

PERCEPTION VERB COMPLEMENTS IN MANDAR*

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Abstract This paper investigates the syntax of a string which surfaces beneath verbs of direct perception in Mandar, an Austronesian language of Indonesia. It is shown that a number of its properties follow from an analysis which takes it to involve clausal complementation followed by a step of *Raising to Object*.

Keywords: Syntax, Perception, Raising

1 INTRODUCTION

This study investigates the syntax of a string that appears beneath verbs of perception in Mandar, an Austronesian language of Indonesia. I will refer to this string as the Perception Verb Complement (pvc). An example is given in (1).

- (1) Ma'ita'a' [**tau mil-lamba** __].
I'm watching people INTR-go.by
'I'm watching people go by.' JT: 6.7, 21

The pvc shows two properties which can be read from its surface structure. First, it denotes a directly perceived event. Second, it contains two components: a nominal element and a relative clause-like constituent which follows. I refer to the first of these elements as the *antecedent* and the second as the *pseudorelative*. It is the task of this paper to understand the syntax which holds them together.

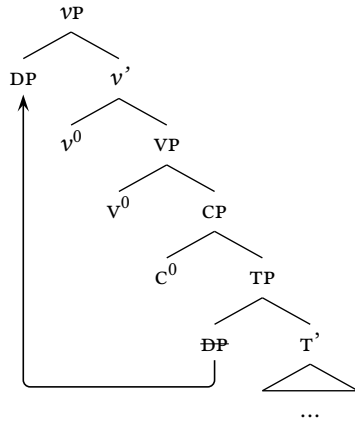
It is useful to note in this respect that the pvc resembles a construction which surfaces beneath perception verbs in many languages of Europe, including those of the Romance family (Kayne 1975; Cinque 1992). This structure is shown in (2).

- (2) J'ai vu [Mario qui __ courait à tout vitesse].
I have seen NAME was.running at full speed
'I saw Mario running at full speed.' French; Cinque 1992: 1

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This construction resembles the pvc in several respects, and the similarities between the two will feature in the discussion which follows. The investigation of the string in (1), moreover, will lead to an analysis with history in work on the construction in (2). This is one which implicates a step of *Raising to Object*:

(3) *The Structure of the PVC*



and takes the pseudorelative to be a clausal complement of the matrix verb and understands the antecedent to raise out of it to a position in the matrix *VP*.

The remainder of this paper is structured as follows. Section 2 provides some background on Mandar and Section 3 lays out the basic facts of the pvc. Section 4 turns to its syntax and develops the analysis in (3). Finally, Section 5 brings up a final property of the pvc and connects it to an analogous constraint that holds over the Romance construction in (2).

2 MANDAR BACKGROUND

Mandar is an Austronesian language of the South Sulawesi subfamily. It is native to a stretch of land on the western coast of the island of Sulawesi, centered around the towns of Majene and Polewali. There are several dialects spoken in this area, and the present study will focus on the standard variety of Polewali Mandar.

The language shows several properties which are typical to the region, and two of these will play a role in the discussion to follow. The first of these involves word order. Mandar is a predicate-initial language, and across all clause types, verbal predicates precede their arguments. This pattern can be seen in the example below, which shows the word order of matrix and embedded clauses.¹

¹ GLOSSING: ABS: absolutive, ADV: adverbative, ANTIP: antipassive, ERG: ergative, FUT: future, GEN: genitive, INTR: intransitive, NEG: negation, NRR: non-restrictive relative clause, PASS: passive, PFV: perfective, PR: pseudorelative, RR: restrictive relative clause

- (4) *Sangga'* **salili**=i *iSitti* *mua'* **lamba**=i *muane-na*.
 always lonely=3ABS NAME if go=3ABS husband-3GEN
 'Sitti gets lonely when her husband is away.' Sikki *et al.* 1987: 244

In this example, the matrix predicate *sangga'* *salili* 'always lonely' precedes the matrix absolutive argument *iSitti*. In the same vein, the embedded predicate *lamba* 'go' precedes the embedded absolutive argument *muane-na* 'her husband'.

There are also constructions in which an absolutive argument precedes its predicate. The pvc is a construction of this type. Two others are shown below.

- (5) **Innai** [*mu-solangan* ___]?
 who 2ERG-accompany
 'Who did you go with?' Friberg & Jerniati 2000: 225
- (6) *Sa'* *masae*=i **iKaco'** [*mottong* ___ *di aya di Ma'assar*].
 Truly long=3ABS NAME stay in up in PLACE
 'It has been a long time for Kaco' to be in Makassar.' Sikki *et al.* 1987: 265

In the first of these constructions, an interrogative noun phrase surfaces in a clause-initial position. In the second, a noun phrase follows a non-thematic predicate and precedes a non-finite clause which contains a gap.

There are reasons to believe that the word order in each of these contexts arises from a process of movement that displaces an absolutive argument from a postverbal position. In the first case, this is a step of WH-movement (Brodkin 2020, 2021a). In the second, it is a process of *Raising to Subject* (Brodkin 2021c).

For this reason, it seems reasonable to begin the investigation of the pvc with the assumption that its argument-initial word order is likely to arise through a step of movement as well. I will return to this stance and justify it in Section 4.

Beyond the facts of word order, there is a second property of the language which will be useful to understand. This is the voice system. Like other languages of the region, Mandar shows morphological alternations on the verb which track properties of argument structure. At the heart of this system is a diathesis between antipassive and transitive verbs. The basic contrast between these two categories is shown with the root *bawa* 'bring' below.

- (7) **Mam**-*bawa*=di *duriang pole di kapping?*
 ANTIP-bring=JUST.3ABS durian from in village
 'Did he just bring durians back from the village?' Sikki *et al.* 1987: 550
- (8) **Na**-*bawa*=mi *tama di boyang*.
 3ERG-bring=PFV.3ABS into in house
 'He brought them into the house' Pelenkahu *et al.* 1983: 153

In the first of these examples, the verb *bawa* takes the antipassive prefix *maN-*. In the second, it takes the ergative prefix *na-*. I will refer to verbs with *maN-* as ‘antipassive verbs’ and those with ergative prefixes as ‘transitive verbs.’

The alternation between antipassive and transitive forms correlates with several clause-level patterns in the language, and these have been laid out in previous work (Brodkin 2021a,c). What is relevant at present, however, is a simple interaction between this morphology and the argument structure of the verb.

In the set of contexts under investigation, there is a straightforward link between the definiteness of the object and the choice of verbal prefix. When the object is indefinite, the antipassive prefix must appear. In example (7), for instance, the object is an indefinite NP (“durians”) and the verb takes *maN-*. When it is definite, in contrast, the ergative prefix must be used. Thus in example (8), where the object is definite (a null pronominal), the ergative prefix *na-* is required.

This pattern will provide us with the basic means to examine the relationship that holds between the antecedent of the pvc and the verb of perception which precedes it. As such, I will return to it in Section 4.

With this background in hand, let us begin our investigation of the pvc.

3 THE CONSTRUCTION OF INTEREST

The basic means to report direct perception in Mandar is through the use of the bracketed string in (9). As we have seen, this is built from two parts: a nominal (the antecedent) and a following clause-like element (the pseudorelative).

- (9) Ma'-ita'=a' [tau mil-lamba __].
 ANTIP-see=1ABS person INTR-go.by
 'I'm watching people go by.' JT: 6.7, 21

The main line of investigation in this paper will focus on the syntax of this string. Before turning to this topic, however, we can begin with an observation about its distribution. The pvc can surface beneath the range of verbs which express direct perception in the language. Some additional examples appear below.

- (10) Na-sa'ding=i iKaco [iCicci' mik-ke'de' __]
 3ERG-feel=3ABS NAME NAME INTR-stand
 'Kaco' felt Cicci' stand up.' JT: 7.15, 260
- (11) Di-irangi=i [iKaco' na-pecawai __].
 PASS-hear=3ABS NAME 3ERG-laugh.at
 'Kaco' was heard being laughed at.' JT: 7.12, 58
- (12) Ka-lambiangi=i [iKaco' mac-coro' __].
 ADV-catch=3ABS NAME ANTIP-steal
 'Kaco' was caught stealing.' JT: 7.12, 312

Note that the verbs which embed the pvc do not need to bear a specific type of prefix. They can host the antipassive prefix *maN-* (9), the ergative prefix (10), or other morphemes in complementary distribution with these (11)-(12).

Beyond the set of verbs which express direct perception, there are no other predicates which embed the pvc. Propositional attitude verbs, for instance, cannot embed this string (13). In the typical case, rather, they select for finite complement clauses that are headed by the overt complementizer *mua'* (14).

- (13) *U-**issang**=i [iKaco' ma'-botor ___]
 1ERG-know=3ABS NAME INTR-gamble
 IM: 'I know that Kaco' gambles.' JT: 7.12, 67
- (14) Pura=i na-**pipissang** [**mua'** na=na-ropo'=i boyan-na,]
 Once=3ABS 3ERG-reveal that FUT=3ERG-sell=3ABS house-3GEN
 'Once he revealed that he would sell his house,' Sikki *et al.* 1987: 291

From this distribution, it seems reasonable to conclude that that the pvc bears a special connection to the syntax of direct perception. In this vein, we can also observe that there is a link between the appearance of this string and the semantics of direct perception. In particular, it seems that the pvc represents the Mandarin instantiation of a *direct perception report* in the sense of Barwise (1981).

There are several diagnostics which point toward this conclusion. The first of these concerns transparency. Direct perception reports are epistemically neutral in that they do not entail that the perceiver hold a belief that corresponds to their content. This is also true of the pvc. It is possible, for instance, for it to be followed with an assertion that the perceiver holds no such belief.

- (15) Na-ita=i [iKaco' s-um-angi' ___], **tapi' na-sanga mecawa=i**.
 3ERG-see=3ABS NAME INTR-cry but 3ERG-think laugh=3ABS
 'She saw Kaco' crying, but she thought he was laughing.' JT: 7.15, 271

This pattern dovetails with a range of additional observations which suggest a meaningful and guiding parallel between the pvc and direct perception reports at large. For instance, this construction cannot host individual-level predicates (16) or statives (17). The same restriction holds over its analogue in English.

- (16) *U-**irrang**i=i [iKaco' **manarang** ___ ma'-ellong].
 1ERG-hear=3ABS NAME be.skilled ANTIP-sing
 IM: 'I heard Kaco' be skilled at singing.' JT: 7.15, 205
- (17) *Na-ita=i iCicci' [iKaco' **monge'** ___ lao].
 3ERG-see=3ABS NAME NAME love to her
 IM: 'Cicci' saw Kaco' love her.' JT: 7.15, 206

In the same vein, the PVC requires tense-matching between the matrix and the embedded verb. When the matrix verb receives a future tense interpretation, for instance, a past tense reading of the embedded verb is ruled out (18).

- (18) Na=ma'-irangi=o [sanaeke' ma-ngino __ (*dionging)]
 FUT=ANT-hear=2ABS kid INTR-play yesterday
 'You'll hear kids playing (*yesterday)' JT: 8.3, 17

In light of these facts, it seems reasonable to conclude that the PVC is a direct perception report. With this much in tow, we can now turn to its syntax.

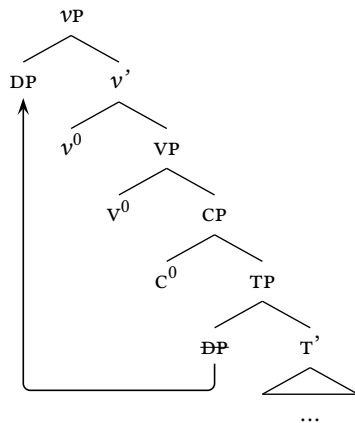
4 THE SYNTAX OF THE PVC

Turning to the analysis of the PVC, we can begin by listing theoretical desiderata. The overarching analysis of this construction should capture the basic structural properties of the antecedent and pseudorelative, their relationship to the matrix verb, and the facts of surface constituency. To meet these goals, we might ask:

- i. What is the “pseudorelative” constituent which follows the antecedent?
- ii. What functions as the direct object of the matrix verb?
- iii. What is the relationship between the antecedent and the pseudorelative?

These questions do not find obvious answers in the surface form of the PVC, and at first glance, it would appear plausible to analyze this string in any of several ways. As we investigate its syntax in finer detail, however, a body of evidence will accumulate that points to an analysis with the structure below:

- (19) *The Raising to Object Analysis*



where the surface string that I term the pvc implicates a process of *Raising to Object*. The defining properties of this analysis are the following.

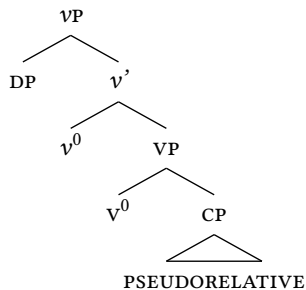
- i. The pseudorelative is a clausal constituent: a non-finite CP.
- ii. The antecedent is a direct object of the matrix verb: it occupies SPEC,VP.
- iii. The antecedent raises to this position from a position in the pseudorelative.

The following subsections lay out the evidence for each of these claims.

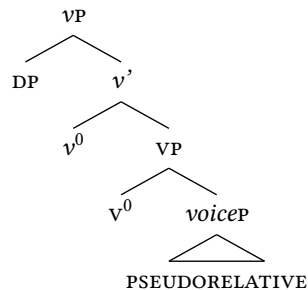
4.1 THE INTERNAL SYNTAX

We can begin our investigation with an attempt to understand the properties of the pseudorelative. The Raising to Object analysis in (19) treats this constituent as a non-finite clause, but the advantages of this analysis are not immediately apparent from its surface form. Alongside the “clausal” analysis in (20), for instance, one could imagine a “reduced” alternative along the lines of (21).

(20) *The Clausal Analysis*



(21) *The Reduced Analysis*



These analyses differ in the amount of structure which they ascribe to the pseudorelative. On the first analysis, in (20), this constituent is treated as a clause. On the second, in (21), it is treated as something smaller: for instance, a *voiceP*.

The Reduced Analysis in (21) is not inherently implausible, and an approach along these lines would be well-poised to capture an key fact about the pseudorelative: it seems to lack the projections associated with the highest level of clausal structure. For instance, it cannot host the finite complementizer (22):

- (22) Ma'-ita=a' [tau (*mua') mil-lamba].
 ANTIP-see=1ABS person that INTR-go.by
 'I'm watching people go by.'

JT: 6.7, 21

And in the same vein, it cannot host the mark of absolutive agreement (23).

- (23) Ma'-ita=a' [tau mil-lamba(*=i)].
 ANTIP-see=1ABS person INTR-go.by=3ABS
 'I'm watching people go by.' JT: 6.7, 22

These patterns would seem to suggest that the pseudorelative does not form a full and finite CP. But before we bring this point to bear on the question of size, it is important to consider it in context. In Mandar, the same constraints hold over every construction which allows extraction of the absolutive argument. Relative clauses, for instance, lack overt complementizers and absolutive agreement:

- (24) Maroa'=tend=i [tau [me-ita ___]].
 numerous=so=3ABS person ANTIP-watch
 'The people watching are so numerous!' Sikki *et al.* 1987: 1003

As do clauses that launch WH-movement (25) or raising to absolutive (26):

- (25) **Apa** [na-sanga [mu-bawa ___]]?
 what 3ERG-think 2ERG-bring
 'What does he think you brought?' JT: 7.22, 188
- (26) Mammis=i=tu'u **lasse'-na toTande** [di-ande ___].
 sweet=3ABS=really langsats-3GEN PLACE PASS-eat
 'The langsats from Tande is sweet to eat.' Sikki *et al.* 1987: 598

The first of these patterns is a type of *that-trace effect*, and the second is an *anti-agreement effect*. They represent the morphosyntactic hallmarks of extraction in Mandar and the other languages of the South Sulawesi subfamily.

These patterns could be interpreted in several ways, and the literature has not proposed a common analysis of the two in other languages of the subfamily (Finer 1997; Baier 2018). But there is a way in which they can be unified, and my sense is that that this provides the best way to understand the system of extraction in the language and the properties of the pseudorelative as well. In the past, I have argued that these patterns both arise from a constraint on the sizes of clauses from which the absolutive argument may be extracted: they cannot be finite (Brodkin 2021a). In concrete terms, I propose that they are cps that lack certain layers of clausal structure: for instance, *Force*⁰ or *Fin*⁰.

If this view is correct, it provides us with a way to understand the syntax of the pvc. We might assume that the pseudorelative is a non-finite CP from which the antecedent has been extracted. This is the analysis that is shown in (19). If adopted, it would allow us to explain three properties of the pvc: the absence of overt complementizers, the lack of absolutive agreement, and the non-canonical linear position of the antecedent with respect to the following predicate.

With this analysis in mind, let us return to the question of size. The patterns above suggest that the highest layers of clausal structure are missing from the

pseudorelative and other constituents which allow extraction. But as we look further down in the clause, we will find that there is little evidence for the absence of other structure in the pseudorelative and other constituents of this type.

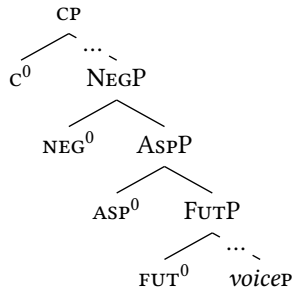
To make this point, it will be instructive to take a brief detour into the syntax of the middle field. In finite contexts, there are a number of elements which occur between the left edge of the clause and the verb. These include a class of proclitic adverbs, sentential negation, aspectual auxiliaries, and the future proclitic *na=*.

- (27) **Andiap**=pa=a' **rua** lao di boyan-na.
 NEG=yet=1ABS ever to at house-3GEN
 'I haven't ever been to his house yet.' Friberg & Jerniati 2000: 146
- (28) **Andiang**=o **na**=pole a?
 NEG=2ABS FUT=come eh?
 'You won't come, eh?' JT: 4.3, 71

These elements are rigidly ordered with respect to each other: negation precedes the auxiliaries (27) and the future proclitic strictly precedes the verb (28).

We can understand this rigid ordering on the assumption that negation, the aspectual auxiliaries, and the future prefix spell out a string of heads in the space between the verb and the finite complementizer (see also Brodtkin 2021b). This type of analysis is sketched out, albeit in a simplified form, in (29) below.

- (29) *The Middle Field*



Should we adopt this view, we arrive at another means to pry into the size of the pseudorelative. If this element is roughly the size of a clause, we predict that it should be able to contain the middle-field elements above. And this is indeed what we find: it can host middle-field elements like negation (30).

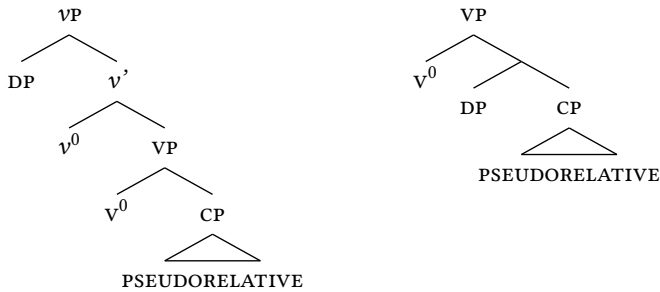
- (30) U-ita=i gena' [iKaco' **indang** ma'-jama __].
 1ERG-see=3ABS earlier NAME NEG ANTIP-work
 'I saw Kaco' not working earlier.' JT: 8.3, 173

A natural interpretation of these facts is that the pseudorelative contains the functional structure of the middle field. For this reason, I would like to suggest that it is essentially clausal in size: namely, that it is a non-finite CP.

4.2 THE EXTERNAL SYNTAX

With this much in place, we can now turn our attention to a second question about the syntax of the pvc. This concerns the manner in which the antecedent and the pseudorelative are integrated into the matrix clause. We can begin our investigation into this topic by laying out two logical possibilities:

- (31) *The Non-Constituent Analysis* (32) *The Constituent Analysis*



On the first of these analyses, in (31), the antecedent and pseudorelative do not form a surface constituent: rather, they occupy separate positions in the *vp*. I refer to this as the *Non-Constituent Analysis*. It contrasts with the *Constituent Analysis* in (32), which takes the two to form a constituent complement to *v*⁰.

As a minimal addition, it is useful to consider three possible extensions to the Constituent Analysis in (32). The literature has historically favored this type of analysis for several types of pseudorelative-like string, but it has reached little consensus on the question of the label that is to be assigned to them. On some views, they are CPs (Rizzi 1992; Casalicchio 2016); on others, TPs (Pearson 2018); and on yet others, DPs (Graffi 1980; Kayne 1981; Angelopoulos 2015). These three possibilities are schematized below.

- (33) *Single CP* (34) *Single TP* (35) *Single DP*
-
- Tree (33) structure: VP → v⁰, CP. CP → DP, C'. C' → PSEUDORELATIVE.
- Tree (34) structure: VP → v⁰, TP. TP → DP, T'. T' → PSEUDORELATIVE.
- Tree (35) structure: VP → v⁰, DP. DP → DP, CP. CP → PSEUDORELATIVE.

In the face of this analytical diversity, it is useful to identify two points of divergence which will allow us to decide empirically between the possibilities at hand. The first of these lies in the relationship between the antecedent of the pvc and the matrix verb. If it is possible to show that the antecedent behaves as a direct object of the matrix verb, then we would come to a reasonable argument against the Single-CP and Single-TP analyses which appear in (33)-(34).

The second point of divergence involves constituency. If it were possible to show that the antecedent and the pseudorelative do not form a surface constituent, we would have reason to abandon the suite of Constituent analyses above. In doing so, we would be left with the Non-Constituent Analysis in (31).

When we begin to look into these questions that surround the pvc, we will find that evidence accumulates rapidly in favor of the Non-Constituent Analysis.

As a first observation, we can note that the antecedent of the pvc triggers agreement in the matrix clause. When the matrix verb is transitive, the antecedent is coindexed with absolutive agreement on the matrix T^0 (36).

- (36) U-ita=i [iKaco' bemme — naung di passauang].
 1ERG-see=3ABS NAME fall down in well
 'I saw Kaco' fall into the well.' JT; 8.17, 63

This fact provides a clue that the antecedent is an object of the matrix verb.

There is a second pattern which provides further evidence for the same view. Recall that Mandar verbs show a morphological alternation which is linked to the definiteness of the object. Simplifying slightly, they take antipassive prefixes when the object is indefinite and ergative prefixes when it is definite (Section 2). While the syntactic correlates of this alternation are complex, its interaction with the pvc is straightforward: it treats the antecedent of the pseudorelative exactly like a canonical object. The following examples illustrate this fact.

- (37) Ma'-irangi=a' [tau bemme — naung di passauang].
 ANTIP-hear=1ABS person fall down in well
 'I heard someone fall into the well.' JT; 8.17, 67
- (38) U-irangi=i [iKaco' bemme — naung di passauang].
 1ERG-hear=3ABS NAME fall down in well
 'I heard Kaco' fall into the well.' JT; 8.17, 64

In the first of these examples, the antecedent of the pvc is indefinite and the matrix verb is required to take the antipassive prefix *ma'*. In the second, the antecedent is definite and the matrix verb is required to take an ergative prefix like *u-*. In other words, the antecedent conditions an alternation on the matrix verb which is canonically linked to the properties of the direct object (7-8).

This pattern holds in a systematic way beneath every verb which embeds the pvc. It is worthwhile to note, moreover, that it does not hold beneath predicates

that embed other types of finite and non-finite clausal complements. In Mandarin, there are a range of verbs that select complement clauses of different sizes, and these typically show idiosyncratic and invariant patterns of prefixation. For instance, the verbs *uang* ‘say’ and *issang* ‘know’ both embed clauses headed by the finite complementizer *mua*’, but the former takes the antipassive prefix *maN*- (39) and the latter the ergative prefixes which mark the transitive voice (40).

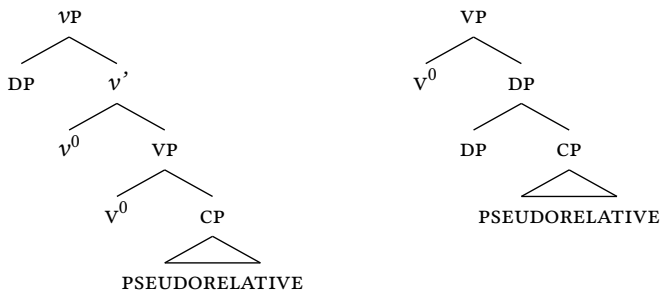
- (39) **Ma**’-uang=a’ [mua’ pole=i iKaco’].
 ANTIP-say=1ABS that come=3ABS NAME
 ‘I said that Kaco’ came.’ JT: 7.22, 156
- (40) **U**-issang=i [mua’ pole=i iKaco’].
 1ERG-know=3ABS that come=3ABS NAME
 ‘I know that Kaco’ came.’ JT: 7.26, 137

The force of these facts is to suggest that the verbs that embed the pvc do not simply embed complement clauses. Rather, they appear to treat the antecedents of the pvc as direct objects. This conclusion allows us to set aside the analyses which would reduce the syntax of the pvc to that of clausal complementation: for instance, the “single TP” and single-CP analyses of (33)-(34).

4.3 THE ANALYSIS

In light of this analytical step forward, it is useful to pause and consider the analytical options which remain. In the possibility space above, there are two. The first is the Non-Constituent Analysis in (21). The second is the subclass of Constituent Analysis on which the pseudorelative is contained in a nominal constituent that corresponds to the antecedent. These possibilities are given below.

- (41) *The Non-Constituent Analysis* (42) *The Single-DP Analysis*



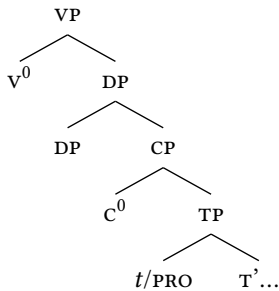
The Single-DP analysis in (42) has historically held currency in work on the complements of perception verbs in many languages of Europe for the reason that the pseudorelatives in these languages look much like relative clauses. It is

interesting to note, then, that the same is true in Mandar. In this language, the pseudorelative bears the same surface shape as a restrictive relative clause (44).

- (43) Ma'-ita=a' buku [PR **bemme** ___].
 ANTIP-see=1ABS book fall
 'I saw a book fall.' JT: 8.3, 138
- (44) U-baca=i buku [RR **bemme** ___].
 1ERG-read=3ABS book fall
 'I read the book that fell.' JT: 8.3, 139

Given this fact, it is tempting to link the analysis of the pseudorelative to the syntax of relative clauses at large. For instance, we might assume that the pseudorelative is a clause inside of the antecedent DP and that it contains a gap which is linked to the surface position of the antecedent by movement or binding (Graffi 1980; Kayne 1981; Donati & Cecchetto 2011). This is shown in (45).

(45) *The DP-Internal Clause Analysis*



This analysis is useful in a respect, as it provides the means to capture the relationship that holds between the antecedent of the pvc and the embedding verb. Nevertheless, it is not without problems. Most notably, it fails to account for a suite of properties that separate the pseudorelative from other types of relativization structure in the language. These patterns are briefly enumerated below.

To begin, it is possible for the pseudorelative to be associated with a null antecedent (46). The same is impossible for restrictive relative clauses (47).

- (46) U-ita=i **pro** [PR **bemme** ___].
 1ERG-see=3ABS 3SG fall
 'I saw him fall.' JT: 7.15, 97
- (47) *U-ala=i **pro** [RR **bemme** ___].
 1ERG-take=3ABS 3SG fall
 INT: 'I took what fell.' JT: 7.15, 77

In the same vein, it is possible for the pseudorelative to follow nominals which cannot host restrictive relative clauses: for instance, proper names (48).

- (48) U-ita=i **iKaco'** [PR bemme __].
 1ERG-see=3ABS NAME fall
 'I saw Kaco' fall.' JT: 7.12, 341

To these facts one might respond with the suggestion that the pseudorelative is a type of non-restrictive relative clause. Unfortunately, however, it is clear that this is not correct. In Mandarin, non-restrictive relatives take a form which is distinct from that of the pseudorelatives and restrictive relatives above: they must be prosodically offset (marked with a comma) and overtly headed (49).

- (49) U-ita=i iKaco' , [NRR **iaro'o** ma'-balu' do'ayu=o].
 1ERG-see=3ABS NAME the.one ANTIP-sell vegetable=there
 'I saw Kaco', the guy who sells vegetables.' JT: 7.15, 52

Pseudorelatives do not (and cannot) show either of these properties.

- (50) U-ita=i iKaco' (*,) [PR (***iaro'o**) ma'-balu' do'ayu=o].
 1ERG-see=3ABS NAME the.one ANTIP-sell vegetable=there
 'I saw Kaco' selling vegetables.' JT: 7.15, 53

These observations suggest that, from a syntactic standpoint, the pseudorelative cannot be equated with any type of relative clause in the language.

In broader perspective, this conclusion suggests a type of kinship between the pseudorelative and the predicative constituent that appears beneath verbs of perception in languages of the Romance family and Greek (Schwarze 1974; Kayne 1975; Angelopoulos 2015). Like its Mandarin analogue, this string follows a nominal antecedent and resembles a restrictive relative clause:

- (51) J'ai vu Mario [PR qui __ courait à tout vitesse].
 I have seen NAME was.running at full speed
 'I saw Mario running at full speed.' French; Cinque 1992: 1

But it occurs alongside with a range of antecedents that cannot host canonical restrictive relative clauses: for instance, names (51) and clitic pronouns (52).

- (52) Je l'ai vu [PR qui __ sortait du cinéma].
 I have seen him was.leaving the cinema
 'I saw him leaving the cinema.' French; Cinque 1992: 9a

The literature has long held that this constituent is not a relative clause. Despite this fact, there are cases across Romance in which it forms a constituent

with the antecedent (Cinque 1992). This is the observation that has given rise to the range of analyses that take it to form part of a single complex DP (45).

What, then, of constituency in Mandar? This question is not trivial, as the pvc is not readily subjected to the diagnostics familiar from the literature on Romance. The absence of an overt relativizer makes it difficult to identify this construction with confidence in fragment contexts, and the flexibility of word order in the language raises separate challenges elsewhere. But there is one fact which is instructive in this domain. In Mandar, it is generally not possible for a matrix-clause adverbial to intercede between a relative clause and its head:

- (53) *U-waca=i buku **dionging** [_{RR} mu-alli __].
 1ERG-read=3ABS book yesterday 2ERG-buy
 IM: ‘Yesterday I read the book that you bought.’ JT; 7.15, 83

But it is possible for an adverb to split the antecedent and pseudorelative:

- (54) U-irangi=i iCicci’ **dionging** [_{PR} ma’-ellong __].
 1ERG-hear=3ABS NAME yesterday ANTIP-sing
 ‘Yesterday I heard Cicci’ singing.’ JT; 7.15, 91

This pattern forms a part of the generalization that the antecedent and pseudorelative can be split in ways that a nominal and a restrictive relative clause cannot. There are several other ways in which this can be seen. For instance, it is possible for the antecedent to undergo a type of A’-extraction which strands the pseudorelative (55). This is not possible for the head of a relative clause (56).

- (55) Innai mu-ita __ [_{PR} tanda __]?
 who 2ERG-see arrive
 ‘Who did you see arrive?’ JT; 7.15, 89
- (56) *Paket-mu na-buai __ [_{RR} tanda __].
 package-2GEN 3ERG-open arrive
 IM: ‘Your package, they opened that arrived.’ JT; 7.15, 92

There are several ways in which this pattern could be interpreted, and many of these have precedent in the literature on pseudorelatives. In the pages which remain, however, I would like to develop a particular analysis of these facts.

4.4 PERCEPTION VERBS AND RAISING TO OBJECT

In Mandar, I propose that the antecedent and pseudorelative do not form a surface constituent in the pvc. Rather, I would like to suggest that the antecedent invariably moves from a position inside of the pseudorelative to one in the matrix vp. I take this to be the canonical landing site of object shift: namely, SPEC,VP.

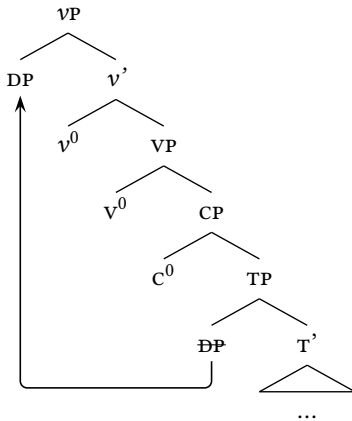
On this analysis, the verbs which embed the pvc are understood as a particular subset of those which allow a process of *raising to object*. The syntax of the clauses which involve this construction, then, can be treated on a par with (57).

- (57) U-hara'=i iKaco' [pole _].
 1ERG-hope=3ABS NAME come
 'I hope Kaco' to come.'

JT: 7.26, 250

The structure in (57) is built from two components of some familiarity. Like the pvc, it contains a nominal and a non-finite clause that follows. Moreover, it can be shown that the nominal in this construction, as in the pvc, moves into the matrix clause and does not form a surface constituent with the following clause. For this reason, it seems reasonable to adopt an analysis along the lines of (58):

- (58) *The Raising to Object Analysis*



on which the nominal undergoes a step of *Raising to Object* from the subject position of the embedded predicative constituent to one in the matrix vp.

Should we adopt the same analysis for the pvc, a number of its properties will immediately fall into place. First, we reach an account that reflects the basic facts of constituency. Second, we receive an explanation for the word order of the construction: the antecedent precedes the predicate because it has undergone a step of movement into the matrix clause. And third, we capture the parallels which hold between the pseudorelative and the set of predicative constituents which launch extraction: both lack overt complementizers, both lack the mark of absolutive agreement, and both host a postverbal absolutive gap.

5 CONCLUSION

In light of these facts, it would seem that the Raising to Object analysis of the pvc in (3) is reasonably successful, and for this reason, I consider it a genuine

empirical advance. But before concluding, I would like to point out an additional property of the construction that is of some note. In Mandarin, there is a restriction which holds over cross-clausal movement: it must target absolutive arguments. The process of Raising to Object, for instance, cannot target an ergative (59).

- (59) *U-hara'=o *pro* [**mu**-waca ___ iting buku].
 1ERG-hope=2ABS 2SG 2ERG-read that book
 IM: 'I hope you read that book.' JT: 8.17, 91

The same constraint holds over the pvc. When the verb in the pseudorelative is transitive, its internal argument (which is absolutive) can be the antecedent:

- (60) U-ita'=o *pro* [_{PR} **na**-pelambi'i ___ iCicci'].
 1ERG-see=2ABS 2SG 3ERG-visit NAME
 'I saw you being visited by Cicci.' JT: 8.17, 118

And it is impossible for the external argument (which is ergative) to do so:

- (61) *U-ita'=o *pro* [_{PR} **mu**-pelambi'i ___ iCicci'].
 1ERG-see=2ABS 2SG 2ERG-visit NAME
 IM: 'I saw you visiting Cicci.' JT: 8.17, 119

In previous work, I have argued that this asymmetry arises from a constraint on locality: in Mandarin, the absolutive argument moves to a position above all other arguments in the clause, and as a result, it is closer to the landing site of any step of cross-clausal movement than a clausemate ergative argument (Brodkin 2021c). On the analysis in (3), the same logic can be applied to the pvc.

In light of this fact, it is interesting to note that the same constraint holds over the analogous construction in Romance. In French, for instance, the antecedent of the pseudorelative can be nominative (2), but not accusative (62).

- (62) *Je l'ai vu [_{PR} qui Marie embrassait ___].
 I him-have seen Mary was.kissing
 IM: 'I saw him being kissed by Mary.' French; Cinque 1992: 9b

It remains to be seen what further investigation of this parallel will reveal.

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