Proleptic constructions in Modern Greek¹

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Abstract. We investigate the semantics of an attitudinal construction in Modern Greek, where an attitude verb may take an accusative object followed by a CP (e.g. 'Maria wants Yanis.ACC_i [CP pro_i only love her]'). Drawing on literature (Kotzoglou 2002; Kotzoglou and Papangeli 2007; Kotzoglou 2017) arguing that the accusative object is base-generated in the matrix clause, we propose that this is an instance of prolepsis. Importantly, unlike proleptic constructions described in other languages, the proleptic object can have *de dicto* readings, despite being base-generated in the matrix clause. We propose an analysis in terms of semantic lowering, along the lines of Dawson and Deal (2019), arguing that semantic lowering is not restricted to extensional, but can also apply to intensional types of pronouns. Finally, we describe an additional semantic restriction on the proleptic object, as well as the implications of the Modern Greek case for the broader function of prolepsis and the syntax-semantics interface.

Keywords: prolepsis, quasi-ECM, de dicto, de re, semantic lowering, causal constructions

1. Introduction

It has been observed that some languages have specific ways of marking that an attitude report has only a *de re* (e.g. Madurese (Davies 2005), German (Salzmann 2017a), Nez Perce (Deal 2018)) or a *de re* and a third reading (e.g. Tiwa (Dawson and Deal 2019)). This is done via *prolepsis*, which Salzmann (2017a) defines as "a construction where a structural complement of the matrix verb is semantically related to the predicate of the embedded clause without there being an obvious movement relationship". Here is an example from German (Salzmann 2017a), where *einem Mädchen* 'a girl' is base-generated in the matrix clause, and is repeated by the pronoun *es* 'her' in the complement clause (henceforth CP):²

(1) **Von einem Mädchen** weiss ich, dass Peter es geküsst hat. Of a-DAT girl know-1SG-PRES I COMP Peter her kiss-PTCP have-3SG 'Of a girl, I know that Peter kissed her.'

This sentence only has a *de re* reading, according to which there exists a specific girl that I know Peter kissed. For example, I may know that Peter kissed Anne. It cannot have a reading according to which Peter kissed a girl but I don't know which. Similar constructions have been described for Nez Perce (Deal 2018) and Tiwa (Dawson and Deal 2019) – but in Tiwa they have an additional reading apart from the classic *de re* proleptic reading of German; they also have a third reading. Here is the crucial example:³

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²For clarity, all proleptic arguments will be boldfaced. In this example, we could also have the verb "expect" *erwarte* (Martin Hackl, p.c.), which is also proleptic in Modern Greek (to have a more minimal cross-linguistic comparison). However, we should note that *erwarte* may trigger generic readings (Kai von Fintel, p.c.).

³Notice that the verb used in the Tiwa examples in this paper is *think*, but Dawson and Deal (2019) note that the process is very productive, and the generalizations extend to most attitude verbs. Although Ingria (1981) argues that *think* in MG is felicitous in this construction, we do not share this judgment. However, a minimal comparison can also be made with Tiwa (like with German) since the verbs *know, believe,* and *remember* can do prolepsis in both languages. Below is the relevant Tiwa example (Virginia Dawson, p.c.):

(3) Mukton does not want to go outside.

 pro_j kishá khódo-gô_i atkhâl lá-ga, [pro_i pe-go_j chi-w honmandé] 3SG one mosquito-ACC think PFV 3SG 3SG-ACC bite-NEUT COMP 'He thinks a mosquito will bite him.'

This is a third reading, because there is no specific mosquito Mukton thinks will bite him. So, the quantificational force of the quantifier "a mosquito" scopes beneath the attitude verb. Yet, this is not a *de dicto* reading, since Mukton is committed to the existence of mosquitoes in the actual world. In fact, Dawson and Deal (2019) show that proleptic constructions in Tiwa cannot have *de dicto* readings:⁴

- (4) Tonbor is not very smart. He doesn't know that dogs can't be green.
 - #Tonbor kishá khódang-shór khúgri-gô_i atkhâl lá-ga, [Lastoi pro_i pre-ga Tonbor one green dog-ACC think-PFV Lastoi 3SG buy-PFV honmandé]
 COMP
 Intended: 'Tonbor thinks that Lastoi bought a green dog.'

Therefore, proleptic constructions in Tiwa have either a *de re* or a third reading. What is common among the proleptic constructions described so far is that the *de dicto* reading is impossible. This justifies, in a sense, the existence of a specific construction that marks *de re* (in the case of Madurese, German and Nez Perce) or non-*de dicto* (in the case of Tiwa).

Modern Greek (henceforth MG) displays certain attitudinal constructions where an attitude verb may take an accusative object (henceforth ACC DP) followed by a CP. Hadjivassiliou et al. (2000); Kotzoglou (2002) dub this the "quasi-ECM" construction. Here is the basic pattern:⁵

(6) I Maria theli **ton Yani** [na aghapai mono aftin]. The.NOM Maria.NOM want.PRS the.ACC Yani.ACC [SBJV love only her.ACC] 'Maria wants Yanis to only love her.'

Crucially, there is a counterpart of "quasi-ECM" where the DP is in the CP and bears NOM case:⁶

 (2) Sonali Mansing-go_i si-ga/ nol-ga/ khósoi mán-ga, [*pro_i* lí-ga honmandé] Sonali Mansing-ACC know-PFV/ believe-PFV/ remember-PFV 3SG go-PFV COMP
 'Sonali knows/believes/remembered that Mansing went.'

⁴Throughout the paper we mark the hypothesized CP boundaries with brackets.

⁵We follow Philippaki-Warburton (1994) in treating na as a subjunctive mood marker rather than a complementizer, and therefore gloss it accordingly. However, note that the syntactic status of the na particle is not crucial for our analysis and that some of the verbs compatible with this construction in MG can also take indicative *oti*clauses (Joseph 1976; Philippaki-Warburton 1987; Theophanopoulou-Kontou et al. 1998; Kotzoglou 2017), where the status of *oti* as a complementizer is more clear:

- (5) a. Ksero tin Maria [oti ine kali mathitria].
 Know.PRS the.ACC Maria.ACC [COMP be.PRS good.FEM student.FEM]
 'Of Maria, I know that she is a good student.'
 - b. Perimename tin Eleni [oti tha eksorjisti].
 Expect.PRS the.ACC Eleni.ACC [COMP will be-furious]
 'We expected that Eleni will be furious.'

⁶Here, the NOM DP can be in post-verbal position too, but as Roussou (2010) notes it can also appear in SpecCP

(7) I Maria theli [o Yanis na aghapai mono aftin]. The.NOM Maria.NOM want.PRS [the.NOM Yani.NOM SBJV love only her.ACC] 'Maria wants Yanis to only love her.'

This paper argues that "quasi-ECM" as in (6) is a proleptic construction, and investigates its semantics. Firstly, we motivate a proleptic analysis, showing that the ACC DP is base-generated in the matrix clause, while the NOM DP is part of the embedded clause. Secondly, we observe that, despite the fact that prolepsis cross-linguistically marks a *de re* or a non-*de dicto* reading, in MG it gives rise to *de dicto* readings as well. In other words, despite base-generation in the matrix clause, both low-scope and opaque readings of the proleptic object, i.e., the ACC DP, are allowed. So, MG is like Tiwa except that it can also have *de dicto* readings. We further argue that MG proleptic constructions impose an additional semantic requirement on the ACC DP, which we formalize in terms of causality. Finally, we extend the analysis of Dawson and Deal (2019) to account for *de dicto* readings as well as the causal requirement present in MG.

We should note that the process is more productive than in Nez Perce for example, where it is only possible with verbs meaning 'think' and 'know' (Deal 2018), but less productive than in Tiwa, where it can reproduce with any attitude verb. The verbs that are felicitous with this construction are *thelo* (want), *perimeno* (expect), *pistevo* (believe), *theoro* (consider), *ipologhizo* (estimate), *ksero* (know), *thimame* (remember) and -at least for Ingria (1981), although the judgment may vary across speakers- *nomizo* (think).⁷ The class of proleptic verbs and the productivity of prolepsis varies cross-linguistically. Even though it most likely involves verbs of cognition, specifying one's mental state about an entity that is the proleptic object, we will not attempt to characterize this verb class here – we highlight this as an open theoretical question.

2. Syntactic Position of the ACC DP

We treat "quasi-ECM" like prolepsis, as opposed to object control (Kotzoglou 2002; Kotzoglou and Papangeli 2007; Kotzoglou 2017). In prolepsis, we have an object of the matrix verb that is base-generated in the matrix clause, but is semantically related to an argument of the embedded clause by co-reference. We advocate for a proleptic instead of an object control analysis, because, contrary to what is usually assumed in the literature, given the right context, the *pro* in the embedded clause that is co-referential with the ACC DP can be in object position:

(8) Yanis is a political activist and part of an organization run by me. I want to raise awareness about it and I think that getting someone arrested will give us some publicity to this end. Thelo ton Yani_i [na ton_i silavi i astinomia].
Want.PRS the.ACC Yani.ACC [SBJV him.ACC arrest the.NOM police.NOM] 'I want the polirce to arrest Yanis.'

In fact, in this case, we see the *pro* overtly realized in the embedded clause as an ACC-marked pronoun *ton* 'him.ACC', since MG has subject- but not object-*pro*-drop (Papangeli 2000). Given that the embedded *pro* co-referential with the ACC DP can be both in subject and object positions

in a topicalized or focused position. We chose the SpecCP position in our examples to create a minimal pair with the ACC DP, which can only be in the object position of the matrix clause.

⁷We note that this is a non-exclusive list of verbs. Additionally, some of them take *na*-clauses, some *oti*-clauses, and some can take both.

in the CP, we conclude that this is an instance of prolepsis. We thus assume the following syntax for (6):⁸





Kotzoglou (2002); Kotzoglou and Papangeli (2007); Kotzoglou (2017) provide considerable evidence that the ACC DP is base-generated in the matrix clause. In this section, we survey some of their arguments, as well as provide some new ones, arguing that the ACC DP (a) is in the matrix clause, and (b) that it cannot have moved there.⁹ From this, we will conclude that the ACC DP is base-generated in the matrix clause and given that it can be co-referential with a *pro* either in subject or in object position in the CP, it is a proleptic construction.

2.1. Prepositional Phrases

Kotzoglou (2002) notes that Prepositional Phrases (henceforth PPs) can intervene between the ACC DP and the CP. In this case, there are two available parses for the PP: it can either modify the matrix verb as in (11a) or the embedded one as in (11b), where the PP occupies a topicalized or focused position in the left periphery. Crucially, the meaning changes; the habit ends up being the son's (11a) or the father's (11b) accordingly.

^{(9) &#}x27;Yanis wants Zoi to give flowers to Christos.'

a.	0	Yanis	theli	ti	Zoi	[na	dhos	i luludhia	t ston		Christo].	
	The.NOM	Yani.NOM	want.PRS	the.ACC	Zoi.ACC	[SBJV	give	flowers	to-th	e.ACC	Christos.	ACC].
b.	Ston	Chtisto	0	Yanis	theli	ti		Zoi	[na	dhosi	luludhia	<i>t</i>].
	To-the.AC	C Christos	the.NOM	Yani.NOM	/ want.PF	the.	ACC	Zoi.ACC	[SBJV	give	flowers	<i>t</i>]

⁹The ACC DP gets its case from the matrix verb. Kakouriotis (1980) argues for a systematic ambiguity of these verbs, which can have either a raised object or a non-raised direct object and a sbjvunctive CP. Philippaki-Warburton and Spyropoulos (1996); Hadjivassiliou et al. (2000) argue that the ACC DP is base-generated at SpecCP and is co-referential with a *pro* inside the VP. Pratt (2011) additionally argues that the ACC DP has to be focused at SpecCP (see Kotzoglou (2017) for problems with this account). The crucial part of our syntactic argument will thus be that the ACC DP could not have raised to and thus is instead base-generated in the matrix clause.

⁸Two comments about the proposed syntax. Firstly, note that we derive the attested word order by V-to-I movement. Secondly, we posit a base-generated clause-edge abstractor, following Dawson and Deal (2019) (and unlike Salzmann (2017b) who argues that *pro* itself creates the abstraction by moving to the edge of the CP), because in MG as in Tiwa (Dawson and Deal 2019) and Nez Perce (Deal 2018) the embedded CP is not an island environment. Here is some evidence from long-distance scrambling:

- (11) a. Ithele ton patera tu apo sinithia [na tu lei kathe Want.PST the.ACC father.ACC he.GEN by habit SBJV he.GEN say every mera ke ena dhiaforetiko paramithi].
 day and a.ACC different.ACC fairy-tale.ACC
 'By habit, he wanted his father to read to him a different fairy tale every day.' (son's)
 - b. Ithele ton patera tu [apo sinithia na tu lei kathe Want.PST the.ACC father.ACC he.GEN by habit SBJV he.GEN say every mera ke ena dhiaforetiko paramithi].
 day and a.ACC different.ACC fairy-tale.ACC
 'By habit, he wanted his father to read to him a different fairy tale every day.' (fa-

'By habit, he wanted his father to read to him a different fairy tale every day.' (father's)

Thus, given that the ACC DP can precede a PP modifying the matrix verb as in (11a), it has to be part of the matrix clause – since the PP on its right is. By contrast, when the DP surfaces in NOM, everything on its right has to be part of the embedded clause. Thus, if it precedes the PP, only one interpretation is possible, namely the PP has to modify the embedded verb as in (12):

(12) Ithele [o pateras tu apo sinithia na tu lei kathe mera Want.PST the.NOM father.NOM he.GEN by habit SBJV he.GEN say every day ke ena dhiaforetiko paramithi].
and a.ACC different.ACC fairy-tale.ACC
'By habit, he wanted his father to read to him a different fairy tale every day.' (father's)

This shows that contrary to the ACC DP, the NOM one is part of the embedded clause and everything on its right has to be part of it too. As a control, notice that if the PP precedes the NOM DP, the sentence is ambiguous between a matrix and an embedded attachment of the PP:

- (13) a. Ithele [apo sinithia o pateras tu na tu lei kathe Want.PST by habit the.NOM father.NOM he.GEN SBJV he.GEN say every mera ke ena dhiaforetiko paramithi].
 day and a.ACC different.ACC fairy-tale.ACC
 'By habit, he wanted his father to read to him a different fairy tale every day.' (father's)
 - b. Ithele apo sinithia [o pateras tu na tu lei kathe Want.PST by habit the.NOM father.NOM he.GEN SBJV he.GEN say every mera ke ena dhiaforetiko paramithi].
 day and a.ACC different.ACC fairy-tale.ACC
 'By habit, he wanted his father to read to him a different fairy tale every day.' (son's)

This test shows that the ACC DP is part of the matrix clause, since it can have matrix clause material on its right. The contrary holds for the NOM DP, which necessarily marks a clause boundary; it is part of the embedded clause and anything on its right has to be part of it too.¹⁰

¹⁰There are other arguments that the ACC DP is part of the matrix clause, which do not have the space to elaborate on here. For example, even though a CP can be doubled in MG by the clitic pronoun *to* "it", this is not possible when there is an ACC DP in the higher clause (Hadjivassiliou et al. 2000; Kotzoglou and Papangeli 2007); instead the clitic has to double the ACC DP, agreeing with it in case. Thus, the ACC DP is an argument of the matrix verb.

2.2. Negative Polarity Items

Another argument showing that the ACC DP is in the matrix clause comes from Negative Polarity Item (henceforth NPI) licensing. It appears that when the ACC DP is an NPI, it cannot be licensed by the negation in the CP; but when the NOM DP is an NPI, it is licensed by the CP negation. Here is the minimal pair (Kotzoglou 2002):

- (14) a. *Me tetia siberifora perimena KANENA [na mi me With such.ACC behavior.ACC expect.PST nobody.ACC SBJV NEG me.ACC proslavi sti dhulia tu]. hire in-the job he.GEN Intended: 'With such a behavior, I expected nobody to hire me at their job.'
 - b. Me tetia siberifora perimena **[KANIS** na mi me With such.ACC behavior.ACC expect.PST nobody.NOM SBJV NEG me.ACC proslavi sti dhulia tu]. hire in-the job he.GEN 'With such a behavior, I expected nobody to hire me at their job.'

The NPI in (14b) is part of the embedded CP, having moved to its left periphery; it can reconstruct for licensing within its clause. However, the NPI in (14a) cannot be licensed in the same way, suggesting that it is not part of the embedded clause. Instead, a matrix clause negation is needed to license it. As a control, we should add that an NPI that has moved to the left periphery in the embedded CP can reconstruct for licensing:

(15) Me tetia chrimatodhotisi perimena [KANENA na mi proslavun t]. With such.ACC funding.ACC expect.PST nobody.ACC SBJV NEG hire.3PL t'With such funding, I expected them to hire nobody.'

So, the fact that (14a) does not reconstruct, shows us that it is part of the embedded clause. However, we should note that this does not yet exclude the possibility that the ACC DP moved into the matrix clause. Indeed, Tsimpli and Roussou (1996) provide the following example, where an NPI moves into the matrix clause and fails to be licensed:

(16) *TIPOTA apofasisa [na mi fao t]. nothing decide.PST.1SG SBJV NEG eat t Intended: 'I decided not to eat anything.'

The NPI data show us that the ACC DP is part of the matrix clause. Indeed, had it been part of the embedded clause as in (15) or (14b), it would have reconstructed for licensing. Thus, so far, we have proven that the ACC DP is part of the matrix clause; but we have not yet excluded the possibility that it may have moved there.

2.3. Absence of reconstruction

We have shown that the ACC DP is part of the matrix clause. This could be because (a) it was base-generated as an argument of the matrix verb, or (b) it moved to that position from the lower clause. We provide evidence in favor of a base-generation in the matrix clause approach and against a raising analysis. Had the ACC DP moved from the embedded CP, it would have left a trace. Thus, it should be able to reconstruct at the position of the trace for interpretation purposes whenever other moved elements are able to do so. We will precisely show that no such

reconstruction effects are attested, attributing this fact to the absence of a trace. We provide data from anaphor licensing and scope reconstruction.

First, Kotzoglou (2002) shows that the anaphor *o idhios* 'himself' can only be bound in the NOM case in the following example:

(17) I Yanai theli *tin idhiai /[i idhiai na aponimi The.FEM Yana want.PRS the.ACC same.ACC / the.NOM same.NOM SBJV award ta metalia].
the.NEUTER.PL medal.NEUTER.PL 'Yana wants to award the medals herself.'

Crucially, this is a long-distance anaphor and by putting it in the ACC, we force it to be in the same clause as its licensor. Thus, the result is ungrammatical. However, when it is in NOM it is part of the CP, thus being licensed by virtue of being in a different clause than its antecedent. Note that anaphors in general reconstruct for licensing.¹¹ Therefore, the ACC DP not reconstructing shows that there is no place in the CP where it could reconstruct, i.e., no trace. We conclude that there cannot be a raising derivation, since reconstruction is not possible.

A similar argument can be made for scope. Kotzoglou (2017) notes that for many speakers inverse scope interpretations are possible with quantificational subjects or objects:

(20) enas ipurghos episkeftotan kathe poli tis eladhas a.NOM minister.NOM visit.PST.3SG every city the.GEN Greece.GEN 'A minister was visiting every city of Greece.'

This sentence has both surface scope (i.e., there is a minister that was visiting every city) and inverse scope (i.e., for every city, there is a minister that is visiting it). However, Kotzoglou (2017) observes that we do not get inverse scope readings with "quasi-ECM", even if the context forces this interpretation:

(21) sto parti perimena enan filo mu [na fai kathe at-the party expect.PST.1SG a.ACC friend.ACC mine.GEN SBJV eat every tiropitaki].
cheese-pie.DIM.ACC
'In the party, I expected a friend of mine to eat every cheese pie.'

This sentence only has a surface scope interpretation (i.e., there is a friend whom I expected to eat everything). If inverse scope is the result of reconstruction to a lower copy position, then the lack thereof constitutes an argument for the lack of such a copy/trace position inside the CP. Therefore, we see that in the construction in question (a) anaphors do not reconstruct for

¹¹For example, the anaphor *o eaftos tis* 'her self' is licensed in the CP where its trace is located:

(18) O eaftos_i tis archizi [na tin_i apoghoitevi t_i]. The.NOM self.NOM hers begin.PRS SBJV she.ACC disappoint t'She is starting to disappoint herself.'

By contrast, when the pronoun does not c-command the trace, the anaphor is not licensed:

(19) *O eaftos_i tis archizi [na apoghoitevi [ton adherfo tis_i] t_i]. The.NOM self.NOM hers begin.PRS SBJV disappoint the.ACC brother.ACC hers tIntended: 'She is starting to disappoint her brother.'

licensing, and (b) we do not get inverse scope readings when the ACC DP is quantificational. We thus conclude that the absence of reconstruction effects is due to the absence of a trace in the CP, where the DP could have been interpreted. We argue instead that the ACC DP has not moved, but is base-generated in the matrix clause, being co-referential with a *pro* in the CP.

2.4. Coordinated DP island

Another argument against a movement approach comes from coordinated DP islands. We argue that the pronoun linked to the ACC DP can be inside a coordinated DP island:

(22) Maria's dad usually does not like to meet her boyfriends, but yesterday he was drank and he wanted Maria and her boyfriend to come for dinner some day. Today, he sobered up and changed his mind again.

O babas tis ithele chtes **ti Maria**_i /[*i Maria_i The.NOM dad.NOM hers want.PST yesterday the.ACC Maria / the.NOM Maria.NOM na erthi **afti**_i kai to aghori tis jia fajito mia mera]. SBJV come she.NOM and the.NOM boy.NOM hers for food one day 'Her dad wanted yesterday Maria and her boyfriend to come for dinner one day.'

The DP is good in the ACC, but not in the NOM. The fact that the ACC DP can be co-referential with a pronoun inside an island environment, out of which it cannot move/raise, suggests that the ACC DP is base-generated in the matrix clause instead of moving there from a lower position in the CP. On the contrary, the NOM DP, which moves out of the coordinated DP island to SpecCP, is ungrammatical. This shows that, when the pronoun in the CP is in an island environment, the ACC DP is still felicitous, suggesting that the relationship between the ACC DP and *pro* in the CP is only one of co-reference. In other words, the ACC DP does not have a trace of movement in the CP, since it is licensed even when movement is impossible.

2.5. Unavailability of idiomatic readings

Another argument in favor of base-generation in the matrix clause and against a raising analysis comes from idiomatic readings. If the ACC DP was raised, we would expect idioms to be fine, since there would be no extra theta role assignment, as in the following English examples:

(23) a. The shit has hit the fan.

b. I expected the shit to have hit the fan.

But, if there is no movement of the ACC DP and there are rather two syntactically independent clauses, we would expect idioms to be ungrammatical, as in control cases in English:

(24) *I persuaded the shit to hit the fan.

Indeed, the construction in question in MG patterns with control in this case, as shown by the following data from Kotzoglou and Papangeli (2007):

(25) a. perimena **#psilus** /[psili na tu bun st' aftia]. expect.PST.1SG fleas.ACC / fleas.NOM SBJV he.GEN get.3PL in-the ears 'I expected fleas to get into his ears (I expected him to become suspicious).'

b. me afta pu eleghe perimena #ton dhjaolo /[o with these COMP say.PST.3SG expect.PST.1SG the.ACC devil.ACC the.NOM dhjaolos na ton pari]. devil.NOM SBJV him take.3SG
'With the things he said I expected the devil to take him (i.e., him to be destroyed).'

The unavailability of the idiomatic reading suggests that the matrix clause and the CP are syntactically independent and that the ACC DP is not a raised object, but rather a base-generated one, which receives a theta role from the matrix verb.

2.6. Interim Summary

We have have argued (a) that the ACC DP is syntactically part of the higher clause (see PP and NPI behavior), and (b) that it was base-generated there (see absence of reconstruction effects, no sensitivity to islands, no idiomatic readings). What is more, we have mentioned that the ACC DP is co-referential with a pronoun in the subject or object position in the embedded clause.

When in subject position, because of *pro*-drop, it is often a *pro*; but when it is in object position, it is necessarily overt (see (8)). In fact, further evidence for a *pro* in subject position comes from the fact that it can be modified by an emphatic modifiers/intensifiers, obligatorily in NOM (Philippaki-Warburton and Spyropoulos 1996; Kotzoglou and Papangeli 2007):

- (26) I epitheorites ithelan ton Yani [na lisi monos The.NOM inspectors.NOM want.PST.PL the.ACC Yani.ACC SBJV solve alone.NOM /*mono tu to provlima].
 - / alone.ACC he.GEN the.ACC problem.ACC

'The inspectors wanted Yanis to solve the problem on his own.'

Kotzoglou and Papangeli (2007) argue that since modifiers cannot appear in isolation with their own case, they must agree with a covert *pro* which assigns NOM to the emphatic modifier; the *pro* is co-indexed with the ACC DP, which gets its case from the matrix verb. In fact, the *pro* can sometimes be overt, such as when it appears in a coordinated DP (see (22)) or when it is focused:¹²

- (27) Perimena/Ithela ton Yiani [na erthi AFTOS spiti]. Ochi na stili Wait.PST/want.PST the.ACC Yianis.ACC SBJV come he.NOM home. NEG SBJV send tin gramatea tu.
 - the.ACC secretary.ACC he.GEN
 - 'I was expecting/wanted Yianis to come home himself. Not to send his secretary.'

Therefore, we can conclude that the ACC DP behaves like a proleptic object: it is base-generated in the matrix clause, and is co-referential with a (sometimes covert) pronoun in the embedded clause in subject or object position. Thus, we treat this pattern as an instance of prolepsis, as studied in Madurese (Davies 2005), German (Salzmann 2017a), Tiwa (Dawson and Deal 2019),

¹²Ingria (1981) argues that the pronoun can be in general overt, but it is more felicitous with contrastive focus.

and Nez Perce (Deal 2018). In what follows we investigate the semantics of this construction, arguing that the ACC DP can have both low-scope and opaque readings, despite base-generation in the matrix clause.¹³

3. Semantic Interpretations

3.1. Availability of de dicto readings

In the previous section, we showed that the MG construction in question is an instance of prolepsis, arguing that the ACC DP is base-generated in the matrix clause and is co-referring with a *pro* in the CP. The ACC DP is therefore structurally outside of the scope of the attitude verb, which correlates with a *de re* reading of proleptic objects in many languages (e.g. Madurese (Davies 2005), German (Salzmann 2017a), Nez Perce (Deal 2018)). In other words, the speaker is committed to the existence of a specific referent for the ACC DP, which has obligatory wide scope. However, third readings of proleptic objects have been described for Tiwa (Dawson and Deal 2019), where the quantifier of the ACC DP can scope under the attitude verb in (3), repeated here for reference:

(28) Mukton_j payâr-jíng lína mon cha. pro_j kishá khódo-gô_i atkhâl-lá-ga, Mukton outside-ALL go-INF desire NEG 3SG one mosquito-ACC think-PFV [pro_j pe-go_j chi-w honmandé] 3SG 3SG-ACC bite-NEUT COMP

'Mukton does not want to go outside. He thinks a mosquito will bite him.'

Dawson and Deal (2019) show that this is a low-scope transparent, i.e. a third, reading, since there need not be any specific mosquito Mukton has a belief about (low-scope); yet the mosquitoes cannot simply exist in the belief worlds, but have to exist in the a actual world (transparent). Crucially, as shown in (4), repeated here for reference, proleptic objects in Tiwa cannot be read opaquely – they commit the speaker to their existence in the actual world:

(29) Tonbor is not very smart. He doesn't know that dogs can't be green.

 #Tonbor kishá khódang-shór khúgri-gô_i atkhâl lá-ga, [Lastoi pro_i pre-ga Tonbor one green dog-ACC think PFV Lastoi 3SG buy-PFV honmandé] COMP
 Intended: 'Tonbor thinks that Lastoi bought a green dog.'

This cross-linguistic picture suggests that proleptic objects have to be interpreted transparently, in all languages described so far. We take issue with this claim, arguing that proleptic objects in MG can have both a low-scope and opaque, i.e. a *de dicto*, reading. In addition to this, it may also have a *de re* or a *third* reading, like in Tiwa.

More concretely, even though the ACC DP is base-generated in the matrix clause, both lowscope and opaque readings are allowed. This is puzzling since the DP can be interpreted semantically at a different clause than the one where it was base-generated syntactically. We see a *de dicto* reading in (30):

¹³One could argue for a prolpetic analysis whenever the ACC DP is interpreted *de re* and a raising one whenever it is interpreted *de dicto*. However, all the syntactic arguments we gave for prolpesis can be reproduced with sentences targeting a *de dicto* interpretation. Therefore, the ACC DP is a proleptic object under every interpretation.

(30) Little Petros is in kindergarten and he and his friends believe that green dogs exist. One day they are talking about green dogs and Petros bets that exactly three of them will show up at his party.

O Petrakis theli akrivos **tris prasinus skilus** The.NOM Petros.DIM.NOM want.PRS exactly three.PL green.ACC.PL dog.ACC.PL [na erthun sto parti]. SBJV come in-the party 'Little Petros wants exactly three green dogs to come to the party.'

This attitude report does not commit the speaker to the existence of green dogs; in Fodor's (1970) terms, the embedded subject is read *opaquely*. Alongside *de dicto* readings, classic *de re* readings (found in prolepsis in all languages that semanticists have studied to date) are also permitted, as shown in the following example:

(31) Maria is on an apostolic mission in Egypt during the pandemic, while working remotely. She started this job during COVID and thus never got to meet her colleagues, Yanis and Christos. It just so happens that Yanis and Christos are also in Egypt and Maria has met them without knowing they are her colleagues. She tried to convince them to become Catholic.

I Maria theli **kathe tis sinadhelfo** [na ine katholikos]. The.NOM Maria want.PRS every.ACC she.GEN colleague.ACC SBJV be catholic.NOM 'Maria wants every colleague of hers to be Catholic. '

Finally, just like Dawson and Deal (2019) describe for Tiwa, proleptic objects in MG may have low-scope, third readings. However, this is not surprising, given that MG has both *de dicto* and *de re* readings and that the third reading is a combination of the two. Consider the following:

(32) Zoi is attending a 100m race at the Olympics. Three contestants are talking to each other before the start. Unbeknownst to Zoi, these three contestants are my friends. She thinks to herself that she wants one of those three people to win the race, because they seem motivated.

I Zoi theli **enan filo mu** [na kerdhisi ton aghona]. The.NOM Zoi want.PRS a.ACC friend.ACC mine SBJV win the.ACC race.ACC 'Zoi wants a friend of mine to win the race.'

This is an instance of a third reading, because the quantifier has low-scope but its restrictor is interpreted transparently. Zoi does not have any beliefs about friends of mine, but these people she has a belief about have to exist in the evaluation world.

Thus, we have shown that proleptic constructions in MG are especially interesting, since they show that proleptic constructions may also have *de dicto* readings. Based on Madurese, German and Nez Perce alone (Davies 2005; Salzmann 2017a; Deal 2018), we could have concluded that prolepsis is a designated road to *de re*; based on Tiwa (Dawson and Deal 2019), we would weaken our hypothesis saying that prolepsis is a designated road to non-*de dicto*. MG completes the empirical picture, showing that prolepsis need not necessarily exclude any readings.

Then the question that naturally arises is: why would we use prolepsis in MG if it is not more informative than a standard attitude report? In what follows we show that prolepsis in MG imposes an additional requirement on the proleptic object, which justifies its use and makes proleptic constructions indeed more informative without lacking any reading. We then provide

an analysis in terms of semantic lowering, extending the analysis of Dawson and Deal (2019) to account for MG proleptic constructions.

3.2. Additional semantic requirement

We have shown that MG proleptic constructions can have *de dicto* readings, being interpreted both with low-scope and opaquely. If prolepsis in other languages described so far was a mechanism of targeting non-*de dicto* readings, then what is this mechanism for in MG? In other words, why do we use prolepsis if it is as informative as its non-proleptic counterpart? In fact, we argue that prolepsis does restrict the meaning of the sentence, just not by excluding opaque interpretations. Prolepsis in MG gives us a more specified meaning by imposing an additional semantic requirement on the proleptic object. Thus, the truth conditions of the proleptic construction are a strict subset of those of the usual sentence with a NOM DP.

More specifically, having access to the ACC DP in the syntax could be used to enrich its meaning. Indeed, intuitively, it feels like these constructions are infelicitous when the ACC DP does not take some kind of action to ensure that the CP holds. This intuition is also present in Hadjivassiliou et al. (2000); Kotzoglou (2002). The former note that when there is a NOM DP we are expecting an event, but when there is an ACC DP we expect the ACC DP to perform the event expressed by the CP. They argue that this indicates that the verb assigns some theta role to the DP, a theme or an affected object one. Kotzoglou (2002) observes that the ACC DP is the person or the thing that needs to undertake the action described by the embedded verb. Kotzoglou and Papangeli (2007) argue that the ACC DP receives a weak theta role, such as "as for...DP" or "on behalf of...DP" from the matrix verb. What exactly the additional semantic requirement is is an empirical question that requires further research. In the rest of this subsection, we empirically investigate and formalize this additional meaning that is conveyed by prolepsis in MG.

We have already shown that the ACC DP can be the object of the CP (see (8)), so the requirement cannot be about subjecthood.¹⁴ Additionally, notice that subjects could be either agents or patients, namely in passive constructions. Is subjecthood enough of a licensing condition when the subject is not an agent? The following examples suggest the answer is 'no':

- (33) a. Thelo ***ton Yani** /[o Yanis na silifthi]. Want.PRS the.ACC Yanis.ACC / the.NOM Yanis.NOM SBJV arrest.PASS 'I want Yanis to be arrested.'
 - b. Thelo tin astinomia /[i astinomia na silavi ton Want.PRS the.ACC police.ACC / the.NOM police SBJV arrest the.ACC Yani].
 Yani.ACC
 'I want the police to arrest Yanis.'

The ACC DP in (33a) is ungrammatical in an out-of-the-blue context because it is not up to Yanis to get arrested; it is rather the police that is doing the arresting. Yet, in (33b) the ACC DP, which is the police, is acting to make the CP hold. This confirms the intuition that the ACC DP in a proleptic construction needs to undertake the action expressed by the CP. In fact, (33a) becomes better in a context where the ACC DP causes its arrest:

 $^{^{14}}$ Notice that in (8) the ACC DP is the object of the embedded clause, but still needs to act to make the event expressed by the CP true.

(34) Yanis is a political activist and part of an organization run by me. I want to raise awareness about the organization and I think that getting someone arrested will give us some publicity to this end.

Thelo ton Yani [na silifthi]. Tha ine kalo jia tin
Want.PRS the.ACC Yani.ACC SBJV arrest.PASS. Will be good for the.ACC kampania.
campain
'I want Yanis to be arrested. It will be good for the campaign.'

This shows that the same structure can be felicitous or not based on the context; if the ACC DP is able to take action in the context, the proleptic construction is licensed (but not otherwise). More specifically, if the context entails that the ACC DP plays a causal role in realizing the event expressed by the CP, the structure is felicitous. Ingria (1981) presents the ungrammaticality of the following datapoint as a puzzle:

(35) ??Thelo **ton Yani** [na tu dhosi to vivlio i Maria]. Want.PRS the.ACC Yani SBJV he.DAT give the.ACC book.ACC the.NOM Maria Intended: 'I want Maria to give the book to Yanis .'

However, notice that the ungrammaticality of (35) could be due to the fact that in an out-ofthe-blue scenario Yanis cannot cause the event described by the CP to be realized. Indeed, this becomes better in the following scenario:

(36) Yanis is working for a publishing house. Maria is a famous writer and she just sold the rights of her new book to a rival publishing house. I am the boss of Yanis and I send him at a book fair to meet Maria and convince her to transfer to him the rights of her book. Thelo ton Yani [na tu dhosi to vivlio i Maria]. Want.PRS the.ACC Yani SBJV he.DAT give the.ACC book.ACC the.NOM Maria 'I want Maria to give the book to Yanis.'

This might lead us to suggest that the ACC DP is the agent of the event expressed by the CP. Could it therefore be that the ACC DP is assigned an agent theta role?¹⁵

There are two important things to consider. Firstly, (34) shows that the ACC DP has to cause the event expressed by the CP, but it need not be its only cause. Indeed, even if Yanis provokes the police to arrest him, at the end of the day the police needs to act for there to be an arrest. Secondly, as Kotzoglou and Papangeli (2007) note there is no animacy restriction on the ACC DP. Kotzoglou and Papangeli (2007) base this on their observation that the construction in question has a similar reading with other constructions involving a PP argument:

¹⁵This would be supported by the following datapoint from Kotzoglou (2002):

⁽³⁷⁾ Thelo tin adherfi /[i adherfi su na min anakatevete sta prosopika Want.PRS the.ACC sister.ACC / the.NOM sister.NOM yours SBJV NEG meddle in private.PL mas]. ours

^{&#}x27;I want your sister to not meddle in our affairs.'

With the ACC DP, this has a meaning of "I want your sister to actively stop interfering", while with the NOM DP this means something weaker, namely "I want it to be the case that your sister stops interfering" no matter how this happens. It could be, for example, that we move to another country and we stop talking to her.

(38) I epivates perimenan apo ton kapetanio [na ferthi The.NOM.PL passenger.NOM.PL expect.PST from the.ACC captain.ACC SBJV act me aksioprepia].
with dignity.ACC
'The passengers expected on behalf of the captain that he would behave with dignity.'

We argue that the ACC DP can in fact be inanimate in proleptic constructions:

(39) I am angry at and have negative thoughts about Yanis. I see him drinking coffee in a cup. Thelo tin kupa [na spasi sta cheria tu]!
Want.PRS the.ACC mug.ACC SBJV break in-the hands he.GEN 'I want the mug to break in his hands!'

Here is another example from a Google search, making the same point:¹⁶

(40) Thelo ton ipolojisti [na liturji san ena telia ekpedhevmeno Want.PRS the.ACC computer.ACC SBJV function like a.ACC perfectly trained.ACC vretano batler].
British.ACC butler.ACC
'I want the computer to function as a perfectly trained British butler.'

One could still argue that these are *agentive-like* readings, but we can still conclude that the ACC DP does not have to be strictly speaking animate.

We argue that the additional semantic requirement associated with the ACC DP cannot be a clear agent theta role, since (i) the ACC DP can be inanimate (e.g., (40)), (ii) it can be a patient in a passive construction as long as it plays some salient causal role in ensuring that the CP holds (e.g., (34)), and (iii) it does not have to be the only cause of the CP (e.g., (34), (36)).¹⁷

We propose instead a causal role requirement along the following lines: in a proleptic construction, the DP has to play a salient causal role in making the CP hold. For example, in (33b) the police has to act in order to arrest Yanis, in (34) Yanis has to provoke the police to arrest him, in (36) he has to convince Maria to give him the rights of her book, in (40) the computer's program has to run perfectly to resemble a perfect butler and so on. We formalize this requirement by a three-place function C(x)(y)(w), where x is the denotation of the ACC DP. It takes the ACC DP, the attitude holder, a world and gives us the following denotation:

(42) Causal function $C = \lambda x_e . \lambda y_e . \lambda w. x$ plays a salient causal role in fulfilling y's desire in w

In the next section, we will use this causal function in the proposed entries of the proleptic verb.

¹⁶The relevant phrase can be found here: https://www.medium.gr/2008-09-09-08-18-48/553-h-negroponte.html ¹⁷Indeed, if there is no agent theta role, the ACC DP should be fine in a passive construction, provided that is has some salient causal role that causes the event described by the CP (see (34)). This is what is attested:

⁽⁴¹⁾ Thelo **tus egklimaties** [na timorithun apo ton dhikasti]. Want.PRS the.ACC criminals.ACC SBJV punish.3PL from the.ACC judge.ACC

^{&#}x27;I want the criminals to be punished by the judge.'

4. A semantic proposal

Having empirically investigated and formalized the additional semantic requirement of the ACC DP, we provide an analysis that uses the causal function, while also capturing the availability of *de dicto* readings of proleptic objects. Our analysis is an extension of Dawson and Deal's (2019) one for third readings in Tiwa proleptic constructions. In order to account for low-scope transparent readings of proleptic DPs base-generated in the matrix clause, Dawson and Deal (2019) propose an analysis in terms of semantic lowering. We adopt their analysis for third readings in MG and extend it to account for *de dicto* ones, as well as for the additional semantic requirement represented by the causal function proposed in the previous section.

We propose that the three different readings are derived by different entries of the proleptic version of the verb, each time changing the type of the second argument. Following Dawson and Deal (2019), we account for *de re* and *third* readings by positing a binding operator in the CP binding a type e or Generalized Quantifier (henceforth GQ) type pronoun respectively (see the syntax in (10)). Here is how the *de re* reading of (31) is derived:

- (43) a. [every colleague_w.ACC] $2 \lambda w$ [Maria t_2 wants_w [OP₁ $\lambda w' pro_1$ be-catholic_{w'}]
 - b. $\llbracket \text{want}_1 \rrbracket = \lambda P_{\langle e, st \rangle} \cdot \lambda y \cdot \lambda x \cdot \lambda w \cdot \forall w' \in \text{BUL}(x, w) : P(y)(w') \& C(y)(x)(w')$
 - c. $[[(31)]] = \forall x[x \text{ is a colleague of Maria in } w \Rightarrow \forall w' \in BUL(Maria, w): x \text{ is catholic in } w' \& x \text{ plays a salient causal role in fulfilling Maria's desire in w']}$

'Maria wants every colleague of hers to be Catholic' ends up being true if and only if for every x, if x is Maria's colleague in the actual world, then x is Catholic in the best worlds that satisfy Maria's desires and x plays a salient causal role to fulfil that desire. In other words, x is Catholic consciously because they chose to (e.g., thanks to Maria's apostolic mission). The *third* reading in (32) is derived in a similar way, by having the pronoun be of GQ-type:

- (44) a. $\lambda w \operatorname{Zoi} [a \operatorname{friend-of-mine}_{w.ACC}] \operatorname{wants}_{w} [OP_1 \lambda w' \operatorname{pro}_1 \operatorname{win}_{w'} \operatorname{the race}_{w'}]$
 - b. $\llbracket \text{want}_2 \rrbracket = \lambda P_{\langle e, st \rangle} \cdot \lambda Q_{\langle et, t \rangle} \cdot \lambda x \cdot \lambda w \cdot \forall w' \in \text{BUL}(x, w) : Q(\lambda y \cdot P(y)(w') \& C(y)(x)(w'))$
 - c. $[[(32)]] = \forall w' \in BUL(Zoi, w)$: $\exists z [z \text{ is a friend of mine in } w \& z \text{ wins the race in } w' \& z \text{ plays a salient causal role in fulfilling Zoi's desire in } w']$

How about the *de dicto* reading in (30)? Here is where MG differs from Tiwa. We argue that the pronoun has an *intensional*-GQ-*type* $\langle s, ett \rangle$ in *de dicto* cases:

(45) a. λw Petros [$\lambda w''$ exactly 3 green dogs_{w''}.ACC] wants_w [OP₁ $\lambda w'$ pro₁ come_{w'} to the party_{w'}]

b.
$$\llbracket want_3 \rrbracket = \lambda P_{\langle e, st \rangle} \cdot \lambda Q_{\langle s, \langle et, t \rangle \rangle} \cdot \lambda x \cdot \lambda w \cdot \forall w' \in BUL(x, w) : [Q(w')] (\lambda y \cdot P(y)(w') \& C(y)(x)(w'))$$

c. $[[(30)]] = \forall w' \in BUL(Petros, w) : \exists 3z [z \text{ are green dogs in } w' \& z \text{ come to the party in } w' \& z \text{ play a salient causal role in fulfilling Petros' desire in } w']$

In this analysis, the attitude verb is inherently relational. Based on Madurese, German and Nez Perce, the entry in (43b) is needed and based on Tiwa, (44b) is also necessary to account for third readings.¹⁸ We further argue that based on MG, (45b) is needed to derive *de dicto*

¹⁸Without the causal function *C*, but this is a point of cross-linguistic variation. In fact, for Haitian Creole (Deprez 1992), the ACC DP in proleptic constructions denotes an *experiencer*, as argued in Rabinovitch (2023). For our purposes, this shows that the content of the function can vary cross-linguistically.

readings. What changes between the independently motivated entry in (44b) and our proposed entry in (45b) is that the world argument of the ACC DP can be bound by the attitude verb. MG completes the cross-linguistic typology, while showing us that, contrary to what has been described up to now, proleptic constructions may have *de dicto* readings. For clarity, here is how the *de dicto* reading of (30) is derived:

(46)



Therefore, MG shows that proleptic constructions are not always interpreted transparently. The availability of *de dicto* readings demonstrates that quantifiers in certain constructions may be interpreted lower than their base-generation site, both w.r.t. scope and w.r.t. the world argument of their NP restrictor. This suggests that, contrary to Tiwa, semantic reconstruction mechanisms are not restricted to $\langle et, t \rangle$ traces in MG, but may also apply to their $\langle s, ett \rangle$ intensions (since the world argument of the DP may be bound by the buletic alternatives of the subject).

What is more, notice that what changes from one proleptic verb entry to another is the type of the second argument, i.e., type *e* in (43b), type *ett* in (44b), and finally type *s,ett* in (45b). This, as well as the empirical picture with the addition of MG suggests the existence of an implicational hierarchy, according to which if a language has a third reading for prolepsis, it also has a *de re* one and if it has a *de dicto* one, it has all other readings too. In other words, it seems that if a language has the higher-typed entry in (45b), it has the other two as well. (45b) implies (44b), which in turn implies (43b). This is illustrated in the following table:

Language	De re	Third	De dicto
Madurese, German, Nez Perce	\checkmark		
Tiwa	\checkmark	\checkmark	
Greek	\checkmark	\checkmark	\checkmark

Table 1: Implicational Hierarchy

In order to capture this implicational hierarchy, we could be tempted to suggest type-shifting rules combining with the basic/non-proleptic meaning of *want* to give us the proleptic entries. In other words, we want morphemes that progressively lift the meaning of *want*, in such a way that we cannot have a lifted meaning if we do not have all the lower types, accounting for the paradigm gaps. One possible implementation of this is to stack the morphemes one onto another in such a way that they always combine with the basic meaning of *want*:



In this implementation combining *want* with $LIFT_{\alpha}$ would yield the classic *de re* interpretation, with $[LIFT_{\alpha} \ LIFT_{\beta}]$ the third reading, and with $[[LIFT_{\alpha} \ LIFT_{\beta}] \ LIFT_{\gamma}]$ the *de dicto* one. In this way, we will predict that there is no language with the reverse German or Tiwa pattern. Therefore, to the extend that the implicational typology is correct, we account for it. Here is the basic meaning of *want* and the proposed entries for the LIFT morphemes:¹⁹

(48) a.
$$\llbracket want \rrbracket^{w,g} = \lambda p_{st} . \lambda x . \lambda w . \forall w' \in BUL(x,w) : p(w')$$

b. LIFT_{$$\alpha$$} = $\lambda P_{st,est}$. $\lambda R_{e,st}$. λy . λx . λw . $P(\lambda w'.R(y)(w') \& C(y)(x)(w'))(x)(w)$

c. LIFT_{$$\beta$$} = $\lambda M_{\langle\langle st, est \rangle, \langle est, \langle e, est \rangle\rangle\rangle}$. $\lambda R_{st, est}$. λP_{est} . λQ_{ett} . $\lambda x.\lambda w.R(\lambda w'.Q(\lambda y.P(y)(w'))$
& $C(y)(x)(w')))(x)(w)$

d. LIFT_{$$\gamma$$} = $\lambda M_{\langle\langle st, est \rangle, \langle est, \langle ett, est \rangle\rangle\rangle}$. $\lambda R_{st, est}$. λP_{est} . $\lambda Q_{s, ett}$. $\lambda x.\lambda w.R(\lambda w'.Q(w')(\lambda y.P(y)(w') \& C(y)(x')))(x)(w)$

Notice that we add an extra argument in the entry for LIFT_{β} and LIFT_{γ} , so that they only combine with LIFT_{α} and LIFT_{β} respectively. This extra argument is purely syntactic, since we do not use it in the denotation and its sole function is to restrict the morphemes LIFT_{β} and LIFT_{γ} can combine with. This is necessary in order to account for the implicational hierarchy, since otherwise we would predict LIFT_{γ} to exist at the absence of LIFT_{β} in a language. However, because of this purely syntactic extra argument, this solution is equally satisfactory with proposing a three-way ambiguity of the proleptic verb. We present both solutions here without claiming that one of the two is theoretically more elegant.²⁰

The most important conclusion is that prolepsis is not necessarily marking non-*de dicto* readings, but is instead a way to syntactically access the proleptic argument, which can then be restricted semantically in multiple ways. Some languages impose a *de re* reading of the proleptic object (e.g., Madurese, German, Nez Perce), others a non-*de dicto* one (e.g. Tiwa), and yet others impose a different semantic restriction (see our causal function for MG).

¹⁹LIFT_{α} is already proposed in Dawson and Deal (2019) for Tiwa (without the causal function *C*).

²⁰The only reason one might prefer the LIFT morphemes is to account for the whole class of proleptic verbs without positing a three-way ambiguity for each one. Thus, depending on how productive the process is in a given language, LIFT morphemes might be more economical.

5. Conclusion

In conclusion, we argued that "quasi-ECM" constructions in MG are proleptic constructions, where the proleptic object, i.e., the ACC DP, is base-generated in the matrix clause and is coreferential with a pro in the subject or object position in the CP. Contrary to other proleptic constructions described so far, MG ones are not always interpreted transparently, allowing for de dicto readings of the ACC DP. This suggests that prolepsis is not simply a mechanism to exclude de dicto readings, but a way to express some marked meaning in general. We argued that in MG this marked meaning can be modeled by a causal function, imposing a semantic restriction on the ACC DP. We also provided an analysis in terms of semantic lowering, extending the account of Dawson and Deal (2019) for Tiwa, while also accounting for the semantic restriction on the ACC DP. If this analysis is correct, the availability of *de dicto* readings shows that quantifiers in certain constructions may be interpreted lower than their base-generation site, both w.r.t. scope and w.r.t. the world argument of their restrictor. This suggests that semantic lowering mechanisms are not restricted to non-intensional versions of pronouns, contrary to what we see in Tiwa. A prediction would be that semantic reconstruction behaves similarly. In a nutshell, we saw that the syntactic access to the proleptic object is used to restrict the semantics of the sentence, and what this restriction is may be a point of cross-linguistic variation.

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