore different from the one for Algonquian, described above as $SAP > 3_{PROX} > 3_{OBV} > 3_{FOBv}$; it must be represented as consisting of two parts, one for the local and mixed domains and one for the nonlocal domain, i. e., $1 > 2 > 3_{OBV}$ and $3_{PROX} > 3_{OBV}$, respectively.

Movima has no verbal affixes that encode person, so that the direct/inverse morphology indicates the semantic roles of cliticized or (in the case of obviative NPs) morphologically independent nominal constituents. In this sense, Movima resembles Tagalog rather than Algonquian. The overt nominative marking in Tagalog that marks the argument whose role is specified by the verbal voice affix can be compared to marking through constituent order and cliticization properties in Movima.

In addition, Movima shares with Tagalog the property that argument status (nominative vs. other in Tagalog, $PROX$ vs. OBV in Movima) interacts directly with syntactic function. As was mentioned above, the Tagalog nominative argument is the pivot of some complex syntactic constructions, e. g., relative clauses (see [13]). In Movima, the argument that corresponds to the Tagalog nominative NP is the OBV argument. While in Tagalog, the nominative NP is marked by the same proclitic in both transitive and intransitive clauses, in Movima, the single argument of an intransitive clause (S) shows the same encoding properties as OBV ; for example, it is attached to the verb by external cliticization (entailing no change in the prosody of the base), as shown in (22):²³

- (22) Movima
Ilo:ni--yʔ.
 walk--1PL
 ‘We walk.’

Moreover, in line with the privileges of the nominative argument in Tagalog, some syntactic constructions can only be accessed by the OBV argument (see Haude 2009a). As in Tagalog, this becomes apparent in relativization. Example (23a) shows the relativization of the single argument of an intransitive clause; (23b) shows the relativization of the undergoer in a transitive clause, with the predicate marked as direct; (23c) shows the relativization of the actor in a transitive clause, with the predicate marked as inverse.

²³ Singular SAPs, which cannot be expressed as OBV , are expressed by a different pronominal set with intransitive predicates (see Haude 2011).

(23) Movima

a. intransitive relative clause

*is so:te [di' joy-**che**]*

ART.PL other.person REL go-R/R

'the others who went'

[HRR_120808-tigregente 057]

b. transitive relative clause (direct)

*is kaywanra [di' joy-**a-te** = is]*

ART.PL food REL go-DIR-CO = 3PL.AB

'the food they took'

[EAO_Vida en el chaco 030]

c. transitive relative clause (inverse)

*is rey mowi:maj [di' manne-**kay-a** = is]*

ART.PL MOD Movima REL meet-INV-EP = 3PL.AB

'the Movimas who met them'

[JGD_160808-Fundacion-02 196]

Thus, like in Tagalog, the pivot that shows up in some constructions is not determined by semantic roles: when the verb is marked as direct, the pivot is the undergoer, and when the verb is marked as inverse, the pivot is the actor. In this way, the syntactic effect of Movima direct and inverse marking is comparable to that of undergoer and actor voice marking, respectively, in Tagalog.

However, the voice function of verbal marking is more limited in Movima than in Tagalog because the Movima system is also governed by the animacy hierarchy: there are strong indications that the direct and inverse construction cannot be employed independently of the referent's semantic properties. In particular, Movima uses a detransitivizing operation when a higher-ranking event participant is relativized. In this case, a transitive verb is preceded by a particle *kaw* (or *kwey*), which reduces its syntactic transitivity. The former PROX argument becomes the only argument, encoded like the single argument of an intransitive clause, and the former OBJ argument is demoted to oblique status (see Haude 2009a).²⁴ In the corpus, all relative clauses with a human acting on an inanimate entity, illustrated in (24a), show this pattern. The corresponding inverse construction, illustrated in (24b), is not attested for this type of scenario. (However, when both participants are animate, the choice between the transitive inverse and the detransitivized direct construction is, in principle, free.)

²⁴ The text corpus only contains examples of this construction with direct verbs, not with inverse-marked ones.

- (24) a. Movima de-transitivized relative clause
is buka' itila:kwa di' kaw joy<a:>-te
 ART.PL DUR.MOV man REL DETR GO<DIR>-CO
n-is buka' ke:so = is
 OBL-ART.PL DUR.MOV cheese = 3PL.AB
 'the men who were carrying their cheese'
 [HRR_2009_tape1_B 029]
- b. Unattested inverse relative clause with a human acting on an inanimate entity
 ??*is buka' itila:kwa di' joy-te-kay-a = is buka'*
 ART.PL DUR.MOV man REL GO-CO-INV-EP-ART.PL.AB DUR.MOV
ke:so = is
 cheese = 3PL.AB
 (?'the men by whom their cheese was being carried')

Thus, the Movima inverse system resembles Tagalog voice in that verbal affixes indicate the semantic roles of verbal arguments. However, due to the influence of the referential hierarchy, which restricts the inverse construction to particular scenarios, the system is not fully available for pivot-maintaining functions.

A further similarity between Movima and Tagalog is that Movima has an ergative bias. It is often stated that the Tagalog undergoer voice, which aligns ergatively, is more frequent (and considered more basic in many analyses). The Movima *OBV* argument has the same coding and behavioral properties as the single argument of an intransitive clause (see [22]), and since this argument represents the undergoer of a direct and the actor of an inverse construction, the direct construction shows an ergative and the inverse construction an accusative pattern (see Haude 2010: 299–300). Like the Tagalog undergoer voice, the Movima direct construction is much more common than the inverse: for instance, in spontaneous discourse, over 90% of all transitive clauses with two 3rd-person participants are direct (see Haude 2014).

Finally, a crucial feature shared by Movima and Tagalog is the fact that in both languages, the coexistence of more than one transitive construction can be explained hypothetically by a nominalizing origin of the verbal affixes, as mentioned in 2.2 above. As is argued extensively in Haude (2009b, 2010), predicates and NPs in Movima show three important morphosyntactic parallels. First, like the Tagalog “genitive” NP, the Movima *PROX* argument is encoded in the same way as an adnominal possessor. Second, verbs as well as nouns can occur as heads of both predicates and NPs in both languages (see Himmelmann 1991, Himmelmann 2008 on Tagalog). Third, in Movima, a verb heading an NP

invariably denotes an event participant, which is the actor of an inverse-marked verb or the undergoer of a direct-marked verb, and also in Tagalog, verbs can head argument expressions (though not with such a strict orientation; see Himmelmann 1991, Himmelmann 2008). Hence, for both languages, it is a plausible hypothesis that transitive clauses developed out of predicate-nominal clauses with possessed participant nominalizations (i. e., “he is her employee” for “she employs him”).

To sum up, Movima is a typical Amerindian inverse language with robust syntactic transitivity and person/animacy hierarchy effects; at the same time, its syntactic structure is strongly reminiscent of symmetrical-voice systems and has possibly arisen through a similar historical process.

3.3 Jarawara

Jarawara, an Arawá language spoken by some 150 people in the Brazilian Amazon (Dixon 2004), seems to constitute an intermediate case between an inverse and a symmetrical voice system as well. Dixon (2004: 422) explicitly characterizes the construction alternation as being similar to a symmetrical voice system: “Jarawara (and other Arawá languages) simply have two alternative transitive construction types, somewhat similar to alternative ‘focus’ constructions in Philippine languages [...]. Their use is determined by discourse considerations”. Nevertheless, Farrell (2005) – who distinguishes between inverse systems and symmetrical voice systems like Klaiman (1991) – treats the Jarawara system as an instance of inverse, possibly because it displays an opposition of only two transitive constructions.

The system is illustrated with the examples in (25) below; the first clause is what Dixon calls “A-construction (Ac)”, the second one is an “O-construction (Oc)”, which takes the marker *hi*.²⁵ The labels reflect the fact that in (25a), the central argument (which, among other things, controls gender agreement and shows a preference for the clause-initial position) is the actor (here, an experiencer), while in (25b), the central argument is the undergoer (here, a stimulus).

²⁵ Note that the morphology employed in order to instantiate the opposition between clause types is rather complex when the whole paradigm is taken into account; it is based on a system of predicate forms consisting of verb roots, TAM markers, and contrasting gender agreement patterns. While the O-construction might be seen as morphologically derived from the A-construction in nonlocal scenarios (25), this is not straightforward with verbal complexes in mixed scenarios (26).

- (25) Jarawara (Arawan)
- a. *Mioto Watati awa-ka.*
 M.(M) W.(F) see-DECL.M
- b. *Watati Mioto hi-wa hi-ke.*
 W.(F) M.(M) hi-see hi-DECL.F
 Both: ‘Mioto (M) saw Watati (F).’
 (Dixon 2000: 31)

While the O-construction is more heavily marked than the A-construction, regarding both form and distribution, Dixon argues that the former cannot be analyzed as being derived from the latter in a passive-like manner, since none of the core argument NPs is demoted in either construction. Furthermore, both constructions are fully transitive: “the two core transitive arguments, A and O, are obligatorily marked within the predicate, in the same way in each construction type. In both an Ac and an Oc the first pronominal position refers to the O and the second pronominal position to the A argument” (Dixon 2000: 32). Since singular 3rd persons are zero-marked (Dixon 2000: 25) and local scenarios only permit the A-construction (Dixon 2000: 43), this is especially apparent in mixed scenarios involving nonsingular 3rd persons (see [26] below).

The central argument (i. e., A of the A-construction and O of the O-construction) – which shows a preference, if overtly expressed by a full NP, to precede the other core argument – represents the topical participant in text passages and feeds the pivot for equi-NP deletion (Dixon 2000: 30–43). Accordingly, the A-construction can be compared to the Algonquian-type direct construction, and the O-construction to the Algonquian-type inverse, where the topical participant is encoded as proximate; this is Farrell’s (2005: 79) approach. On the other hand, and in line with Dixon (2000: 33), the Jarawara A-construction can also be compared to the Philippine-type actor voice, where the actor argument has a pivot function, and the O-construction would be comparable to the Philippine-type undergoer voice, where the undergoer argument has a pivot function.

Jarawara clause morphology differs from the Plains Cree and Tagalog equivalents in that the Ac predicate is less marked than the Oc one; furthermore, and more importantly, the predicate *agrees* with the central argument instead of merely signaling the latter’s semantic role, and there is no overt marking on nominals. Therefore, aside from contextual information, one has to know the gender of the central NP in order to identify it as the central argument.

The clauses in (26) show mixed scenarios. As in Tagalog, and in contrast to Plains Cree, both constructions are in principle available for both SAP-on-3rd and 3rd-on-SAP interactions (although in the former case, the availability of the inverse/UV construction depends on the presence of tense-modal marking on

the verb; Dixon 2000: 43). In SAP-on-3NSG scenarios like the ones illustrated below, feminine gender markers appear no matter what, so it is a more subtle distinction that helps telling both constructions apart. The 1st person singular S/A index *o-* appears on the verb when this participant is A (26a)–(26b), and the form *owa* appears in the first slot when it is P (26c)–(26d); the 3rd person nonsingular appears as invariable *mee* in such clauses, either in the first slot when in P function (26a)–(26b) or in the second slot when in S/A function (26c)–(26d). If the central argument is the 1st person singular (26a), (26c), the role-neutral marker *o-* ‘1sg’ appears as a further index in a post-verbal, post-TAM slot that immediately precedes an optional secondary verb (not illustrated here) and the mood suffix (here: the declarative feminine *-ke*).

(26) Jarawara (Arawan)²⁶

- a. 1SG → 3NSG A-construction

Mee o-wa#katoma-ra o-ke.
 3NSG 1SGA-stare.at-TAM.F 1SG-DECL.F

- b. 1SG → 3NSG O-construction

Mee o-wa#katoma-ra-ke.
 3NSG 1SGA-stare.at-TAM.F-DECL.F

Both: ‘I stared at them.’

- c. 3NSG → 1SG O-construction

Owa mee ka#katoma-hara-ke.
 1SG P 3NSG stare.at-TAM.F-DECL.F

- d. 3NSG → 1SGA-construction

Owa mee ka#katoma-hara o-ke.
 1SGP 3NSG stare.at-TAM.F 1SG-DECL.F

Both: ‘They stared at me.’

(Dixon 2004:421–422)

The syntax and discourse features of such alternations appear to mirror to a considerable extent those found in the Tagalog voice system. Regarding their morphology, however, not only do A-constructions not have equally complex morphology as their Oc counterparts – their morphology is actually more complex, at least for these 1SG-on-3NSG interactions. Such predicate structures are rather like Plains Cree ones, combining both neutral and role-marked indexes, although they do not include overt direct or inverse morphemes. Unlike Tagalog predicates, the predicates lack dedicated voice morphemes. In addition, the opposition between the two constructions in Jarawara can be regarded as closer

²⁶ Following Dixon (2004), the symbol # stands for a phonological word boundary.

to the direct-inverse in Algonquian in that the system is neither as rich nor as flexible as the Tagalog one. Jarawara does have an applicative-like derivation (*ka-*), but with some verbs it is a bona fide (albeit semantically broad-range) applicative that increases syntactic valency, whereas with others it has idiosyncratic semantic effects and leaves clause transitivity unaltered (Dixon 2004: 254–255). The Jarawara system is a hybrid like Movima, but, given the absence of verbal “voice” morphemes and the unequal complexity of the two constructions, clearly of a different kind.

4 Conclusion

In this article, we compared five genealogically unrelated languages with different typological properties, which, however, have one particular set of characteristics in common: they all have two (or more) transitive construction types, many of which cannot be said to be morphologically derived from the other;²⁷ they all have verbal morphemes that mark the participant role(s) of the core argument(s); in all these languages, the alternation between the constructions occurs (though not exclusively) in situations involving two third-person participants, where it is, at least in part, governed by discourse considerations.

Two subtypes of such systems are traditionally distinguished in the literature: direct-inverse systems, best known from the American continent, and symmetrical-voice systems, known from Austronesian languages. Based on the comparison of two languages that are often presented as typical examples of each of these systems, Plains Cree and Tagalog, we chose some properties that help comparing the two systems. The results for Plains Cree, Tagalog and the additional languages are summarized in Table 2. Again, note that the +/- symbols are oversimplifications of the findings, which are discussed below.

Table 2 shows that apart from the above-mentioned shared features, not all properties are equally distributed in the five languages under comparison. We believe that the most important criteria for distinguishing the direct-inverse type on the one hand and the symmetrical-voice type on the other, are the rigidity vs. flexibility of the systems. “Rigidity” here means that the choice of the construction is determined by inherent referential properties of the arguments, such as person or animacy; “flexibility” means that inherent properties of the arguments

²⁷ Those that arguably can be seen as derived-underived pairs are the Mapudungun inverse and direct and some of the Jarawara O-constructions and A-constructions; see Footnote 25.

Table 2: Overview of properties of the languages under study.

	Plains Cree	Mapudungun	Movima	Jarawara	Tagalog
More than one basic transitive construction	+	+	+	+	+
Nominals overtly distinguished	+	-	+ (constituent order)	-	+
Person agreement	+	+	-	+	-
Both actor and undergoer roles encoded by verbal morphemes (direct/inverse or voice)	+	+	+	+	+
More than one participant role encoded by verbal morphemes	+	+	+	+	-
Alternations are determined by ontological and grammatical factors (“rigid”)	+	+	+	-	-
Alternations can be used for discourse purposes (“flexible”)	+	+	+	+	+
S aligns with (only) one of the arguments of a transitive clause	-	-	+ (“external clitic”)	-	+ (<i>ang=</i>)
System interacts with syntactic pivot	-	-	+	+	+

play no role for the choice of the construction, so that the constructions are available for discourse-organizing purposes. Even though this has not always been mentioned explicitly in the literature, rigidity can be regarded as the defining property of inverse languages, while the flexibility that allows the pivot-maintaining function is the defining property of symmetrical-voice languages. It seems that the existence of grammatical constraints based on reference properties is central for distinguishing the two morphosyntactic types: even in languages where a direct-inverse opposition only applies in the nonlocal domain, as in Navajo (see Witherspoon 1980), this is based on semantics, not discourse; thus, to call something “inverse” implies that the action goes against some grammatically established default direction.

These properties defining the two systems, rigidity vs. flexibility, are located on different levels: in a rigid system, the factors that determine the choice of the construction include referential properties of the argument(s), such as person or animacy. In a flexible system, the choice of the construction is determined by pragmatics. Since a flexible system is largely independent of the inherent properties of nominals, it can fulfil a pivot-maintaining function, applicable to

complex constructions such as relativization. It seems therefore not surprising that there should exist a hybrid type like *Movima*, where the choice of the construction is in part rigid, but where the alternation can be employed for syntactic purposes as long as the hierarchy is not violated (see [23]). At the same time, with its additional detransitivizing construction, *Movima* also shows that the two systems are to some extent mutually exclusive: the more a system is grammaticalized with respect to inherent properties of the arguments such as animacy, the less it is available for voice-like alternations.

Other differences of the languages in the sample involve verbal person agreement and/or marking of the arguments: *Movima* and Tagalog have no verbal person markers, while Plains Cree, Mapudungun and Jarawara do; in Mapudungun and Jarawara, NPs are not marked for obviation (as in Plains Cree and, by constituent order, in *Movima*) or case (as in Tagalog), so that the arguments whose roles are encoded by the verb morphology have to be identified by other means (context or, in the case of Jarawara, gender). It is not clear at this point whether, and to what degree, these differences contribute to a more general distinction between the functions of the systems of the different languages or not; one might be led to think that the highly synthetic morphology of a language like Plains Cree – with elaborate person marking on the verb, relatively free syntactic structure and omissability of argument NPs – contributes to the fact that the direct-inverse system is independent of morphosyntactic alignment or subject choice, whereas in more analytic and configurational languages like *Movima* and Tagalog, the inverse/voice marking has a direct impact on the interpretation of NPs, which at the same time represent grammatical relations. We wish to leave this question open for future research.

Finally, it appears that hardly any categorical distinction can be made between Tagalog, as the only Austronesian language in the sample, on the one hand, and the four languages from the American continent, on the other. The only remarkable difference seems to be that syntactic transitivity plays an important role in the systems of the indigenous American languages reviewed here (as in many others), but not in Tagalog: in Tagalog, the verbal morphemes indicate the role of only one argument, irrespective of the number of arguments in the clause; in other words, for the choice of the Tagalog voice marker it does not matter if the clause has one, two, or more arguments. Another notable difference, which is often mentioned in the literature on Austronesian voice phenomena, is the fact that Tagalog displays several undergoer-oriented transitive voices while languages of the Americas show at most only one. Nevertheless, this fact is related to the apparently idiosyncratic development path followed by applicative constructions in Tagalog, which differs from the one seen in other Philippine languages slightly and from the one found in other Austronesian languages rather markedly (cf. the

relevant facts of e. g., Indonesian, but also of Totoli as described by Himmelmann and Riesberg 2013). Further research will have to explore the likely reasons why the Tagalog voice devices targeting peripheral semantic roles (instruments, reasons, beneficiaries, locations, etc.) ended up coalescing, or at least interacting in formally intricate ways, with voice devices targeting core semantic roles (agents and patients) whereas Amerindian applicatives have stayed strictly separate from the direct-inverse opposition.

We hope to have contributed to the discussion of which factors are involved in the make-up of a morphosyntactic system where there is a choice between two transitive constructions. More generally, the paper has shown that languages with more than one transitive construction should take a more prominent place in alignment typology, where up to now, the main criterion for establishing morphosyntactic types was the comparability of one of the two arguments in a *single* transitive construction with the only argument of an intransitive one. To account for linguistic systems like the ones described here, alignment typology might be more adequate if an initial distinction were made between languages with only one, and languages with more than one transitive construction, before proceeding to the identification of accusative, ergative etc. alignment types (see Himmelmann 2010). Such a step may be taken by assembling both types of systems with two transitive constructions – inverse and symmetrical voice – into one, which can then be opposed to languages with only one transitive construction.

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