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DPs in adjectival small clauses in Romanian – a diachronic perspective

Monica Alexandrina Irimia
University of York/University of Toronto

This paper focuses on some diachronic data from Romanian concerning adjectival predicates under intensional verbs (*consider*-Adj. types). The interest in these constructions resides not only in their contribution to the investigation of one of the most versatile structures in human language, namely small clauses, but also in their relevance for understanding the structure of the Romanian DPs and DOM strategies, due to the salient diachronic stability of important structural properties of these configurations. It is proposed that a complex predicate analysis employing a Multiple Agreement Mechanism is able to derive the *strong/specific* readings of the shared arguments under discussion; the variation in the DOM marking of pronouns is correlated to a plausibily more recent development of the definiteness scale for differential marking in Romanian, complementary to the animacy scale.

1. Introduction

Constructions involving adjectival predicates embedded under intensional predicates like *consider, see, want*, etc., although less studied as compared to other non-verbal counterparts, pose numerous conceptual challenges. One the one hand, their syntactic structure is still an open issue, theoretical accounts alternating between small clause structures (Stowell 1981, 1991, etc.) or complex predicate configurations (Chomsky 1975, a.o.). On the other hand, these constructions are highly relevant for understanding the nature of DPs functioning as shared arguments, as well as for nominal syntax in general. These two aspects are interconnected as the special morpho-syntactic and interpretive properties of these DP provide crucial hints into the structure these non finite embeddings projections. This paper discusses adjectival predicate data from 16th century Romanian, as compared to modern Romanian, illustrating both interpretative stability as well as variation in the morphological marking of the shared argument. The diachronic picture confirms the configurational distinctions, as well as the interpretive restrictions of the shared DPs, allowing us to better refine this explanatory domain.

1.1 Specific shared DPs

As initially noticed in Williams' (1983) seminal paper, and subsequently confirmed by various cross-linguistic data (see Irimia 2011 for an overview), shared arguments with adjectival embedded predicates can normally only be interpreted as *specific*. Hence the morphological indefinite in (1) is felicitously interpreted as a specific indefinite (de Houp 1973, Heim 1982, etc.).

	ENGLISH
(1)	I considered *a student* sick.
	= I considered a specific student sick. (student is salient in the context, and known to the speaker, if not the wider audience)
	≠ I considered some student or other sick.

Note that this restriction holds not only with individual-level adjectives (as argued for in Basilico 2003), but also with stage-level ones – in (1) sickness is not understood as an immutable characteristic of the student.

As expected, this restriction also applies in Modern Romanian. Moreover, as in many other languages, object (human) morphological indefinites in these contexts **have to be overtly marked** as differential objects introduced by the marker *pe*, and (obligatorily) clitic-doubled (register-dependent), as shown in (2).

(2)	*(L)-*	am	considerat	*(*pe)*	*un*	*student*	bolnav
	=him	have.1.SG	considered	DOM	a.M.SG	student	sick.M.SG
	'I considered a student sick.'						

The diachronic picture is nevertheless more complex in Romanian. Although in Old Romanian such arguments are able to carry only *strong/specificity* readings, as predictable, their morphological marking is not as strict as in Modern Romanian, in that the DOM material can be omitted in some instances. The most important question posed by this paper is how semantic stability (i.e., immutable restriction to specificity) can be reconciled with a non-systematic morphological marking of some classes of shared DPs. The answer has non trivial consequences regarding the syntactic configurations adjectival predicates project, as explained below in 1.2.

1.2 Specific DPs and the small clause/complex predicate debate

As is well known from the extensive literature on scope, canonical specific DPs are generally analyzed as taking wide-scope with respect to the (intensional) predicate (Milsark 1974, Williams 1977, May 1977, Heycock 1994, Diesing 1992, de Houp 1996, Enç 1991, various papers in Reuland and ter Meulen 1987, etc.). Hence specificity in (1) and (2) can only be explained if the shared DP is interpreted **above** the matrix predicate. Raising for Case (to a position above the matrix predicate) can straightforwardly derive wide-scope; however, it leaves unexplained why narrow-scope reading under reconstruction (Chomsky 1995, Lasnik 1999, May 1977, Boeckx 2001, etc.) is not possible. A comparison with other non-finite embedded predicates (e.g., infinitives) unambiguously indicates that in these latter contexts both wide-scope and narrow-scope readings are possible. Consider the contrast between (3) and (4).

(3)	A student seems to be sick.	(4)	A student seems sick.
	Wide-scope: a student >> seems *Narrow-scope:* seems >> a student		*Wide-scope:* a student >> seems No narrow-scope reading

Williams (1983) attributed the lack of narrow-scope readings of shared DPs in (1, 2, 4) to their complex predicate structure, strongly denying a small clause analysis. More precisely, the shared argument is base-generated above the complex formed by the two

predicates, and hence cannot reconstruct to a position lower than the matrix predicate. Therefore, specificity is the only possible interpretation of these types of strong/wide-scope DPs.

When looking at non-pronominal forms, the data collected from Old Romanian behave as expected: only specific indefinites (introduced by *pre*) or definites have been found in these contexts. Complications are found with pronouns: as seen in (5) as opposed to (6), because the DOM marker can sometimes be absent.

(5)	Că	Dumnezeu	ispiti	pre	ei	şi	află	*ei*	destoinici
	That	God	tested	DOM	they	and	found	them	loyal.PL.M
	luiş.								
	he.DAT								
	'That God put them to test and found them loyal to him.' (Coresi EV 260)								

(6)	Ispitind	pre	el	diavolul	…, …	află	*pre*	*el*	nebiruit
	Test.GER	DOM	he	devil.the		found	DOM	he	invincible. SG.M
	'When the Devil put him to test, he found him invincible.' (Coresi EV 520)								

Note that in Modern Romanian DOM is **obligatory** with (shared) object pronominal arguments. Hence, two other questions follow: (i) Why do pronouns exhibit this fluctuating behavior in Old but not Modern Romanian?[1] (ii) Are there changes with respect to what DOM (preferred strategy for marking wide-scope and specificity) actually encompasses morphologically (Silverstein 1976, Aissen 2003)?

Again, what is interesting in these examples is that the DOM marking can be either present (6) or absent (5) with shared object pronouns. However, in the Old Romanian structures examined here non pronominal DPs can only carry DOM or be definite (typical instantiations of *strong/*specific DPs). The data under analysis mainly come from some of the earliest attested Romanian texts, especially Coresi's *Evanghelia cu învăţătură* (CC 1581) which exhibits a variety of small clauses under intensional predicates. This permits a non-trivial testing of both stability as well as diachronic differences in the structure of Romanian DPs and small clauses.

Given what is known about the systematicity of adjectival embedded predicates, the working hypothesis is that the stage of Romanian described here simply illustrates the introduction and early development of a definiteness scale, alongside the more prominent animacy scale in the differential marking of objects. It is also argued that other systematic

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[1] Di Sciullo & Somesfalean (this volume) ask the same question from a biolinguistic perspective. While their answer grasps changes in the computational pattern (i.e., the breaking of symmetry), my purpose is to see how the stability solution for this construction can be compared to similar changes in other contexts where specificity is mapped through DP morphology.

properties of the construction, such as the *strong* readings of shared nouns, support a complex predicate analysis. However, as adjectival predicates display phi-feature agreement with the shared argument, the mechanics of a derivationally simultaneous multiple checking of features by a unitary projection (Hiraiwa 2005) is implemented.

On the basis of this working hypothesis and after a detailed diachronic examination of Romanian adjectival predicates under intensional predicates, the main proposal is that an enriched complex predicate structure is better equipped to account for the data. The discussion is contained in four main parts, starting with section 2 which further introduces the relevant examples and their diachronic picture. Section 3 emphasizes the commonalities of the Romanian examples against a cross-linguistic background, and their stability regarding the presence of *strong* readings of shared arguments. In section 4 further remarks about the structure of non-finite embedded adjectives and their interaction with differential object marking are made. Section 5 contains an evaluation of previous theoretical approaches to embedded adjectives which paves the path for the analysis in section 6. Embedded adjectives under unitary multiple agreement are demonstrated to construct a complex predicate structure (Chomsky 1975): a functional projection ($v_{CMPL.}$) is responsible for checking the relevant features of multiple predicates simultaneously derivationally; section 7 addresses the problem of the unstable morphological marking of pronouns and proposes that this is a result of a shift in the scope of differential marking. The last part (section 8) contains the conclusions.

2. Romanian small clauses

As mentioned in the introduction, Romanian texts from the 16th century contain a variety of adjectival small clauses under intensional predicates (*consider, want*, *think,* etc.); such configurations are also common in Modern Romanian. As the structure of such constructions is still problematic for many modern syntactic analyses, any empirical data that can contribute further relevant details deserve careful investigation. This paper will focus on the contribution embedded small clauses bring to the analysis of shared argument DPs, more clearly their interaction with specificity and DOM. Moreover, although small clauses of this type have received a great amount of attention cross-linguistically from a synchronic perspective, not much has been said about their diachronic behavior, which however appears to provide crucial clues into their nature.

In order to illustrate the facts more precisely, it is very useful to present the data from Modern Romanian and then compare them to the facts from older stages of the language. As seen below, this strategy reveals both stability at the interpretive level but also some important differences with respect to the morphological marking of shared DPs.

Building on the example in (2), repeated here in (7), in Modern Romanian shared DPs in small clauses under intensional predicates can only have the following properties: a) indefinites must carry DOM, (optional) clitic doubling, and specificity related intepretations (7) (see Dobrovie Sorin 1994; von Heusinger & Onea 2009; Chiriacescu & von Heusinger 2009; Hill 2013, etc.); b) if DOM is not possible (as in Modern Romanian DOM is generally restricted to DPs with the feature [+human]), the DPs must be definite (8a), interpreted cardinally in the

singular (8b), or obligatorily specific in the plural (8c) (von Heusinger & Onea 2009; Chiriacescu & von Heusinger 2009);

c) bare DPs (singular or plural) are ungrammatical without differential marking (Chiriacescu & von Heusinger 2009);

d) if pronouns function as the shared argument, they must have DOM, as well as clitic doubling, as in (11) (Chiriacescu & von Heusinger 2009).

(7)	*(L)-*	am	considerat	(**pe*)	*un*	*student*	bolnav
	=him	have.1.SG	considered	DOM	a.M.SG	student	sick.M.SG
	'I considered a (specific) student sick.'						

(8) a.	Am	considerat	*cărţile*		prea	scumpe	
	have.1.SG	considered	book.PL.F.the.PL.F		too	expensive.F.PL	
	'I considered the books too expensive.'						
b.	Am	considerat	*o*	carte	scumpă.		
	have.1.SG	considered	a.F.SG	book.F.SG	expensive.F.SG		
	'I considered a book expensive.'						
c.	Am	considerat	*nişte/unele*[2]		*cărţi*	scumpe	
	have.1.SG	considered	some.F.PL./some.the.F.PL		book. F.PL	expensive. F.PL	
	'I considered some (specific) books expensive.'						

(9)	*Am	considerat	*cărţi*	prea	scumpe[3].
	have.1.SG	considered	book.PL.F	too	expensive.F.PL
	'I considered books too expensive.'				

(10)	*Am	vrut	*pisică*	sănătoasă[3].

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[2] Many native speakers will only accept the *unele* indefinite plural form in this context. As opposed to the indefinite *nişte* which can alternate between a weak and strong reading in the plural, the determiner constructed from the base *un* (one), and which obligatorily takes the definite marker (*une + le*), can only have specific readings.

[3] As the unmarked position of the attributive adjectives is postnominal in Modern Romanian the string in (9) is grammatical with the adjective interpreted attributively (i.e., *I considered expensive books*, *I wanted a healthy cat*), a reading which is irrelevant for the discussion.

| | have.1 | wanted | cat.F.SG | healthy.F.SG |
| | (under the relevant small clause reading) |

(11)	(*Ne)-	au	considerat	(*pe)	noi	inteligenţi/inteligente.
	= us	have.3.PL	considered	DOM	we	smart.M.PL./smart.F.PL
	'They considered us intelligent.'

All these examples also illustrate obligatory phi-feature (gender, number) agreement between the shared DP and the embedded adjective. If agreement is not overt, the embedded predicate can in some instances be interpreted as a manner adverb of the matrix predicate, as in (12); hence such examples are also left aside and omitted from the discussion, as the DP might not have to comply with the same (interpretive and morphological requirements) as the shared DPs in embedded small clauses.

(12)	(*Ne)-	au	considerat	(*pe)	noi	inteligent
	= us	have.3.PL	considered	DOM	we	intelligent.ADV
	'They considered us in an intelligent manner.'

Table 1 summarizes the characteristics of the shared DPs in embedded small clauses in Romanian.

Table 1: Shared DPs in small clauses in Modern Romanian

Definite DPs	Indefinite DPs	Bare DPs	*Pronouns*
√	- require DOM if [+human] - possible in the singular if interpreted cardinally - possible in the plural with a specific interpretation	* (both singular and plural), unless DOM-ed	*- only possible if DOM and clitic doubling are present*

As already mentioned, the data from older stages of Romanian is both convergent and divergent. The similarity resides in the fact that only definite DPs, DOM indefinites (17) and specific indefinites (*ceva* in 13) appear to be found in the corpora. Further examples are given below:

(13)	Unde	să	veţi	afla	*ceva*	*neisprăvit*
	where	SUBJ	FUT.2.PL	find.INF	something	unaccomplished.M.SG
	bine	sau	*greşit…*			

	well	or	wrong.M/N.SG
	'Where, if you find something which is not well accomplished or wrong…' (Coresi EV, 63)		

(14)	Pentru	aceaia	fericat	iaste	omul	cela	ce
	for	that reason	blessed.M.SG	is	man.the.M.SG	that.M.SG	who
	se	*află*	*nevinovat.*				
	REFL.3	finds	innocent.M.SG.				
	'For that reason, happy is the man who is innocent.' (Coresi EV 48)						

(15)	Cine	vedea	vedea	*mortul*	*înviat*	şi	să
	Who	FUT.3.SG.	see.INF	dead.the.M.SG	ressurected.M.SG	and	SUBJ.
	nu	se	veselească?				
	not	REFL.3	rejoice.SUBJ.3.SG				
	'Who is that person who if they see the dead resurrected does rejoice for it?' (Coresi EV 23)						

(16)	Când	ar	fi	văzut	îngerul	din	cer	cu
	when	COND.3.SG	be.INF	seen	angel.the.M.SG	from	sky	with
	veste	bună	şi	de	izbândă	pogorit.		
	tidings.SG	good.F.SG	and	with	victory	descended. M.SG		
	'When he would have seen the angel from the sky with good news and descended with victory…' (Coresi EV 85)							

(17)	*..Pre*	*cazaci*	să	-i	lase	*neatinşi.*
	DOM	Cossack.M.PL	SUBJ	=they.ACC.M.PL	leave.SUBJ.3	untouched.M.PL
	'They should leave the Cossacks untouched.' (Ureche 204)					

At this stage of the language, pronouns can also function as shared arguments in small clauses. However, differently from Modern Romanian the differential object

marking is not obligatory. The examples in (5) and (6) are repeated here as (18), and (19). Note that in (18) the DOM on the shared argument is missing in the small clause (such a structure would therefore be ungrammatical in Modern Romanian), while it is found with the pronoun in the first matrix clause (*ispiti **pre** ei*). In (19) on the other hand, DOM is seen on the shared argument in the small clause.

(18)	Că	Dumnezeu	ispiti	pre	ei	şi	află	*ei*	destoinici
	That	God	tested	DOM	they	and	found	them	loyal.PL.M
	luiş.								
	he.DAT								
	'That God put them to test and found them loyal to him.' (Coresi EV 260)

(19)	Ispitind	pre	el	diavolul	…, …	află	*pre*	*el*	nebiruit
	Test.GER	DOM	he	devil.the		found	DOM	he	invincible. SG.M
	'When the Devil put him to test, he found him invincible.' (Coresi EV 520)

More examples illustrating this alternation are provided below. Note that in (20), (21) and (22) the pronoun has DOM.

(20)	Să	nu	ne	afle	*pre*	*noi*	mirele
	SUBJ	nu	=us	find.SUBJ.3.SG	DOM	we	groom. the.M.SG
	adurmiţi	şi	leninindu	-ne			
	asleep.M.PL	and	be lazy.GER	=us			
	'So that the groom doesn't find us asleep and slacking off.' (Coresi EV 90)

(21)	Deci	de-aciia	vrea	vedea	*pre* el	
	Hence	from here	want.INDIC.PRES.3.SG	see.INF	DOM	he
	răstignit.					
	crucified.M.SG					
	'And he wants to see him crucified.' (Coresi EV 115)

(22)	Nici	**pre**	*noi*	nu	lăsă	*săraci.*
	and.not	DOM	we	not	leave.PST.3.SG.	poor.M.PL
	'And he did not leave us poor (in poverty)'. (Coresi EV 88)					

Once again, what differentiates Modern Romanian from older stages is the obligatoriness of DOM with pronouns in the former variant. The similarities, as well as this relevant difference are summarized in Table 2.

Table 2: Shared DPs in small clauses in Old versus Modern Romanian

DEFINITE DPs		INDEFINITE DPs		BARE DPs		*Pronouns*	
Modern Romanian	16th c Romanian	Modern Romanian	16th c Romanian	Modern Romanian	16th c Romanian	Modern Romanian	16th c Romanian
√	√	- require DOM if [+human] - possible in the singular if interpreted cardinally - possible in the plural with a specific interpretation		* (both singular and plural), unless DOM-ed		*only possible if DOM and clitic doubling are present*	*DOM and clitic doubling are not obligatory*

These patterns require a systematic explanation. There are two aspects an analysis needs to capture with respect to the structure of embedded small clauses and the nature of their shared DPs. First of all, what type of configuration predicts the stable character of non pronominal DPs? More specifically, why are *weak/non-specific* DPs not possible in these contexts? And secondly, given the *specificity/strong* readings imposed on the shared arguments in these constructions, why do pronouns have a variable behavior? An investigation into the second question requires a clear answer to the first question. More simply put, it is necessary to understand what the structure of embedded small clauses is and its interactions with specificity on shared DPs. Section 3 presents a more comprehensive, cross-linguistic picture of the behavior of shared arguments in embedded small clauses, demonstrating without doubt that the restrictions on specificity are a defining property of this configuration, and not a quirk of Romanian. This solid conclusion in turn allows us to tackle the problem of the structure of embedded small clauses in section 4.

3. Small clauses and their shared DPs: beyond Romanian

The observation that shared arguments with embedded adjectival predicates carry interpretations generally identified under the class of *specificity* is cross-linguistically

robust. In fact, it can be seen in language after language that various *specificity* strategies are employed in order to construct *strong DPs* (Milsark 1974) in these instances, which I illustrate in this section for *consider* + AdjP constructions. Moreover traditional grammars systematically signal the special morphological behavior of objects in such contexts, connecting it to 'broad specificity' interpretation: *an entity is made salient/made specific/identified/individualized within someone's mind, but the audience might not precisely identify which entity the mind has individualized* (see de Hoop 1996 for Finnish, Kachru 2006 for Hindi-Urdu, Mandarin Chinese grammars, general discussion in Postal 1974, etc.). Some of the morphological strategies for shared DPs are listed below:

- if bare indefinite, DPs must carry DOM and be interpreted specific (23, Hindi; 27, Turkish)
- if an indefinite DOM is impossible, only definites are allowed (25, Romanian mass noun; 31 Italian mass nouns)
- if weak Case is used (as in Finnish/languages that lack morphological in/definiteness) there is morphology-semantics mismatch (no weak readings allowed in 26, although the essive is not the case 'strong DPs' normally carry)
- strong Case must be further 'strengthened' by overt 'specificity' marking (Arabic, 28)
- 'classifier' languages: demonstratives are obligatory in these instances (Chinese, 29)
- split behavior of mass nouns:
  - in some languages mass nouns are only possible if definite (Romanian 25)
  - in other languages bare DPs are possible with generic interpretation only (30, English)

SHARED DPS AND EMBEDDED ADJECTIVAL PREDICATES

	HINDI-URDU (INDO-IRANIAN)				
(23)	admi	kitab-**ko**/*Ø	acha	səməjʰta	hɛ.
	man.M.SG	book.**DOM**	good.M.SG	think.PRES.PRT.M.SG.	be.PRES.3.SG.
	'The man considers the/a book good.' (a book >> consider; *consider>> a book)				

	SPANISH (ROMANCE)					
(24)	El	professor	consideró	**a**/*Ø	un	estudiante	intelligente.
	The	professor	considered	(**a= DOM**)	a	student	intelligent.
	'The professor considered a specific student intelligent.' (a student >> consider)					

	ROMANIAN (ROMANCE)			
(25)	Vânzătorul	consideră	**mierea**/*miere	ieftină..
	Store clerk.the	considers	honey.the.F.SG./honey	cheap.F.SG
	'The store clerk considers (the) honey cheap.'			

	FINNISH (FINO UGRIC)			
(26)	Miehet	pitävät	***oppilaita***	ilois-i-*na*.

	Man.PL.NOM	consider-PRES.3.PL.	student.**PART.PL**	happy.PL.ESS	
	'The men consider the/ specific students happy.'				

	TURKISH (ALTAIC)				
(27)	Ali	bir	öḡrenc-i-**yi**/*Ø	zeki	bulu-yor.
	Ali	a	student-EP.V.**DOM**/*Ø	intelligent	find-PRES.PROGR.3.SG.
	'Ali finds/considers a (specific) student intelligent.'				
	(a student >> find; *find>> a student)				

	ARABIC (SEMITIC)			
(28)	ʔəʕtəbiru	**Ta:lib-ən**	***(bi-ʕəyni-hi)**	kəsu:l-ən
	1.SG.consider	student-ACC.	in-same-him	lazy-ACC
	'I consider a specific student lazy.'			

	MANDARIN CHINESE (SINO-TIBETAN)					
(29)	Jiaoshou	renwei	**nage**/*Ø	shuesheng	hen	congming.
	Teacher	consider	DEM.	student	very	smart.
	'The teacher considers that/the student smart.'					

	ENGLISH (GERMANIC)
(30)	These people consider meat healthy.

	ITALIAN (ROMANCE)			
(31)	Considero	il	**miele**/*Ø	Costoso.
	Consider.1.SG.	the.MS.SG	honey	expensive.M.SG.
	'I consider (the) honey expensive.'			

Therefore both overt morphological markings, as well as the interpretations these types of shared DPs receive correspond to the so called *strong* readings, in Milsark's (1974) typology. Based on syntactic and semantic properties, Milsark (1974) pioneered a classification of nominal phrases into two important subgroups: a) *weak/narrow scope/non-specific* DPs (which are characteristic to existential contexts, and can be used bare); b) *strong/wide scope/specific* DPs (which are normally more complex morphologically, take wider scope with respect to other operators and cannot be used bare). Milsark (1974), as well as subsequent work, have also identified interpretational properties of each of the two classes; Given that shared DPs in embedded small clauses are uniformly marked as *strong* DPs which exhibit a relevant host of properties, an analysis must be formulated that can derive the wide scope as well as the differential marking. As will be shown in section 4, base generating a small clause containing the shared argument and the embedded adjectival predicate does not predict the right output. Hence strong DPs in these configurations indicate something non-trivial about the structure of embedded adjectival predicates and the nature of wide scope readings.

Before addressing the structure in more detail, one more aspect needs to be made precise about the 'consider-AdjP' contexts. As seen from the various examples above, the embedded adjective requires phi-feature agreement (excluding person, as adjectives do

not normally carry person morphology) with the shared DP. Romanian, Italian, and Hindi-Urdu illustrate this pattern. The same facts hold for a language like French (32). Languages like Arabic also require agreement in Case (see 28), although cross-linguistically a dedicated Case strategy is also a prevalent option, as seen in Finnish (essive Case on all embedded adjectives – depictives and complement adjectival predicates, 33) or Russian (instrumental Case, 34).

	FRENCH				
(32)	Jean	considère	les	femmes	*intelligentes*/*intelligent.
	Jean.M.SG	consider.INDIC. PRES.3.SG	the.PL	women. F.PL	intelligent.F.PL/*intelligent. M.SG
	'Jean considers the women intelligent.'				

	FINNISH			
(33) a.	Sö-i-n	tomaati-n	raaka-*na*. (Depictive)	
	eat-PST-1.SG	tomato-ACC	raw-ESS	
	'I ate a tomato raw.'		(Pylkkänen 2008, ex. 34)	
b.	Miehet	pitävät	*oppilaita*	ilois-i-*na*.
	Man.PL.NOM	consider-PRES.3.PL.	student.**PART.PL**	happy.PL.ESS
	'The men consider the/specific students happy.'			

	RUSSIAN			
(34)	Ja	sčitaju	Ivana	umnym/*umnogo.
	I.NOM	consider	Ivan.ACC.M.SG	intelligent.INSTR./intelligent.ACC
	'I consider Ivan intelligent.'			

Exhaustive agreement between the shared argument and the embedded predicate is a strong indication of a small clause configuration, which however is problematic for deriving the wide scope readings. Hence the challenge for an analysis that could reconcile the two aspects becomes even more difficult. Section 4 discusses and evaluates possible accounts, and proposes that a complex predicate implementation is equipped best to derive the right results.

4. Embedded adjectival predicates and their shared DPs

So far, we have seen that, when examining the properties of adjectival secondary predicates, the linguist is puzzled to see that they are crosslinguistically uniform, in the sense that they respect a set of common characteristics. Some of these properties have already been mentioned, such as (a), while most languages also provide hints into (b), (c), (d): a) the requirement that the shared argument receive a strong interpretation (as opposed to other non-finite instances which might permit weak readings); b) binding facts, which demonstrate that the adjectival secondary predicate does not project an

independent binding domain, separate from the matrix predicate; c) lack of subject control readings; d) occurrence with cross-linguistically stable classes of matrix predicates. Each of these diagnostics is presented below, comparing Romanian with English:

4.1   One universal fact: strong readings of shared DPs

The shared argument with adjectival small clauses must be interpreted as 'specific'; this entails a wide scope reading with intensional predicates, as seen in the English example in (35):

	ENGLISH
(35)	John considers a student intelligent. a student » consider = John considers a (specific) student intelligent. *consider » a student # John considers some student or other intelligent.

Embedded non finite contrast in this respect with embedded infinitivals under main predicates like *consider*, in that they might allow weak readings of the shared argument:

	ENGLISH
(36)	John considers a student to be intelligent. a student » consider = John considers a (specific) student to be intelligent consider » a student = John considers some student or other to be intelligent.

As said above, this property also holds in both Old and modern Romanian; moreover, the two stages also provide morphological overt evidence that signals the specificity/wide-scope status of the shared argument. As seen throughout the paper and in Tables 1 and 2, the object with adjectival secondary predicates under intensional verbs is normally either definite, specific indefinite or differentially marked with *pre*. Old Romanian example (17) containing a differentially marked indefinite is repeated here as (37), for convenience. The absence of narrow scope readings is also strengthened in example (38) from modern Romanian where the shared argument cannot receive an existential reading:

(37)	..*Pre*	*cazaci*	să	-i	lase	*neatinşi.*
	DOM	Cossack.M.PL	SUBJ	=they.ACC.M.PL	leave.SUBJ.3	untouched.M.PL
	'They should leave the Cossacks untouched.' (Ureche 204)					

(38)	*(L)-*	am	considerat	*(*pe)*	*un*	*student*	bolnav.
	=him	have.1.SG	considered	DOM	a.M.SG	student	sick.M.SG
	'I considered a student sick.' a) 'I considered a (specific) student sick.'						

b) ≠ 'I considered some student or other sick.'

At this stage, it is opportune to examine in more detail the nature of *–pe/-pre*, as there are at least two logical possibilities regarding the source of wide-scope readings. On the one hand, it is often assumed that these types of interpretations arise as a result of a special syntactic configuration, generally derived by movement of the DP to a position above the intensional predicate. On the other hand, it has also been demonstrated that there are situations in which a position of the DP *below* the matrix predicate does not necessarily prohibit the argument from taking wide scope. The correct answer for the configurations under discussion here will have syntactic consequences on the structure of secondary predicates. More specifically, it helps disambiguate between a small clause account (39 a) and a complex predicate analysis (39 b). The major difference between the two structures in (39) is that in (39 a) the shared argument is base-generated below the matrix predicate, and further raising to a position above the matrix predicate entails the wide-scope reading. In (39 b), on the contrary, the shared argument is merged high to begin with, predicting the correct high scope facts.

(39)   a. …..   b. …..

        consider   SC   *pe/pre un student*

          pe/pre un student inteligent   consider   inteligent

        Small clause structure   *Complex predicate structure*
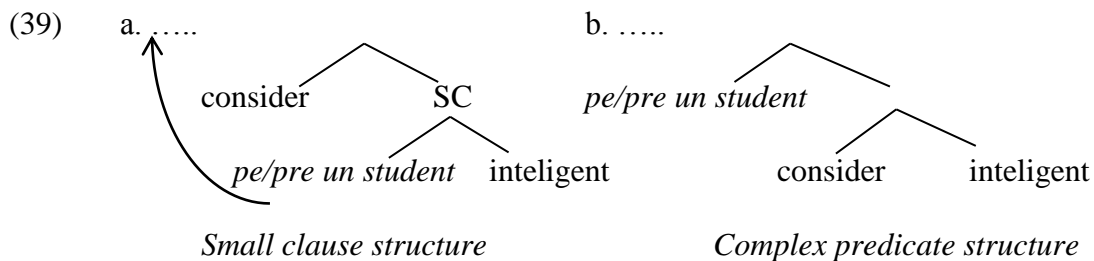
There are various diagnostics whose application can detect the presence of a copy below the intensional predicate; for example, the position should be available for reconstruction processes which could potentially restore the narrow scope reading. However, as observed cross-linguistically, narrow scope interpretations are generally blocked in these environments. However, in order to proceed with a discussion of reconstruction, and to unambiguously decide which of the structures in (39) is to be assumed, let's examine first the nature of *–pre/pe*.

4.2. Differential object marking in Romanian

Traditional Romanian grammars, as well as more recent formalizations (Leonetti 2007; Klein 2007; von Heusinger & Onea 2009; Hill 2013; Cornilescu & Dobrovie Sorin 2008; Farkas & von Heusinger 2003, etc.) have long been puzzled by the nature of this prepositional-like marker, being caught in a debate on whether it encodes a Case marker (the Accusative Case, as in Cornilescu & Dobrovie Sorin 2008) or something else. The Academy Grammar notes that in Romanian the marker *pe/pre* is normally restricted to indefinites or bare nouns, excluding definites. The following contexts of use are further mentioned: a) when the indefinite noun (phrase) is animate, especially human; or c) if inanimate, the noun (phrase) is definite and specific; or c) the noun phrase is used in the double transitive construction (i.e. with secondary predicates).

From a more recent perspective, the collapse of specificity with sensitivity to animacy suggests that *–pe/pre* marks a mixed *differential object* (DO) strategy. If this assumption turns out to be correct, Romanian mirrors the morpho-semantic picture these types of objects have cross-linguistically. For example, languages which encode such objects overtly *require* the differential encoding of the object in embedded small clause overriding features [+human] (as seen in the examples in 23-31, etc.). Also, differential objects can only be interpreted as specific, and *must* take wide scope (Bossong 1991, Bittner 1994, Torrego 1998, Aissen 2003, Öztürk 2005, Rodríguez-Mondoñedo 2007, de Swart 2007, etc.). And, lastly, in the majority of languages their special status is normally indicated by adpositional material.

The question is now: why are *differential objects* the unmarked possibility with secondary predicates? The two structures in (39) provide a straightforward answer in orthogonal ways. If the secondary predicates project a small clause (39 a), the shared argument has to move to a position above the matrix predicate in order to have its Case features checked (assuming a pre-Derivation By Phase framework); adjectival small clauses are non-finite domains in which the relevant structural Case projection is not available. The differential marking signals the derived high position of the argument. The complex predicate analysis on the other hand assumes that the two predicates are merged directly, and the shared argument is independently introduced to a position above the complex formed. Given its high position, it will carry differential marking. Distinguishing between these two hypotheses turns out to be a complex task; however, as shown is subsection 4.1. the small clause analysis ends up in circularity when pushed to its limits. A complex predicate analysis makes better predictions.

5.   Theoretical debates on the structure of adjectival embedded predicates

The observation that shared DPs with Adj.SPs must take wide scope was discussed at length by Williams (1983), who examined sentences like (40) contrasting an embedded adjectival predicate (40 a), and an infinitival (40 b).

	ENGLISH	
(40)	a. A student seems sick.	(Williams 1983, 293, ex.40a)
	b. A student seems to be sick.	

In order to make the distinction more transparent, assume a context like the following for the two sentences above:

(41)	*I walk into the classroom and I see some pill cases on one of the desks.*

Only sentence (40 b) is possible as a continuation to this small fragment; it reports that the evidence indicates that a student is sick, but not necessarily a particular one. This is the *non-specific indefinite* reading, as the indefinite DP can refer to a non-specific entity. Sentence (40 a) on the other hand would be infelicitous for describing the context in (41), as the shared DP with a secondary predicate does not permit the non-specific indefinite

reading. In order for (40 a) to be acceptable it must be the case that there is a specific, previously introduced, discourse or contextually salient student who is sick.

The canonical generative grammar approach to interpretative contrasts along the 'specificity' line follows the pioneering analysis of scopal relations formulated in May (1977, 1985), who scrutinized sentences like (42):
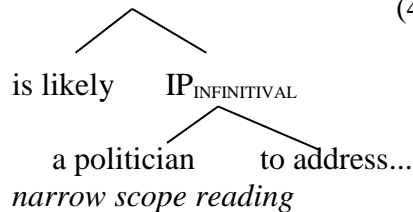
(42)	Some politician is likely to address John's constituency.

May's (1977) crucial observation is that the sentence above is ambiguous. Its two readings can be further paraphrased as follows:

> *[42] may be taken as asserting either that (i) there is a politician, e.g. Rockefeller, who is likely to address John's constituency, or (ii) that it is likely that there is some politician (or other) who will address John's constituency.*

Crucially, May (1977) further connected the two readings to structural differences. The interpretation in (i), which introduces a *specific* referent, was assumed to correspond to a structure in which the DP is (interpreted) above the matrix predicate *(is) likely*, as shown simplistically in (43b). Specificity is thus associated with the *wide scope* of the shared DP. The non-specific reading, May (1977) argued, must be read off a configuration in which the DP is below the predicate *(is) likely*, most probably inside the infinitival clause, as in (43a). A process of covert quantifier lowering inside/adjoined to the non-finite clause allowed the reconstruction of the (existential) quantifier in the embedded domain.
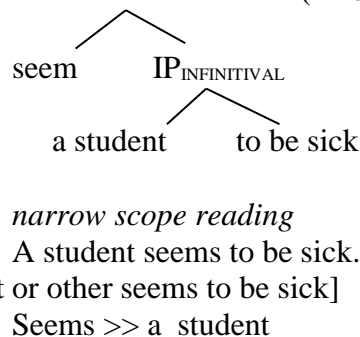
(43 a) ……

    is likely   IP_{INFINITIVAL}

        a politician   to address...
narrow scope reading

(43 b) ……..

    a politician
    is likely

        to   address...
wide scope reading

A politician is likely to address.....   A politician is likely to address.....
[Some politician or other is likely to...] [A (specific) politician is likely to.....]
     is likely >> a politician   a politician >> is likely

(44 a) ……

    seem   IP_{INFINITIVAL}

      a student   to be sick

    narrow scope reading
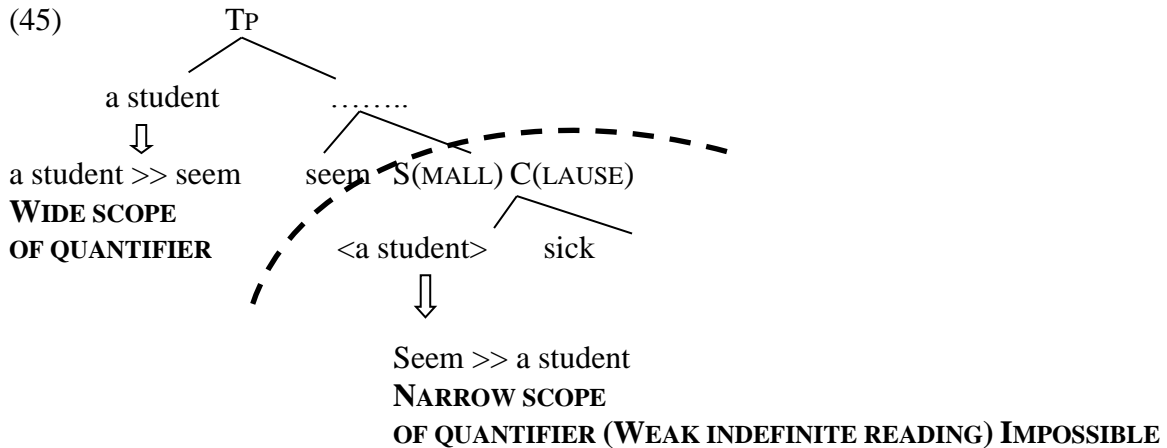   A student seems to be sick.
[Some student or other seems to be sick]
    Seems >> a student

(44 b) ……..

    a student

    seem

        sick
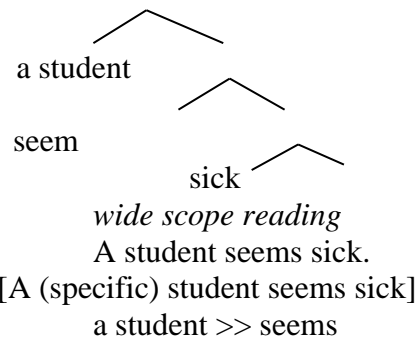
    wide scope reading
    A student seems sick.
[A (specific) student seems sick]
    a student >> seems

Following May (1977), Williams (1983) took the impossibility of the narrow scope reading with secondary predicates to indicate that the existential quantifier in not found in the embedded subject position at any stage in the derivation. If the subject were indeed base-generated lower than the matrix predicate (as the subject of a small clause à la Stowell 1981, or Chomsky 1981) then the possibility of the existential (narrow scope) interpretation would be expected to arise (by quantifier lowering), on a par with the wide scope one (obtained after the subject has raised). Simplifying the structure of small clauses, the configuration in (45) would be expected if the quantifier were allowed to lower inside secondary predicate domains.

(45)

a student >> seem
WIDE SCOPE
OF QUANTIFIER

Seem >> a student
NARROW SCOPE
OF QUANTIFIER (WEAK INDEFINITE READING) IMPOSSIBLE

The question is what the absence of narrow scope readings tells us about the structure of secondary predicates. A radical conclusion, argued for by Williams (1983), is that since the small clause subject position is not available for reconstruction, it is probably not present in the syntax. More straightforwardly, it must be the case small clause structures don't exist for non finite embedded adjectives Williams further argued, and therefore the grammar should not contain a specific theory-internal subcomponent dedicated to them. More importantly, by eliminating small clauses, the conceptual force of the theory is not in any way weakened; there are other ways in which the puzzle of secondary predicates can be adequately explained.

Williams' (1983) account is not the only possible answer to the interpretational puzzle of shared arguments with secondary predicates. Other researchers, among which Lasnik (1999), Chomsky (1993, 1995), Sportiche (2005), Matushansky (2002), and Basilico (2003), argue in favour of a small clause account for secondary predicates, attributing the lack of narrow scope readings to other, independent reasons (among which the impossibility of A-movement to feed reconstruction).

Some of the small-clause accounts will be briefly discussed below, with their shortcomings. What these analyses have in common is the idea that reconstruction into an original subject position inside the small clause is not possible due to independent reasons. Three hypotheses are salient: a) A-movement does not feed reconstruction (Chomsky 1995, Lasnik 1999); b) the subject of adjectival secondary predicates has a topic status small-clause internally, and hence is interpreted as taking wide scope even if embedded under the intensional predicate (Basilico 2003); c) small clauses are not

quantification domains, or crucial structural layers pertaining to quantification are absent (Sportiche 2005).

Pushing to its limits the assumption that A-movement does not feed reconstruction leaves the infinitival cases (40b, 43) unexplained. On the one hand, there are situations in which reconstruction under A-movement could be possible (Boeckx 2001). In order to propose a unified analysis for both infinitives and adjectival SPs one must make the assumption that embedded adjectival predicates do not instantiate small-clause configurations. A possible solution according to which the various readings with shared DPs in these instances are due to the vagueness of indefinites (Lasnik 1999) is not totally satisfactory either, as it cannot predict how 'vagueness' works in these instances (i.e, where strong vs. weak readings are obtained). Turning to the topic status of the shared DPs, Basilico's (2003) analysis implies that narrow scope readings must be systematically absent from these configurations. But this is not empirically correct. Crucially, narrow scope interpretations are possible with modal adjectives only, as seen in (46):

	ENGLISH
(46)	The man considers a book necessary.
	considers » a book (i.e. the man considers some book or other necessary)
	a book » consider (i.e., the man considers a specific book necessary)

Note that the observations extend to the Romanian data analyzed in this paper; that is, instances containing modal adjectives functioning as secondary predicates allow specific and existential readings. Observe that, as shown in example (47), in these instances the specificity/differential object marker –*pre* can be dropped more easily in modern Romanian:

(47)	Profesorul	consideră	*un*	*student*	necesar	pentru	proiect
	Teacher.the.M.SG	considers	a.M.SG	student	necessary. M.SG	for	project
	a. The professor considers a (one) student necessary for the project. b. The professor considers some student or other necessary for the project.						

As topics have specificity as one of their semantic correlates, examples like (46) and (47) are not only unexpected, but also impossible to derive under Basilico's account. A more plausible explanation is that the low scope interpretation is obtained in these instances because of the inherent semantics of modal adjectives, which have been argued to normally take wide scope with respect to other quantificational elements (see Moulton 2011). Under a complex predicate account the data can be derived straightforwardly; the modal adjectives take scope over the high merged shared DP inside the complex.

Lastly, the reasoning that narrow scope readings are not possible with subjects of adjectival predicates because small clauses are not full domains of quantification has its problems, too. As Williams (1983) already remarked, if it were true that small clauses are

scopally defective in important respects, blocking certain types of quantification, we would expect weak interpretations of indefinites to be systematically blocked inside small clauses. But again, this doesn't seem to be the case. In sentences (48 a and 48 b) from English, the indefinite in the complement to the adjectival secondary predicate can be interpreted both weak and strong:

	ENGLISH
(48)	a. John seemed upset with a friend. = John seemed upset with a specific friend. = John seemed upset with some friend or other.
	b. They considered the student happy with a book. = They considered the students happy with a specific book. = They considered the student happy with some book or other.

There does not seem to be any non-stipulative way to explain the absence of the narrow scope readings in a putative subject position inside the small clause except for the assumption that that position is not generated to begin with. Hence a complex predicate structure makes the right predictions in a non-stipulative manner. This proves to be on the right track anyway because it also predicts the binding facts (discussed in 4.2).

5.1   Binding facts

In many languages negation on the adjectival secondary predicate takes main clause scope (i.e., it behaves as if interpreted in the domain of the matrix verb). To better understand this point, let's examine a language where such characteristics are more prominent. For example, dialectal Hindi-Urdu adjectival embedded predicates illustrated in (49), and (50), as this language allows variable positioning of negation. These two sentences contain a negative polarity item on the subject of the matrix predicate. Crucially, in (49) negation is not placed adjacently to the matrix predicate (as in 50), but rather in the domain of the adjectival secondary predicate. The fact that this sentence is not interpreted as a negation on the main predicate indicates that the negation is not found syntactically in a position above the main predicate only. Sentence (34) is rather felicitous in a context in which some fish eating might have taken place, but crucially the fish consumed wasn't raw[4]. What is relevant is that even though negation is in the domain of the embedded adjective, it can take scope over and bind the negative polarity item (*ek-bhii*) in the matrix predicate domain. A complex predicate analysis derives the facts straighforwardly.

	HINDI-URDU (INDO-IRANIAN)					
(49)	ek-bhii	laṛke-ne	*machli*	**nahī:**	*kacch-ii*	*kaa-i*.
	one-NPI.	boy-ERG.	fish.F.SG	NEG	raw-F.SG	eat-PFV.F.SG
	LIT. 'One boy ate the fish not raw.' (i.e., some fish-eating might have taken place, but the fish wasn't raw)					

---

[4] For speakers of the standard variety of Hindi-Urdu, the sentence in (49) appears to be degraded (but not completely out; rather it should be marked as ??). Thank you to Prof. Rajesh Bhatt for clarification.

	'Not even a single boy ate the fish raw.' (*dialectal variant*)

(49) is not *not* truth-conditionally equivalent to a sentence in which negation appears on the main predicate, as in (50). The reading of the latter is that no fish eating has taken place, no matter whether the fish would have been raw or cooked.

	HINDI-URDU (INDO-IRANIAN)					
(50)	ek-bhii	laṛke-ne	*machli*	*kacch-ii*	**nahĩ**:	*kaa-i.*
	one-NPI	boy-ERG.	fish.F.SG	raw-F.SG	NEG	eat-PFV.F.SG
	'Not even a single boy ate the fish raw.' (i.e., the boy did not eat the fish at all)					

The negation diagnostic strengthens the complex predicate analysis. In Section 4.3 another diagnostic that supports these two conclusions is also introduced.

5.2. *No subject control verbs*

A classic observation regarding the constructions under scrutiny here is that verbs selecting adjectival predicates are *not* normally subject - control classes (Chomsky 1981; Postal 1974; Hornstein 1999, etc.):

	ENGLISH
(51)	*John considers intelligent. (i.e., John considers himself intelligent).

	ENGLISH
(52)	*John wants happy. (i.e. John wants to be happy).

There has been extensive discussion as to why this restriction holds (see especially the detailed presentation in Chomsky 1981). A complex predicate structure predicts the facts. Under a small clause analysis, intensional predicates like *consider* would require a control-type configuration in which coreference is mediated by PRO in the subject position of the small clause headed by the adjectival predicate (assuming here a very simple syntax of control). But if there's no such position, PRO can't be part of the structure[5]. As expected, the *no-subject-control* restriction is valid in Romanian:

	ROMANIAN (ROMANCE)		
(53)	*Profesorul	consideră	bun
	teacher.the	considers	good.M.SG
	'The professor considers good.' (intended – 'the professor considers himself good')		

	ROMANIAN (ROMANCE)

---

[5] *Seem*-type contexts, which are not discussed in this paper, might appear to be an exception, because of examples like 'He seems sick'. However, this is only apparent. In language after language, these structures exhibit properties which are clearly distinct from canonical control.

(54)	*Regele	vrea	viu.
	king.the	wants	alive.M.SG
	'The king wants alive.'		(i.e., the king wants to be alive)

5.3   *Verb classes?*

Lastly, to finish the comparison between Romanian and their correspondent structures elsewhere, it can also be mentioned that the inventory of matrix predicates selecting AdjSP is the typical one: *vrea* ('want'), *considera* ('consider'), *declara* ('declare'), *spune* ('tell'), *găsi* ('think', 'find', 'consider'), etc.

Let us summarize the results obtained in the last two sub-sections: a complex predicate analysis can straightforwardly derive the lack of narrow scope readings of DPs with non-modal adjectival embedded predicates. The next task is to spell-out the precise mechanics of shared agreement. This is done in the next section. Subsection 6.1 starts by eliminating some logically plausible explanations for the propagation of exhaustive parasitic agreement into the Adj.SP. Sub-section 6.2 introduces an enriched complex predicate analysis under which shared agreement arises as a result of a Multiple Agree operation applying simultaneously with two predicates.

6   Multiple agreement and complex predicates?

Configurations of shared, multiple agreement have been under intense scrutiny in the minimalist program. A recent structural evaluation is found in the Derivation by Phase-based (DBP) – style *syntactic* implementations. Following the explicit remarks in Chomsky (1993) adjectival secondary predicate configurations are collapsed with participial parasitic agreement instances. More specifically, a minimalist theory of agreement has to explain the mechanics of agreement on participial forms like *caught* (55). Note that in inflectionally richer languages, φ and Case agreement on the participial is overt in these instances, as shown in example (57 a) from Icelandic, where it tracks its *semantic* argument. In Icelandic, AdjSPs also show exhaustive agreement with the *semantic* argument in *consider*-AdjSP contexts, as illustrated in (57 b):

(55)	There seem to have been *caught* many fish. (Chomsky 2001, ex. 18)
	……..expect to have been *caught* many fish

(56)   a. C[β T seem ⎤
                                          ⎬   [Expl to have been [α caught several fish]
             b. [β *v* expect ⎦

	ICELANDIC							
(57) a.	*Participial overt exhaustive agreement*							
	Það	virðist	sem	*margir*	*fiskar*	hafi	verið	*veiddir*

	There	seems	that	many	fish-PL.N	have	been	caught.PL.N
	'Many fish seem to have been caught.'							
b.	*Secondary predicate overt exhaustive agreement*							
	Monica	tel		*barnið*		*gafað.*		
	Monica	considers		child.the.N.SG.ACC		smart.N.SG.ACC.		
	'Monica considers the child smart.'							

The Derivation By Phase model assumes double Agree operations generate sentences like (57). The probes (T or *v*) agree with Expl (this step is not discussed here for reasons of space) and *fish*. T deletes the uninterpretable feature of Expl (inducing raising) and values nominative on *fish* (56a a). *v* deletes the uninterpretable feature of Expl (without raising to [Spec,*v*], and values accusative Case on *fish* (56 b). The second Agree operation involves the participial/Adj.SP. More specifically, Prt is assumed to establish a phi-Agree relation with the argument *fish*. But as in languages like Icelandic, Case agreement is also visible, its presence on the participial must also be explained. The Case facts that have to be captured by the theory are that, normally, the participial is nominative with probe T, and accusative with probe *v*. Crucially, in order for the Agree relation between the participial/Adj. SP. and the shared argument to be straightforwardly established, a small-clause configuration needs to be taken for granted. Assuming, for the sake of the argument, that the object is licensed as an argument of a small clause projected by the participial head, let's focus our attention on that stage of the derivation in which the shared argument and the participial are in a local configuration (58). In order to simplify the discussion, that stage is labeled here 'cycle α'.

(58)   [α Prt [catch [DO several fish]]]
               ┌ **u#** ┐   ┌ # ┐
   │ **uγ** │   │ γ │
               └ uC ┘   └ uC ┘
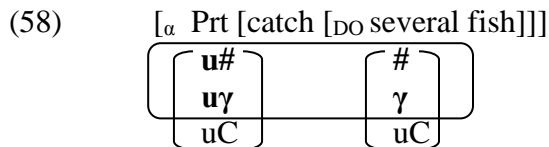
The precise mechanics of cycle α, which is also the main interest for the embedded adjectives is as follows. As the Prt. head has an adjectival nature, "its φ-set may consist of (unvalued) number, gender, and Case, but not person" (Chomsky 2001). Its unvalued features initiate the operation Agree, targeting the shared argument (closest, in fact only DP in its domain). The φ-sets of Prt. and DO match (DO is φ-complete), inducing Agree. Number and gender features of the Prt. receive values and delete. At the next stage of the cycle (stage β, see 56), Case is assigned to the DO: nominative with probe T and accusative with probe *v*. But this leaves the Prt with its Case feature unvalued, leading to a crash in the derivation. Chomsky's idea for a repair strategy builds on the notion of phase. The φ-features of Prt are still visible at stage β of the cycle, though deleted, because T and Prt are not strong phases. Valued features will only disappear at the strong-phase level CP or *v*P, as the phase is transmitted to the phonological component. As a result of this feature visibility extension, Prt. can also enter into a Case agreement relation. Hence, Prt and DO agree with one another: directly for number/gender, indirectly for structural Case (since each agrees with the probe). Another important

remark concerns the basic nature of predicative adjective features. The general assumption in DPB, as well as MPLT (Chomsky 1993) is that predicative adjectives establish, in cycle α, automatic agreement with the closest argument (the specifier/complement in a small clause configuration). The two frameworks a-priori block a mechanics in which the unvalued features of the predicative adjective could skip the closest DP, preferring later valuation. The challenge presented now is how to reconcile these agreement patterns, which suggest a small clause configuration, with the absence of narrow scope readings. Sub-section 5.1. introduces the mechanics of a simultaneously multiple agreement operation that can derive both complex predicate configurations as well as adjectival agreement.

5.1 Analysis

To recapitulate, the various diagnostics introduced support one important conclusion. Namely, a complex predicate analysis is more adequate to explain the scope facts (no matter which variant is analyzed). Remember that a skeletal configuration that predicts default scope readings on the shared DP in canonical Adj.SPs contexts like (2a), repeated here as (59), is as in (60). The two predicates merge first, and then the shared argument is introduced. Crucially, the shared argument and the secondary predicate do *not* form a small clause constituent at any stage in the derivation:

(59)	*(L)-*	am	considerat	*(*pe)*	*un*	*student*	bolnav.
	=him	have.1.SG	considered	DOM	a.M.SG	student	sick.M.SG
	'I considered a student sick.'						

(60)   …….
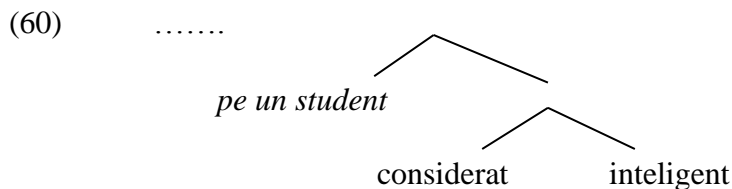
A complex predicate syntax along the lines in (60) is by no means new. It has been proposed in Chomsky (1975), to cite just a classic reference. However, several aspects of it have to be further worked out in order to provide an adequate account of the Romanian data. Two questions are particularly important: 1. What is the status of the shared argument? 2. What is the specific mechanics of the operation of complex predicate formation? This paper proposes that the structure in (60) has to be enriched as in (61).

(61)……..
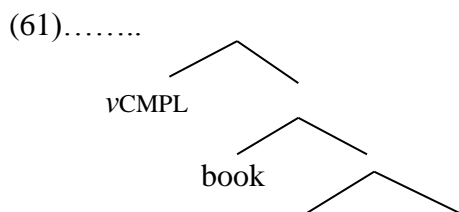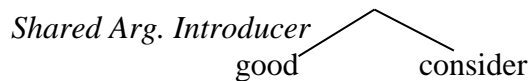
Based on cross-linguistic consistent morphological markings, it seems safe to assume that the shared argument is introduced by a dedicated functional projection. But nothing hinges on this. Note that the facts would also be explained by assuming that the argument is compositionally introduced by the predicate complex; the only reservation is that in this case more sophisticated mechanics would be needed. What is important for the current analysis is that the shared argument be merged high; the more precise nature of the projection introducing it would require a discussion that goes beyond the space limits of this paper, and is thus left aside.

The main assumption regarding the structure of these embedded predicates is that they undergo a process of *complex predicate* formation in syntax, and don't project small clauses. This analysis further builds on Rothstein's (1985) idea: there are predicates which cannot saturate their features directly. More specifically, these are predicates that *cannot take their subject directly* – they have to be predicated of an argument introduced by/in the domain of another predicate. The computational system of FL contains a procedure by which the [+pred] feature of more than one head can be checked simultaneously. The ingredients of this simultaneous checking operation are the process of Multiple Agree (Hiraiwa 2004) and its implementation to the domain of predicates. Hiraiwa (2004) formalized a process of multiple agreement which operates in those instances in which multiple simultaneous identical Case markings spread to more than one syntactic object. He focused mainly on sentences like (62) from Japanese:

	JAPANESE (Hiraiwa 2004, ex. 2.4)					
(62)	Taro-**ga**/ni	Hanako-**ga**	me-**ga**	waru-ku	kanji-rare-ta	(koto).
	Taro-**NOM/DAT**	Hanako-**NOM**	eye-**NOM**	bad.INF	think-PASS-PST	(that)
	'(that) Taro thought that Hanako had a bad eyesight.'					

These types of sentences are puzzling because the nominative Case 'propagates' across a non-finite complementation domain. The subject of the matrix clause is expected to bear nominative Case, but the morphological markings of the subject and the object of the embedded non-finite clause are surprising. In Japanese, just like in English, the verb *think* can function as an ECM-inducing predicate, checking accusative Case. But the case on the embedded subject, the DP *mega* 'eye', is nominative. Even more unexpected is the presence of the nominative on the embedded clause possessor, Hanako. In this context, the genitive Case would normally be predicted in Japanese.

In order to account for this apparently strange state of affairs, Hiraiwa (2004) assumes that a single probe (matrix T) can check the uninterpretable Case features of *several* goals which happen to be in the required space at some moment in the derivation. Implementing Ura's (1996) observations about multiple feature checking, Hiraiwa (2004) formalizes the mechanism of Multiple Agree as in (63), (64), and (65):

(63)   MULTIPLE AGREE *(multiple feature checking) with a single probe is a single simultaneous syntactic operation*; AGREE *applies to all the matched goals at the same derivational point derivationally simultaneously.*
(Hiraiwa 2004, page 38)

(64)   MULTIPLE AGREE $(P, \forall G)$
Agree is a derivationally simultaneous operation AGREE $(P, \forall G)$

$$P \quad > \quad G_1 > ....> G_n$$
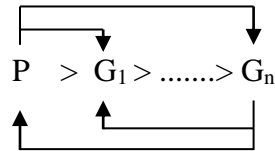
(65)   THE PRINCIPLE OF SIMULTANEITY   (Hiraiwa 2004, 2.9)
Apply operations simultaneously at a probe level.

Assuming a correlation between multiple Case spreading with arguments, and shared agreement with 2> predicates, this paper extends and specifies the nature of Multiple Agree to the domain of predicative complexes. When applied to complex predication formation, Multiple Agree is an operation that values the Pred (and other uninterpretable) features of (two) predicates. The process is realized simultaneously and initiated by a functional projection endowed with the capacity of valuing and transmitting the relevant features of *more than one predicate*. The principle of complex predicate formation is given in (66):

(66)   PRINCIPLE OF COMPLEX PREDICATE FORMATION
[uPredicate/uφ] features of more than one predicate in the same phase are checked derivationally simultaneously by a probe which can establish an AGREE relation with a goal containing the **relevant interpretable [φ]features**.

Multiple agreement initiated by the functional projection labeled v_{CMPLX} in order to emphasize its contribution to the formation of the complex. Checking is initiated at *v*, instead of T (see also Béjar and Rezac 2009), in order to explain the common cross-linguistic object agreement patterns with such constructions, as well as their complex predicate nature (as was seen from anti-reconstruction patterns in the interpretation of shared arguments, binding effects, etc.). More specifically, v_{CMPLX} establishes first an agreement relation ($_1$) with the closest DP and obtains the relevant [φ]features features which are then $_{(2)}$ transmitted simultaneously to the multiple predicates in the configuration. A sample derivation is provided in (67):
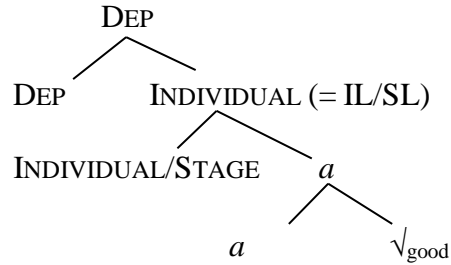
(67) $_{(1)}$
$v_{CMPLX} > \; G_1 > ....> Pred_1 > ....Pred_n$
$_{(2)}$
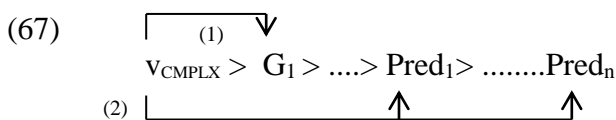
A sample derivation:

(68)   The man considers the women intelligent.

Num/Lexicon = {the, man, Sit^0, v_{CMPLX}, *considers*, DEP, *a*, $\sqrt{\text{good}}$}
              [Sit^0 = to introduce the shared argument]

i) Assemble Dep:

DEP
├── DEP
└── INDIVIDUAL (= IL/SL)
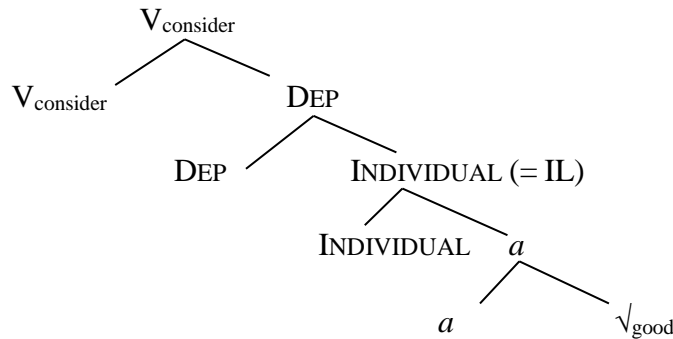   ├── INDIVIDUAL/STAGE
    └── *a*
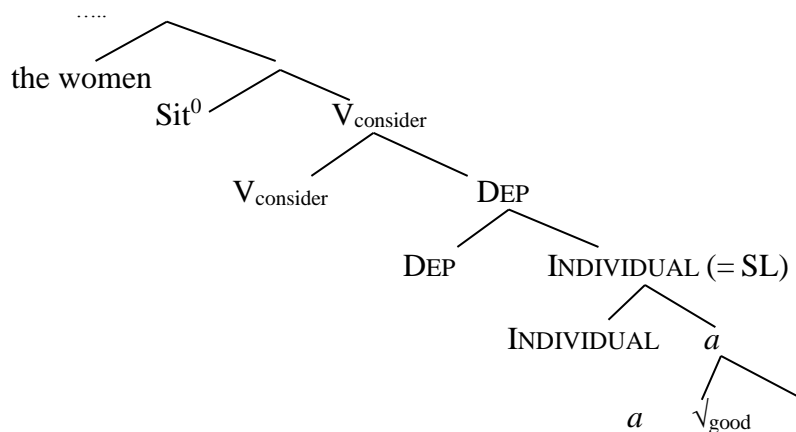   ├── *a*
        └── $\sqrt{\text{good}}$

The label DEP is used here for the embedded adjectival predicate in order to disambiguate it from a resultative constituent. INDIVIDUAL/STAGE stands for the possible individual-level or stage-level specification of a predicate like *good*. As further details of the internal structure of the secondary predicate are irrelevant here, they will be left aside.

ii) Select *consider* (more detailed structure not shown here)   V$_{consider}$
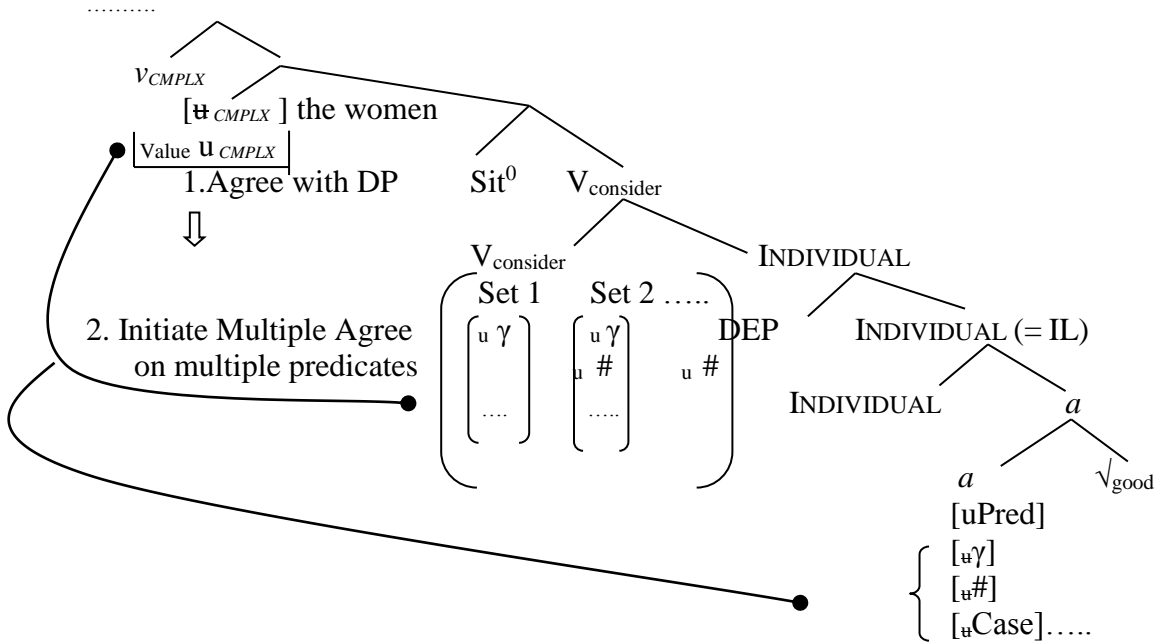iii) Dep & V$_{consider}$: Merge

V$_{consider}$
├── V$_{consider}$
└── DEP
    ├── DEP
    └── INDIVIDUAL (= IL)
        ├── INDIVIDUAL
        └── *a*
            ├── *a*
            └── $\sqrt{\text{good}}$

iv) Merge Sit^0, and shared argument

…..
├── the women
└──
    ├── Sit^0
    └── V$_{consider}$
        ├── V$_{consider}$
        └── DEP
            ├── DEP
            └── INDIVIDUAL (= SL)
                ├── INDIVIDUAL
                └── *a*
                    ├── *a*
                    └── $\sqrt{\text{good}}$

v) Merge v_{CMPLX}

MULTIPLE AGREE OPERATION, responsible for THE INTEGRATION OF INDEPENDENT PREDICATES INTO A COMPLEX

....

v$_{CMPLX}$
[Ħ $_{CMPLX}$] the women
Value u $_{CMPLX}$
1. Agree with DP   Sit^0 V$_{consider}$
⇩

2. Initiate Multiple Agree on multiple predicates

V$_{consider}$
Set 1   Set 2 .....

$\begin{bmatrix} u\ \gamma \\ {}_u\ \# \\ .... \end{bmatrix}$ $\begin{bmatrix} u\ \gamma \\ {}_u\ \# \\ ..... \end{bmatrix}$ ${}_u\ \#$ DEP   INDIVIDUAL (= IL)

INDIVIDUAL   a

a   √$_{good}$
[uPred]
$\left\{ \begin{array}{l} [{}_Ħ\gamma] \\ [{}_Ħ\#] \\ [{}_ĦCase]..... \end{array} \right.$

Note that the derivation above represents the situation in which the shared argument and the secondary predicate also show Case match. As already mentioned, in many languages (Finnish, Russian, etc., see examples 8 and 9 above) secondary predicates might carry dedicated Cases. These patterns require a somehow distinct implementation of the Agree operation, but as their analysis goes beyond the topic of this paper, the precise mechanics will be omitted here. Multiple Agree predicts uniform agreement with the shared object, as applied to the process of complex predicate formation.

The mechanics introduced above derives both the wide scope readings and differential morphology on the shared DP in both Old and Modern Romanian. If these constructions are instances of complex predicates, their diachronic stability is straightforwardly explained. However, the complex predicate analysis remains agnostic to the diverging marking of pronominals. This aspect is briefly touched upon in section 5.

7. Pronouns and differential object marking

Remember that a striking difference between Old Romanian and Modern Romanian is seen in the marking of the pronouns functioning as shared arguments in embedded adjectival contexts. Namely, if in modern Romanian all personal pronouns must carry differential marking in these instances (as in example 11, repeated here as 69), in Old Romanian there appears to be optionality in that pronouns can either have the differential marking or not. Diachronic examples (5) and (6) are also repeated here under (70) and (71). In (70) the shared pronoun does not carry differential marking.

(69)	*(*Ne)-*	au	considerat	*(*pe)*	*noi*	inteligenţi/inteligente.

	= us	have.3.PL	considered	DOM	we	smart.M.PL./smart.F.PL
	'They considered us intelligent.'					

(70)	Că	Dumnezeu	ispiti	pre	ei	şi	află	*ei*	destoinici
	That	God	tested	DOM	they	and	found	them	loyal.PL.M
	luiş.								
	he. DAT								
	'That God put them to test and found them loyal to him.' (Coresi EV 260)								

(71)	Ispitind	pre	el	diavolul	…, …	află	*pre*	*el*	nebiruit
	Test.GER	DOM	he	devil.the		found	DOM	he	invincible. SG.M
	'When the Devil put him to test, he found him invincible.' (Coresi EV 520)								

Given this split, the question is the following: do pronominal morphological alternations indicate structural diachronic differences in the construction of small clauses? Or are the differences to be found somewhere else? Given the fact that non-pronominal DPs exhibit the same morphological marking restrictions diachronically (i.e, prohibition on bare indefinites, restriction to wide scope and specificity readings), structural differences at the clausal level are not plausible. It rather appears to be more probable that a shift in the setting of the differential marking took place, extending its coverage to pronouns.

In order to better motivate this preliminary observation, a few more words are necessary regarding differential object marking. The typological literature following the pioneering work by Bossong (1985) has established that differential object marking is a strategy encoding the prominence of an object when compared to the subject. This generalization, as formulated is Aissen (2003) is spelled out in (72):

(72) The higher in prominence a direct object, the more likely it is to be overtly case marked.

Another very important observation typological studied have made is that the differential object marking strategy is not unitary. Human languages employ this overt morphological marking based on a variety of factors broadly related to prominence, among which are animacy and definiteness. Aissen (2003) further identified the following rankings that hold cross-linguistically with respect to the differential status of objects:

(73) Animacy scale: Human > Animate > Inanimate
(74) Definiteness scale: Personal pronoun > Proper name > Definite NP > Indefinite specific NP > Indefinite NP

What these scales are supposed to capture is not only semantic/structural prominence but also its correspondence to morphology. Hence, as [+human] is situated higher on the scale of animacy, human DPs are statistically more probable to receive differential marking. The reasoning goes on a similar way for the definiteness scale; as personal pronouns are the highest, they are more likely to receive differential marking.

Romanian, as opposed to many languages in which only one of the scales is used for differential object marking, exhibits a complex mix. On the animacy scale, DPs with the features *human* and *animate* can only receive differential marking. On the definiteness scale, all DPs with the puzzling exception of definites (and non-specific indefinite NPs) can take the marker *pe*. This is schematized in (75):

(75) Differential marking in Romanian:
      a. Animacy scale: Human > Animate
      b. Definiteness scale: Personal pronoun > Proper name > Indefinite specific NP

However, out of the two scales, the definiteness one is less stable. Examples from the same period indicate that some definites accepted differential marking, especially if they encoded unique entities (e.g., God):

(76)	Și	cine	va	căuta	aceasta	milostiv	afla-va
	and	who	FUT.3.SG	seek.INF	this	merciful	find-FUT.3.SG
	pre	*Domnul*.					
	DOM	God.the.					
	'And who will seek this, he will find God merciful.' (Coresi EV 278)						

However, such examples are not statistically prominent, and appear to be marginal in modern Romanian. This fluctuating status could probably indicate that the texts from Old Romanian witness the development of the second definiteness scale, complementary to the animacy one. This could explain why the pronouns can receive differential marking or not; in the latter case, they illustrate a stage in the history of Romanian when the definiteness scale had not been fully implemented, leaving the pronouns unaffected.

8. Conclusions and further issues

This paper investigated some previously unaddressed diachronic data with adjectival secondary predicates in Romanian, focusing on the most economical and empirically motivated strategy to derive restrictions to wide scope on shared DPs. The main conclusion reached is that typical intensional predicates with Adj.SPs. form a predicate complex syntactically, resulting in obligatory multiple agreement inside the complex. Preliminary investigation into the nature of differential marking in Romanian also supports a hypothesis according to which the alternating differential marking of pronouns (as opposed to non-pronominal DPs) is due to a shift in differential marking strategy, namely the introduction of a definiteness scale, complementary to the more canonical animacy scale.

Corpus

CC^2 1581   Puşcariu, S. & A. Procopovici (eds). 1914. Diaconul Coresi, *Cartea cu învăţătură*. Bucharest: Atelierele Grafice Socec.

CPr 1566-1567   Bianu, I. (ed.). 1930. Coresi, Apostol. *Texte de limbă din secolul XVI, IV, Lucrul apostolesc tipărit de diaconul Coresi la 1563*.

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