

# ON ROMANIAN PERCEPTION VERBS AND EVIDENTIAL SYNTAX

GABRIELA ALBOIU<sup>1</sup>, VIRGINIA HILL<sup>2</sup>

**Abstract.** This paper focuses on Romanian perception verbs with an aim at sorting out the correlation between the type of evidential reading (i.e. direct *versus* indirect) and the type of complement to the verb. We argue that, beside lexical encoding of evidentiality, Romanian also resorts to syntactic encoding, which is manifested in two ways: (i) a direct evidential reading arises when the perception verb selects a reduced CP complement; whereas (ii) an indirect evidential reading (inferential, evaluative) arises when the verb selects a full-fledged CP, the subject of which moves to the matrix clause (Raising-to-Object – RtoO).

**Keywords:** evidential, reduced CP, ECM, Raising to Object.

## 1. INTRODUCTION

Perception verbs have intrinsic evidential features, since their lexical definition includes the source of information (i.e., sight, hearing, touch, smell, taste). Hence, the interpretation of the sentence they generate is expected to provide direct (sensory) evidence about an entity or a proposition. However, this is not always the case, since perception verbs may also convey indirect evidence, involving inferences, presuppositions, hearsay, degrees of commitment to the evidence and other nuances that involve cognition instead of physical experience. A longstanding question in linguistics concerns this switch between direct and indirect evidential readings on perception verbs: is it achieved within or via the lexicon only, or does it involve morpho-syntactic processing as well? And if it does, how is the latter achieved (Wiemer 2007)?

This paper makes a contribution to the questions above by focusing on the switch between direct and indirect evidence with perception verbs in Romanian. Our case study shows that switch in type of evidentiality coincides with a switch in the syntactic pattern of complementation. We further show that both direct and indirect evidentiality contexts allow the embedded subject to interact syntactically with the main clause predicate domain, with the result that the DP subject of the embedded clause may surface with ACC Case instead of NOM Case in certain contexts. Furthermore, in some cases (exact details to be clarified in the paper) when the ACC Case marked DP appears in the matrix clause it pairs with a switch to indirect evidentiality. In order to explain why a change in the location of the ACC Case marked DP subject triggers a shift in evidential interpretation, the semantic evidentiality feature must be assumed to map into syntax, let's say, as the evidential

<sup>1</sup> York University, Canada, galboiu@yorku.ca.

<sup>2</sup> University of New Brunswick, Canada, mota@unb.ca.

functional feature, [E]. It is this feature that attracts the embedded subject for checking and valuation. In all other cases, this feature is realized lexically and, so, is directly satisfied via the subcategorization requirements of the verb.

Empirically, our paper focuses on evidential paradigms as in (1) and (2), which show a contrast between direct (sensory) and indirect evidence.

- Direct evidence

- (1) a. Am auzit melodia aceea.  
have.1 heard tune.the that  
'I've heard that tune.'
- b. L-am auzit pe Mihai cântând la pian.  
him-have.1 heard DOM Mihai singing at piano  
'I heard Mihai playing the piano.'
- c. L-am auzit pe Mihai cum cântă la pian.  
him-have.1 heard DOM Mihai how sings at piano  
'I heard Mihai play the piano.'

- Indirect evidence

- (2) a. Am auzit eu în ce fel cântă Mihai la pian.  
have.1 heard I in what way sings Mihai at piano  
'I heard about how Mihai plays the piano.'
- b. Am auzit că Mihai cântă la pian.  
have.1 heard that Mihai sings at piano  
'I heard that Mihai plays the piano.'
- c. L-am auzit pe Mihai c-ar cânta la pian.  
him-have.1 heard DOM Mihai that-would sing at piano  
'I heard Mihai claim that he plays the piano.'

The same perception verb, *auzi* 'hear', yields constructions with contrasting evidential readings. Our syntactic investigation will show that sentential complements are not all alike, and that their differences pattern along the evidential divide. For this purpose, the paper resorts to various diagnostic tests on constructions as in (1) and (2), focusing on both the type of complementation and the behavior of the embedded DP subject. In particular, we deal with the issue of having the embedded subject surfacing as what would seem to be a direct/ACC object in the matrix, with the Differential Object Marker (DOM) *pe*<sup>3</sup>, as opposed to it surfacing in the embedded clause.

## 2. THEORETICAL FRAMEWORK

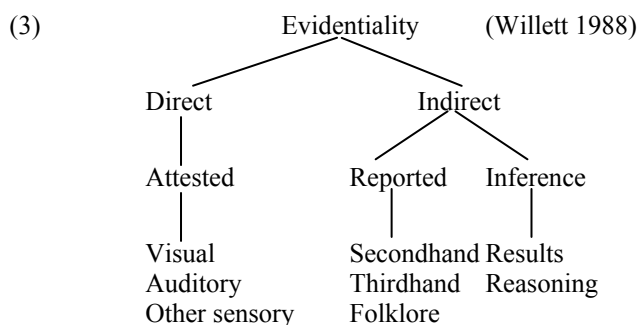
### 2.1. Evidential taxonomy

*Evidentiality* is a concept that captures the specification of the source of information for the utterance (Cruse 2010). In terms of Faller (2002: v), "evidentiality [is] the linguistic

<sup>3</sup> For information on the syntax of the Differential Object Marker *pe* and its interaction with Accusative Case marking and clitic doubling we refer the reader to Cornilescu 2001, 2002; Hill & Tasmowski 2008; Hill 2013a, b.

encoding of the speaker's grounds for making a speech act, which in the case of assertions corresponds with his or her source of information". There are different ways in which information may reach the speaker (e.g., eyewitness, hearsay, inferences etc.), and these ways are conveyed in language through various strategies. Linguistic literature debates both the classification for the sources of information and the classification of the encoding strategies. In this respect, Willett (1988) proposes a clear dichotomy between direct and indirect evidence, a system that was further developed and refined in Aikhenvald (2004), de Haan (1999), Plungian (2001) among others. Case studies verifying the strategies for encoding evidentiality were carried out on languages of various genetic groups, both within lexical semantics (e.g., Friedman 1986 for Balkan languages; Wiemer 2007 on Lithuanian a.o.) and within morpho-syntax (Jakobson 1957, Speas 2004 among many others).

For our case study, we use the classification in Willett (1988), shown in (3), which grasps the mixed types of indirect evidence that may occur with the use of the same lexical item.



Typologically, languages vary insofar as some encode evidentiality in the lexicon, whereas others do so morpho-syntactically. Romanian displays a list of evidential lexemes, but it also resorts to morpho-syntactic strategies, especially for conveying the contrast between direct and indirect evidentiality, as we show in this article. For the morphological encoding of evidentiality in Romanian, we refer the reader to Avram (2012) and Irimia (2009, 2010a, b).

## 2.2. Framework

The analysis is carried out in the framework of generative grammar, with theoretical tools couched in the Minimalist Program (Chomsky 1995 and further works) and cartography (Rizzi 1997, 2004). The main abbreviations are: DP for Determiner Phrase (which is any nominal constituent); CP for Complementizer Phrase (which is a clause); TP for Tense Phrase (which represents the entire inflectional properties of the verb: tense and agreement features). The main technical concepts we need for our analysis are as follows:

*Argument structure* refers to the syntactic mapping of the thematic roles of a verb, V, and yields a predicate phrase hierarchically configured as:  $vP > VP$ . Internal arguments are saturated in a sisterhood relation with V, within the VP(hrase). The external argument (i.e. the subject) is merged at the next phrasal level, in the Specifier of  $vP$ , being a sister to  $v'$ . The internal theta-role is checked directly upon the merging of a constituent as a sister to V.

The *clause hierarchy* is built on three levels: CP > TP > vP, corresponding to: clause typing/ discourse feature mapping > verbal inflection > argument structure. CP is important to our analysis since it is the field responsible for allowing the embedded subject in (1) and (2) to move to the position in which it can be DOM-ed.

*Feature checking* is an operation that matches uninterpretable features with their interpretable counterparts, thus licensing an item both syntactically and semantically. It involves valuation of uninterpretable features under certain structural configurations which sometimes involve movement. For example, case on DP arguments is an uninterpretable feature (i.e. [uCase]) that obtains a value when it checks against an appropriate case licenser (i.e. NOM, if the licenser is finite T, ACC, if the licenser is v).

*Phase* refers to a closed structure, a finished domain, in which all feature checking operations are implemented. A phase is a structural brick, inserted in the derivation as a whole, its domain being impenetrable to probes from other phases, with the exception of the item that is situated at the very *edge* of the phase (e.g. Spec,CP). For example, movement of *wh*-phrases brings them to the phase edge, from where they can be probed from a hierarchically higher phase. In our analysis, the concept of phase is necessary to sort out the difference between various sentential complements (are they phases or not?), and to understand the status of the DOM-ed embedded subject since Case valuation is a property of the phase (Chomsky 2008).

Constituents may undertake two types of *movement*: movement to an argumental position (A-movement) or movement to a non-argumental position (A'-movement). This distinction is important to us as it helps with understanding why the embedded subject may move across some constituents but not across others, and what kind of position it targets in the matrix clause.

We intend to avoid heavy formalizations in this paper and keep the discussion accessible to linguists who are trained in other frameworks. For a detailed minimalist treatment, we refer the reader to Alboiu & Hill (2013), who focus on constructions as in (2) and formalize the syntactic process by which the embedded DP subject raises to the matrix object position.

### 3. PREVIOUS ANALYSES

Formal analyses of perception verbs in Romance are unanimous in acknowledging their constant mono-transitive thematic grid (Guasti 1993, Rafel 2000, Noonan 1985). The same definition can be extended to Romanian, as shown through the syntactic testing proposed in Alboiu & Hill (2013). From this point of view, perception verbs in (1) and (2) select either a nominal or a clausal direct object complement, but not both at the same time.

Disagreements arise when it comes to the analysis of constructions as in (2c), where the perception verb is followed by a DOM-ed DP and by a finite 'that' CP, and the DOM-ed DP is the subject of the embedded CP. More specifically, the question here concerns the element that qualifies as the direct object of the matrix verb: is it the DP or the CP? In formal terms, which constituent satisfies the internal thematic role of the matrix V: does V select and merge with the DP or does it select and merge with the CP? Note that these constructions occur in several Romance languages, as shown in (4), for 'I saw John running' and are often referred to as 'pseudo-relatives' (see Guasti 1993 and references therein).

- (4) a. J'ai vue Jean qui courait. French  
 I have seen Jean that.3 ran<sup>4</sup>  
 b. He visto a Juan que corría. Spanish  
 have.1 seen DOM Juan that ran  
 c. Ho visto Gianni che correva. Italian  
 have.1 seen Gianni that ran  
 d. L-am văzut pe Ion că fugea. Romanian  
 him-have.1 seen DOM Ion that ran  
 (adapted from Rafel 2000: 68)

There are two analyses for these 'pseudo-relatives': one considers that the direct object is the (DOM-ed) DP, whereas the CP is a kind of relative clause modifying the DP; the other considers that the CP fills out the direct object position, and the DP is moved to the edge of the CP, and thus it receives ACC Case due to this structural adjacency with V. The former originates in Kayne (1984) and is adopted by Burzio (1984); variations of the latter have been proposed in Guasti (1993) and Rafel (2000), among others. Both these authors argue that the embedded clause is somehow reduced: Guasti (1993), capitalizing on insights in Shlonski (1991), who splits C into C > AgrC, argues that the domain is just an AgrCP, while Rafel (2000) proposes a complex small clause analysis for the CP.

For Romanian, Alboiu & Hill (2013) show that neither the pseudo-relative nor the small clause CP analysis provides an adequate account for the sentence in (4d). A pseudo-relative clause analysis of the CP fails on several accounts:

- In Romanian, *că* 'that'-indicative cannot be a relativizer. One would have to stipulate a special case for these constructions.
- Pseudo-relatives capitalize on the behavior of DP-CP as a constituent (i.e., antecedent noun plus its relative). Constituency tests fail for (4d), as shown in (5), upon fronting to Topic, and in (6), where substitution applies only to CP, separately from DP.

- (5) \***Pe Ion că fugea** l-am văzut.  
 DOM Ion that ran him-have.1 seen  
 '\*Ion running I've seen.'  
 (6) L-am văzut pe Ion **în această situație**.  
 him-have.1 seen DOM Ion in this situation  
 'I've seen Ion in this situation.'

On the basis of these observations, we have to reject a relative clause analysis of (4d). Rather, we suggest that in these cases, the perception verb selects only the DP as its complement, while the CP is an adverbial adjunct.

Guasti (1993) and Rafel (2000) also rule out a pseudo-relative clause analysis as empirically inadequate for Romance languages. Instead, Rafel proposes a complex *small clause* CP analysis, on grounds that in the Catalan and Spanish counterparts of (4d) the CP can be co-ordinated with a reduced small clause, as in (7).

<sup>4</sup> Cinque (1992) points out that when French *que* is spelled out as *qui*, it has only 3<sup>rd</sup> person agreement.

- (7) Al entrar, vi a María que fumaba marihuana y  
 to.the enter saw.I to María that smoked.she marihuana and  
 a Juan totalmente borracho.  
 to Juan totally drunk  
 ‘When I entered, I saw María smoking marihuana and Juan totally drunk.’

However, this structural equivalence also fails for (4d) in Romanian:

- (8) \*Când am intrat în cameră am văzut-o pe Maria  
 when have.I entered in room have.I seen-her DOM Maria  
 că fumează și pe Ion beat.  
 that smokes and DOM Ion drunk  
 ‘When I entered the room, I saw Maria smoking and saw Ion drunk.’

Rafel’s small clause analysis is crucially dependent on the adjacency of the ACC DP and the small clause CP, as seen in (9a) for *a Juan-que*, since he locates the DP at the edge of the embedded CP (versus in the matrix clause). This is also true of Guasti’s (1993) analysis. Romanian, however, may allow for matrix clause material to intervene between the relevant DP and the CP, as shown in (9b). Hence, in (4d), the DP cannot be in the embedded CP, but has to be in the matrix clause.

- (9) a. He visto a Juan que era detenido por la policia.  
 have.I seen DOM Juan that was arrested by the police  
 ‘I saw Juan being arrested by the police.’ (from Rafel 2000: 78)  
 b. L-am văzut pe Ion **cu ochii mei** c-a fost arestat.  
 him-have seen DOM Ion with eyes.the my that-has been arrested  
 ‘I saw Ion with my own eyes when he’s been arrested.’

The tests in (8) and (9) further indicate that (4d) cannot be analysed as a small clause CP, but that this is a construction where ‘see’ takes only the DP as its complement and the CP is an adjunct.

However, the various analyses of pseudo-relatives and small clause CPs do not make a correlation between syntactic structure and evidential reading. Thus, the tests are indiscriminate to evidential types. For example, Rafel (2000) applies the same arguments to the paradigm in (4), which contains sentences with direct evidential readings, and to constructions as in (10a) (Rafel 2000:13), which yield an indirect evidential reading, and he generalizes the small clause CP analysis to all these constructions. In the case of (10a), he points out that complements to verbs of perception are ruled out with a verb linked to propositional expressions (e.g. *saber* ‘know’) and that this further indicates that the direct object clause must have a reduced/small clause CP status. The Romanian counterpart, however, is grammatical, as seen in (10b), so the CP must have propositional status, hence cannot be reduced. While we will argue here that the underlying structures of (4d) – with direct evidentiality, and (10b) – with indirect evidentiality, are different, it is important to note that neither of them qualify as small clause CPs.

- (10) a. \*Vi a [(Juan) que (Juan) *sabía* francés].  
 saw.I to-ACC Juan that Juan knew.he French  
 'I saw that Juan could speak French.'  
 b. L-am văzut pe Victor că ştie spaniolă.  
 him-have.1 seen DOM Victor that knows.3SG Spanish  
 'I saw that Victor could speak Spanish.'

A reduced clause analysis of the type proposed in Guasti (1993) is also difficult to maintain. The author claims that these embedded CPs do not project fully since, following Higginbotham (1983), complement clauses selected by perception verbs lack referential tense. However, when direct sensory perception is not involved, an independent temporal reference is permitted, as seen in (11).

- (11) L-am văzut pe Toni [că va avea probleme].  
 him-have.1 seen DOM Toni that will have problems  
 'I/We realized that Toni would run into trouble.'

The rejection of a relative clause analysis and of a reduced CP analysis containing the DP at its edge in (4d) and (10b)/(11) means that the respective CP must be taken for what it systematically is in Romanian: a fully formed, phase-level CP, that can be either a clausal complement or an adverbial adjunct. Consequently, in these constructions, the perception verb takes either a DP or a CP as its complement, but not a DP-CP relative or a reduced CP.

#### 4. THE TRADE BETWEEN LEXICON AND SYNTAX

When we look at the range of complements permitted by 'hear', as listed in (1) and (2), we see that this varies from a DP to a CP taking the shape of: declarative (CP-'that'); free relatives (CP with *wh*-phrases); and non-finite (CP-gerund). What decides which one of these options is picked by the derivation?

One may assume that there are two entries for 'hear' in the lexicon: one that conveys the sensory evidence, and one that conveys the indirect, cognitive evidence. Then each entry comes with different selectional properties: the sensory 'hear' selects a DP or a gerund CP or a *cum*-indicative CP, whereas the cognitive 'hear' selects a DP or some other kind of CP. An argument in favour of this analysis is that cognitive 'hear' has the same c-selection with verbs of cognition, whereas sensory 'hear' does not, as shown in (12a, b) versus (12c).

- (12) a. Am auzit/ am aflat [că Victor ar vrea să vină.]  
 Have.1 heard/ have.1 found.out that Victor would want SUBJ come  
 'I heard/found out that Victor would want to come.'  
 b. Am auzit/ am aflat [cum cântă Mihai la pian.]  
 have.1 heard/ have.1 found.out how plays Mihai at piano  
 'I heard/found out how Mihai plays the piano.'



- c. L-am auzit/ (\*I-am aflat) [pe Mihai cântând la pian.]  
 him-have.1 heard/ him-have.1 found.out DOM Mihai playing at piano  
 'I heard Mihai playing piano.'/\*'I found out Mihai playing piano.'

Thus, the idea is that cognitive 'hear' is at the intersection between prototypical (sensory) 'hear' and prototypical 'know'.

However, this analysis has two disadvantages: first, it chooses an option that burdens the lexicon; second, it still does not account for the variation in the CPs selected by sensory 'hear' (i.e., either finite or non-finite), and for why one type of indicative CP is compatible with this 'hear' while other types of indicative CPs are not. There is nothing in the lexical semantics of 'hear' that would motivate one grammatical choice over the other.

The approach we propose is that the semantic evidential feature of the verb is underspecified in the lexicon (i.e., there is no lexical decision on whether the verb is sensory or cognition oriented), and that it acts upon the syntactic mapping for valuation. In Romanian, verb related evidentiality<sup>5</sup> is not an inflectional feature, so it is not part of the feature set associated with T (for examples of inflectional evidentiality see Aikhenvald 2004, Speas 2004). Therefore, the evidential reading arises either compositionally, from the semantic selection of the direct object plus the semantics of the constituents involved, or syntactically, through the mapping of an evidential functional feature in the functional domain of the verb. We shall argue that both mechanisms are at work in Romanian.

## 5. DIRECT EVIDENCE VIA NON-PHASAL CP

Let us start with the configurations that systematically yield direct evidentiality, such as illustrated in (1), which is repeated here as (13), for convenience.

- (13) a. Am auzit melodia aceea.  
 have.1 heard tune.the that  
 'I've heard that tune.'  
 b. L-am auzit pe Mihai cântând la pian.  
 him-have.1 heard DOM Mihai singing at piano  
 'I heard Mihai playing the piano.'  
 c. L-am auzit pe Mihai cum cântă la pian.  
 him-have.1 heard DOM Mihai how sings at piano  
 'I heard Mihai play the piano.'

The most unambiguous way to obtain a direct evidence reading is to construct the perception verb with a DP complement, as in (13a). This DP fulfils the feature checking requirements as follows: the DP is selected and merged as a sister to V and gets ACC Case from the vP predicate domain.<sup>6</sup> The compositional meaning, covering the semantics of the verb and the semantics of the noun, amounts to a direct evidential reading.

<sup>5</sup> Adverb related evidentiality is shown to be associated with the features of C in Cinque (1999).

<sup>6</sup> We do not elaborate here on whether ACC Case is checked and valued solely via the operation Agree or requires dislocation to some relevant specifier position within the predicate domain. For discussions on this issue, see Pesetsky & Torrego (2004); Bowers (2002); Lasnik (2003).



Nonetheless, in (13), direct evidentiality also arises from sentential complementation with a gerund complement, see (13b), and with a *cum*-indicative, see (13c). Both are discussed below.

### 5.1. Gerunds

It is commonly acknowledged that gerund verbs move to C in Romanian, hence the gerund > clitic word order in the clause, as in (14a) (Alboiu 2010; Motapanyane 1995). It is also commonly acknowledged for Romanian that gerund clauses can be ambiguous in some constructions with perception verbs, when it comes to the identification of their subject (Vasiliu, Golopenția Eretescu 1969). This is shown in (14b), where the subject of the gerund could be either the matrix subject or the matrix object (i.e., either ‘I was crossing the street’, or ‘Victor was crossing the street’). Even for (14a) one may construct a scenario where the matrix subject was singing a serenade at the time when s/he saw Mihai, or while s/he was singing the serenade for Mihai. Lastly, (14c) shows that such constructions behave like the *că*-CP in (4d), namely, the gerund CP can be replaced with an adverbial constituent, denoting that it is an adverbial clause. Therefore, even in the presence of a CP, ‘see’ can select and completely license a DP complement.

- (14) a. L-am văzut pe Mihai cântându-i o serenadă.  
 him-have.1 seen DOM Mihai singing-to.3SG.CLITIC a serenade  
 ‘I saw Mihai singing a serenade for her.’ or  
 ‘I saw Mihai while I was singing a serenade for him.’  
 b. L-am văzut pe Victor traversând strada.  
 him-have.1 seen DOM Victor crossing street.the  
 ‘I saw Victor when I/he was crossing the street.’  
 c. L-am văzut pe Victor atunci.  
 him-have.1 seen DOM Victor then  
 ‘I saw Victor then.’

Thus, the selectional feature of ‘see’ in (14b) replicates the selectional feature of ‘hear’ in (13a), so a direct evidential reading is expected.

Upon closer inspection, however, we notice that the adverbial constituent *atunci* cannot replace the CP when the subject of the gerund coincides with the DOM-ed DP. Consider (15).

- (15) a. Qu: Cu ce ocazie l-ai văzut pe Victor?  
 with what occasion him-have.2 seen DOM Victor  
 ‘When/Under what circumstances did you see Victor?’  
 b. A: Traversând strada.  
 crossing street.the  
 ‘When I/\*he was crossing the street.’

The sentence fragment/stand alone constituency test performed in (15b) shows that the subject of the gerund has to coincide with the subject of the matrix clause and cannot be interpreted as the DOM-ed DP. Consequently, the gerund is a constituent CP only when the

subject of the matrix in (14b) coincides with the subject of the gerund but not when its subject coincides the DOM-ed DP. In the latter case, it seems that the DOM-ed DP is actually part of the gerund clause.

That this is correct is further reinforced by the data in (16). Specifically, although the construction in (14b) is ambiguous, when we have XP material fronted above the gerund, as in (16a), the ambiguity is resolved, and the embedded subject is obligatorily *Mihai*. The same type of fronting can apply in constructions with ‘hear’, as in (16b), indicating a systematic correlation between XP fronting in the gerund and a ban on coindexing the matrix subject with the subject of the gerund.

- (16) a. L-am văzut pe Mihai chiar atunci traversând strada.  
 him-have.1 seen DOM Mihai [<sub>XP</sub> just then] crossing street.the  
 ‘I saw Mihai crossing the street just at that moment.’  
 b. L-am auzit pe Mihai chiar în zorii zilei/mai devreme  
 him-have.1 heard DOM Mihai [<sub>XP</sub> even in dawn-the day.GEN/more early]  
 cântând la pian.  
 playing at piano  
 ‘I heard Mihai playing the piano earlier/even at dawn.’

In sum, while in (16a, b), the adverbial XP constituents can modify either the matrix or the embedded verb, crucially, when modifying the embedded verb, the reading is necessarily one where *Mihai* is the subject of the gerund. This sorts out the constructions as follows:

(i) When the embedded subject is the same as the matrix subject, the CP is an adjunct. The adverb located above the gerund can only be construed with the matrix verb, not with the gerund, since the gerund is a type of temporal adjunct (i.e. domains which disallow fronting as a rule)<sup>7</sup>. In these contexts, the matrix verb selects a DP object.

(ii) When the embedded subject is the same as what seems to be the direct object of the matrix verb, the adverb is construed with the gerund versus the matrix verb, so XP fronting is allowed. This signals that the gerund is not an adjunct but an argument of the matrix verb. Importantly, in such contexts, the direct object of ‘see’ or ‘hear’ is the gerund clause, not the DP, and the reading is eventive. The DOM-ed DP here is selected as the subject of the gerund clause.

There is no doubt that adjunct CP gerunds are phasal (Alboiu 2009, 2010). However, the gerund clause selected by a verb of perception is non-phasal (Avram 2003). This is confirmed by the fact that the left periphery of the selected gerund cannot accommodate Topic (17a) and Focus (17b) constituents, which occur only in a full-fledged CP field. When fronting to topic and focus is necessary, it obligatorily targets positions in the matrix, as in (17c).<sup>8</sup>

<sup>7</sup> Haegeman (2010) argues that several types of adjunct adverbial clauses have an operator in their CP that interferes with fronting.

<sup>8</sup> Note that adverbial XP fronting of the type in (16) corresponds to Mod(ifier), a position lower than Topic and Focus (Rizzi 2004).

- (17) a. L-am auzit pe Mihai (\*din carte) citindu-i  
 him-have.1 heard DOM Mihai [<sub>TOP</sub> from book] reading-her  
 Mariei (din carte).  
 Mary.DAT from book  
 'I heard Mihai reading to Mary (from the book).'  
 b. L-am auzit pe Mihai (\*LA PIAN) cântând (la pian).  
 him-have.1 heard DOM Mihai [<sub>FOC</sub> at piano] singing (at piano)  
 'I heard Mihai playing the piano.'  
 c. Pe Mihai LA PIAN l-am auzit cântând (nu la vioară).  
 [<sub>TOP</sub> DOM Mihai] [<sub>FOC</sub> at piano] him-have.1 heard singing (not at violin)  
 'It's the piano that I heard Mihai playing (not the violin).'

Thus, although the left periphery of the selected gerund clause allows for some material to be fronted, it disallows the types of constituents that indicate the presence of a C with a complete feature set. Therefore, we have to acknowledge that Romanian perception verbs select reduced CP gerunds. Henceforth, as a visual aid, we make a distinction between full-fledged C and reduced/defective C<sub>def</sub><sup>9</sup>.

This conclusion entails that the small clause CP analysis proposed in Rafel (2000) is relevant to these constructions. Indeed, the tests in that article used to confirm the small clause CP properties of the embedded clause yield good results with the Romanian C<sub>def</sub>P gerund:

- anaphoric tense, which is a systematic property of non-finite gerunds.
- coordination with reduced small clauses, as in (18).

- (18) I-am văzut pe Matei fumând și pe Ion beat turtă.  
 them-have.1 seen DOM Matei smoking and DOM Ion drunk utterly  
 'I saw Matei smoking and Ion totally drunk.'

In conclusion, we adopt a small clause analysis for the Romanian evidential gerund, as in Rafel (2000), and further note an important Case asymmetry between the subjects of these gerunds and those of gerund adjuncts. See (19a), with a NOM subject, versus (19b), with ACC.

- (19) a. (Tu) fiind (tu) în întârziere, ei n-au mai terminat lucrul.  
 you being you in late they not-have more finished work.the  
 'Because you were late, they couldn't finish their work.'  
 b. Te-am auzit pe tine cântând la pian.  
 you-have.1 heard DOM you singing at piano  
 'I heard you playing the piano.'

The distinction between a phasal CP in adjunct gerunds and a non-phasal C<sub>def</sub>P gerund means that the latter gerund cannot ensure Case checking for its subject, as Case checking is a property of the phase (Chomsky 2008). So Exceptional Case Marking (ECM) is needed: the subject of the gerund is in a structural position that allows ACC Case checking against the matrix vP/VP.

<sup>9</sup> In Rizzi's (1997, 2004) cartography, this would correspond to Fin.

ECM in English is a structure preserving operation occurring with a range of transitive matrix verbs selecting reduced infinitives and gerund clauses. However, the classes of verbs that typically trigger ECM yield ungrammatical sentences in Romanian: compare *I want [him working]* with the Romanian equivalent, *\*Il vreau pe Mihai muncind*. Thus, Romanian gerunds are not typical ECM complements. In fact, ECM with gerunds occurs only with perception verbs and a few other verbs if (or when) they yield an evidential/inferential reading (e.g., discovery verbs). Therefore, there must be some factor that is responsible for cancelling the phase here that does not occur in the other derivational patterns with gerunds.

We relate this extra-factor to the strong verbal nature of gerunds in Romanian (Edelstein 1972), which makes them occur in adverbial versus argument position (i.e., they have operators in CP). It is thus necessary to remove the adverbial clause typing features of the CP gerund in order to enable it to function as an argument. It is not clear why evidential verbs are the only verb class that can achieve the C reduction in gerunds<sup>10</sup>. The fact is that, due to the reduced C<sub>def</sub>P, the matrix predicate can access the DP and check it for Case (which is, thus, ACC). Accordingly, the configuration with C<sub>def</sub>P gerunds is as in (20)<sup>11</sup>.

(20) [ V [C<sub>def</sub>P DOM DP [C<sub>def</sub> V<sub>gerund</sub> [.....]]

## 5.2. Cum-indicatives

The paradigm in (13) also displays indicative CPs headed by *cum*, as in (13c), repeated as (21). *Cum* in (21) is an evidential complementizer that matches *că* ‘that’ insofar as it is devoid of quantificational features. Thus, evidential *cum* is different from the interrogative/relative adverb *cum*.

<sup>10</sup> This approach is also compatible with the observation that gerunds do not occur as subjects in Romanian. From our p.o.v. there is no factor that would lead to a reduced C<sub>def</sub>P (and thus, allow it to be an argument) when the gerund is in subject position.

<sup>11</sup> We do not concern ourselves here with whether the DOM-ed DP is pre-verbal, as in examples in (16), or post-verbal, as in (i). The word orders in (i) can be derived either through the merging of the DP as an apposition or by resorting to remnant TP movement.

- (i) a. Capra l-a văzut lăcomind pe lup la sarmale.  
Goat-the him-have.1 seen gluttoning DOM wolf at cabbage rolls  
‘The goat saw the wolf greedily eating cabbage rolls.’  
b. Aseară l-am auzit sforăind pe Toni.  
last evening him-have.1 heard snoring DOM Toni  
‘Last evening I heard Toni snoring.’

Alternatively, ACC Case could be assigned without dislocation to the edge of the gerund, just as in cases of subject raising where the embedded subject need not move to the matrix clause, see (ii) where *țevile* stays in the subjunctive.

- (ii) Iarna cam tind să se spargă țevile la blocul nostru.  
winter quite tend SUBJ REFL burst pipes.the at apartment building ours  
‘In winter time, the pipes at our apartment building tend to burst.’

- (21) L-am            auzit pe Mihai    cum    cântă la pian.  
 him-have.1 heard DOM Mihai that    sings at piano  
 ‘I heard Mihai play the piano.’

The complementizer *cum* has an intrinsic modal feature (Coteanu et al./DEX 1998: 248) that makes it adequate not only for direct evidentiality but also for presumptive blends such as *cum că* ‘as if’<sup>12,13</sup>, which merge as a complex head in C. Clauses with *cum că* qualify as full-fledged CPs, because the complementizer can be followed by Topic and Focus constituents, as in (22a). Furthermore, such CPs are phases, because they can license Nominative subjects, as in (22b), and they have independent tense values, as in (22c).

- (22) a. Spunea cum că    la mare numai tinerilor    li            se        dă  
           cazare.  
           said that that            at sea    only youth.the.DAT to.them REFL    give  
           accommodation  
           ‘She said that they give accommodation only to the youth at the seaside.’  
       b. Ileana se    plângea        cum că guvernul            o să-i  
           taie pensia.  
           Ileana REFL complained that that government.the will SUBJ-to.her  
           cut pension.the  
           ‘Ileana complained that the government is allegedly going to cut her pension.’  
       c. Ileana ne acuză    cum că vom            participa/am participat        la alegeri.  
           Ileana us accuses that that will.1PL participate/have participated to elections  
           ‘Ileana accuses us of intending to participate/having participated in the  
           elections.’

In contrast to (22), evidential *cum*-indicatives have different properties, pointing to a reduced, non-phasal C<sub>def</sub>P status, on a par with that of gerund C<sub>def</sub>P complements in (20). We verify this with the tests in Rafel (2000).

- anaphoric tense:

With direct evidentiality, the embedded indicative verb depends on the matrix tense, as shown in (23).<sup>14</sup>

- (23) a. O        și        aud    pe Maria        cum bate/\*bătea/\*va bate        covoarele.  
           her    also    hear.1 DOM Maria that shakes/shook/will shake    mats.the  
           ‘I can just hear Maria shaking the mats.’  
       b. Am auzit-o            pe Maria        cum bătea/\*bate/\*va bate        covoarele.  
           have.1 heard-her    DOM Maria that shook/shakes/will shake    mats.the  
           ‘I heard Maria shaking the mats.’

<sup>12</sup> In Old/Early Modern Romanian, *cum* and *cum că* occur in free variation (Frâncu 2009).

<sup>13</sup> The blend *cum că* occurs with perception verbs as well in archaic Romanian:

(i) Iar        din inima lui            simte [un copac        cum că        răsare]  
           and    from heart.the his    feels a tree as        that            grows  
           ‘He feels as if a tree is growing out of his heart’ (Eminescu, *Scrisoarea a III-a*)

<sup>14</sup> Indirect evidentiality with *cum* is discussed in Section 7.

- restriction on interveners between the DOM-ed DP and *cum*, as shown in (24).<sup>15</sup>

- (24) Am auzit-o (în zori) pe Maria (\*în zori) cum bătea covoarele.  
 have.1 heard-her at dawn DOM Maria at dawn that shook mats.the  
 ‘I heard Maria shaking the mats at dawn.’

One possibility of ruling out (24) is to assume that *cum* is in the highest C head (i.e. Force in Rizzi (1997)), as noticed for *cum că* in (22a); this would entail that Topic and Focus constituents cannot precede *cum* but should be able to immediately follow it. However, this cannot be the case, given (25a, b). Topicalized and focused constituents can only appear in the relevant matrix positions, as in (25c). This is similar to what we saw for gerund complements to perception verbs.

- (25) a. L-am văzut pe Matei (\*în spatele școlii) cum  
 him-have.1 seen DOM Matei [TOP in back-the school] how  
 (\*în spatele școlii) fuma (în spatele școlii).  
 [TOP in back-the school] smoked in back-the school  
 ‘I saw Matei smoke/smoking behind the school.’  
 b. L-am văzut pe Mihai (\*LA MATEMATICĂ) cum  
 him-have.1 seen DOM Mihai [FOC at math] how  
 (\*LA MATEMATICĂ) lucra (nu la fizică).  
 [FOC at math] worked not at physics  
 c. Pe Mihai LA MATEMATICĂ l-am văzut cum  
 [TOP DOM Mihai] [FOC at math] him-have.1 seen how  
 lucra (nu la fizică).  
 worked not at physics  
 ‘It’s math that I saw Mihai doing (not physics).’

The word order observations stemming from (25) point to a C<sub>def</sub>P structure of the direct evidentials with *cum*.

- coordination with small clauses:

This test verifies whether *cum*-indicative CPs can be coordinated with reduced small clauses. For Romanian, coordination should also be successful with the gerund complement if both are C<sub>def</sub>P domains. This is indeed the case, as seen in (26).

- (26) Le-am văzut pe Maria fumând, pe Ileana beată și pe Ana  
 cum trăgea să doarmă.  
 them-have.1 seen DOM Maria smoking DOM Ileana drunk and DOM  
 Ana that going SUBJ sleep  
 ‘I saw Maria smoking, Ileana drunk, and Ana falling asleep.’

<sup>15</sup> Rafael (2000) mentions obligatory adjacency but that is not a property of Romanian as seen in Footnote 9.

The tests in (23) to (26) indicate that *cum*-indicatives function as reduced/non-phasal  $C_{\text{def}}$ P<sub>s</sub>, in a configuration as in (27), that replicates (20) for gerunds.

(27) [ V [ $C_{\text{def}}$ P DOM DP [ $C_{\text{def}}$  *cum* [.....]]

In (27), the DOM-ed DP must have the same status as in (20), that is, it obtains ACC Case from the matrix through ECM. In order to explain why an indicative verb is unable to assign NOM Case in this configuration, we follow the same argument put forth in Cinque (1992), Guasti (1993), Rafel (2000): *che/que* is defective insofar as it retains the subject agreement features; since these features are not in T, NOM Case cannot be assigned (since C cannot govern its Spec position in their framework). Along the lines we adopted for our analysis, *cum* is intrinsically  $C_{\text{def}}$  (defective) instead of C (full-fledged). This line of argumentation gets support from examples as in (28), which show that every time a *cum*-indicative clause can have a NOM subject, it is phasal: *cum* is a *wh*-phrase, introducing a free relative. The proof that *cum* is an adverb in these constructions comes from the fact that the subject can only be post-verbal, which is an effect arising in the presence of operator-variable chains. Predictably, another *wh*-phrase may replace *cum* in CP (28b) (as long as it maintains the free relative status), but not in  $C_{\text{def}}$ P (28c).

- (28) a. Am văzut cum (\*copiii) cântau (copiii) la pian.  
 have.1 seen how children.the played children.the at piano  
 'I saw how the children were playing the piano.'
- b. Am văzut ce (\*copiii) cântau (copiii) la pian.  
 have.1 seen what children.the played children.the at piano  
 'I saw what the children were playing at the piano.'
- c. \*I-am văzut pe copii ce cântau la pian.  
 them-have.1 seen DOM children what played at piano  
 'I saw what the children were playing at the piano.'

The tests in this section lead us to the conclusion that the evidential complementizer *cum* is defective and generates  $C_{\text{def}}$ P with obligatory ECM, whereas the adverb *cum* requires a full-fledged CP. Although both types of *cum* can be selected by a perception verb, the former is restricted to direct evidential readings, whereas the latter is unrestricted for the type of evidentiality. Thus, the free relative with *cum* is involved in direct evidentiality in (28a), but it is also compatible with an indirect inferential construction in (29).

- (29) Am văzut cum încercați voi să vă fofilați.  
 have.1 seen how attempt you SUBJ you escape  
 'I saw how you were attempting to get out of this.'

The general conclusion of this section is that a direct evidential reading is obligatory when the direct object of the perception verb is a  $C_{\text{def}}$ P (i.e. a reduced clause). In Romanian, a  $C_{\text{def}}$ P is obtained when gerund and modal *cum* Cs are weakened by removing the clause typing features (adverbial or relative).



## 6. INDIRECT EVIDENTIALITY VIA DP MOVEMENT ACROSS A PHASAL CP

Aside from direct evidentiality, indirect evidentiality may also result when a perception verb selects a DP to check its theta-role feature (e.g., *Am mirosit situația* ‘I got the idea.’). These constructions are unexceptional, because they rely on lexical semantics (e.g. abstract DP object yields indirect evidentiality). The issue that needs discussion is the selection of a sentential complement. In this respect, the general idea we develop in this paper is that direct evidentiality involves reduced  $C_{\text{def}}P$  complements, whereas indirect evidentiality involves full-fledged CP complements. It turns out that the latter may also display a DOM-ed DP subject, but we argue here (see also Alboiu & Hill 2013) that that is the result of discourse driven Raising-to-Object (RtoO), and not of structure preserving RtoO for the purpose of ECM, as with the  $C_{\text{def}}P$  complements in (20) and (27). The discourse driven trigger for RtoO is identified as being an evidential feature [E] mapped as a functional/morphosyntactic feature at the edge of little *v*.

In order to determine the position of the DOM-ed DP, which is the subject of the embedded clause, we begin with the example in (2c), repeated below as (30a), while also noting that this sentence may also occur with the DP subject in the embedded clause, as in (30b).

- (30) a. L-am        auzit pe Mihai    c-ar        cânta la pian.  
           him-have.1 heard DOM Mihai that-would play at piano  
           ‘I heard Mihai claiming that he plays the piano.’  
       b. Am        auzit că        Mihai        ar        cânta la pian.  
           have.1        heard that Mihai        would        play at piano  
           ‘I heard that Mihai would (allegedly) play piano.’

Both (30a) and (30b) have an indirect evidential reading, but their overall interpretation differs: in (30a) *Mihai* is the source of the information that the speaker (i.e. the matrix subject here) is reporting, whereas in (30b) the source of the reported information is unknown. Hence, the location of *Mihai* in (30a) is not gratuitous, but motivated by a change in interpretation.

The structure of (30a) is different from the structures in (13b, c) in one crucial aspect: the embedded CP is a phasal domain versus a non-phasal small clause. Proof of the phasal status of this *că*-CP comes from: independent tense values on the embedded verb, as in (31), and the presence of Topic and Focus constituents following *că* ‘that’, as in (32a, b).

- (31) L-am        auzit pe Mihai    c-ar cânta/ar fi cântat/o să cânte        la pian.  
           him-have.1 heard DOM Mihai that plays /would’ve play/will play at piano  
           ‘I heard Mihai claiming that he plays/has played/will play the piano.’  
       (32) a. L-am        văzut pe Matei    [că [TOP Elenei] nu        vrea  
           him-have.1 seen DOM Matei that Elena.DAT nor want  
           să-i        dea        niciodată dreptate].  
           SUBJ-her.DAT give.3.SUBJ never justice  
           ‘I noticed about Matei that he never wants to agree with Elena.’

- b. L-am văzut pe Victor [că [FOC TOCMAI ATUNCI] a ezitat].  
 him-have.1 seen DOM Victor that exactly then has hesitated  
 ‘I noticed about Victor that it was exactly then that he hesitated.’

The question, then, concerns the status of the DOM-ed DP, which cannot be moved to the matrix predicate domain for purely ECM reasons since the phasal CP should be able to check its Case as NOM, as in the versions with subjects in the embedded clause, as further shown in (33).

- (33) Am auzit [că el pleacă în Spania].  
 have.1 heard that he leave.3SG in Spain  
 ‘I heard that he is going to Spain.’

Given the mono-transitive nature of perception verbs (Guasti 1993, Noonan 1985, Rigger & Beukema 1985, a.o.) and the phasal status of the CP complement, the DOM-ed DP as in (2c) can only be in a non-argumental position in the matrix, which entails either prolepsis or some type of operator movement.

### 6.1. [E] as a morpho-syntactic feature mapped onto *v*

First, we point out that the DOM-ed DP in (2c), (30)-(32) is post-verbal in relation to the matrix verb, so it does not involve (clitic left) dislocation to the CP field<sup>16</sup>. Second, this position is very low in the clause hierarchy, namely, lower than adverbs such as *adesea* ‘often’ in (34a), which generally signal the border between the TP and the vP fields (Dobrovie-Sorin 1994). However, the position is higher than the Spec,vP for subjects in-situ (Dobrovie-Sorin 1994; Motapanyane 1989), as shown in (34b). Thus, the DOM-ed DP is at the edge of vP.

- (34) a. L-am auzit adesea pe Mihai c-ar cânta la pian.  
 him-have.1 heard often DOM Mihai that plays at piano  
 ‘I often heard Mihai claiming that he plays the piano.’  
 b. L-ai auzit pe Mihai tu însăți c-ar cânta la pian?  
 him-have.2 heard DOM Mihai you yourself that would play at piano  
 ‘Have you yourself heard Mihai claiming that he plays piano?’

What type of non-argumental position can there be at the edge of vP? Alboiu (1999, 2002) argues on independent grounds for the syntactic mapping of the discourse contrast *theme-rheme*, with the edge of vP hosting *theme* (old information), and the rest of the vP providing the *rheme* (new information). This is in line with cross-linguistic analyses showing similar effects for the mapping of the discourse in the left periphery of vP (e.g., Belletti 1990, Cornilescu 2002, Ordóñez 1998). However, she shows that this position lacks operator properties.

<sup>16</sup> Secondary movement is possible, as in (i), but it does not generate in the embedded clause.

- (i) Pe Mihai l-am auzit ~~pe Mihai~~ [c-ar cânta la pian].  
 DOM Mihai him-have.1 heard DOM Mihai that-would play at piano  
 ‘Mihai, I heard him claiming that he plays piano.’

We propose that the embedded subject DP occurs in the matrix clause as a DOM-ed DP because of the evidential feature, [E], mapped onto little *v*. This feature acts as a probe and triggers RtoO to the left edge of the vP.

## 6.2. Raising-to-object

The location of [E] at the edge of vP naturally accounts for the “externalization” of the DOM-ed DP in data like (2c), but it does not indicate whether the merging of the DP in that position is done in or post narrow syntax. To sort this out, we propose the tests in (35) to (41).

Direct merge at the edge of vP means prolepsis, a stylistic procedure of “anticipating” the new topic in the discourse (Panhuis 1984), which does not involve feature checking in syntax. The tests (which we borrow from Bruening 2001, Davies 2005, Massam 1985) show that this is not the case for constructions as in (2c), because:

- Prolepsis applies to any constituent of the embedded clause, whereas (2c) shows restriction to the embedded subject, as seen in (35a) versus (35b).

- (35) a. L-am auzit **pe Ion** [că i-ar fi invitat la restaurant].  
 him-have.1 heard DOM Ion that them-would be invited to restaurant  
 ‘I heard Ion say that he allegedly invited them to the restaurant.’  
 b. \*Am auzit **la restaurant** [că i-ar fi invitat Ion].  
 have.1 heard to restaurant that them-would be invited Ion

- Constituents in prolepsis can trigger resumptive pronouns in the embedded clause, which cannot be achieved in our constructions, as shown in (36).

- (36) \*L<sub>j</sub>-am auzit pe Ion<sub>j</sub> [că (**el**<sub>j</sub>) i-ar fi invitat (**el**<sub>j</sub>) la restaurant]<sup>17</sup>.  
 him-have.1 heard DOM Ion that he them-would be invited he to restaurant  
 ‘I heard Ion say that he allegedly invited them to the restaurant.’

- Prolepsis does not restrict the Case of the constituent, whereas only ACC is possible on our DP, even when it could have a different Case marking as embedded subject, as shown in (37).

- (37) a. Am auzit [că lui Ion<sub>k</sub> i<sub>k</sub>-a fost foame].  
 have.1 heard that the.DAT Ion him.DAT-has been hungry  
 ‘I heard that Ion was hungry.’  
 b. L<sub>k</sub>-am auzit pe Ion<sub>k</sub> [că i<sub>k</sub>-a fost foame].  
 him-have.1 heard DOM Ion that him.DAT-has been hungry  
 ‘I heard Ion say he was hungry.’

<sup>17</sup> The example is grammatical if *el* ‘he’ has a contrastive focus reading. That is, however, irrelevant to the test.

These tests show that a prolepsis approach to (2c) is empirically problematic. Therefore, we must turn to a movement approach, for which we replicate tests from Bruening (2001), Bošković (2007), and Davies (2005). The data show that the DOM-ed DP originates in the embedded clause and subsequently undergoes movement across the embedded phasal CP. This movement ends with ACC Case marking on the DP, so it involves some manner of raising to object (RtoO) – that is, the DOM-ed DP interacts with the main clause predicate. However, unlike standard ECM, this movement has additional A-bar/operator properties.

- Constituency tests with movement, as in (38), also support a second merge analysis (i.e. base-generation in the embedded clause, with subsequent movement to and insertion in the matrix). Fronting of the sentential complement in (38a) is permitted, as in (38b), but not when the embedded subject is in the matrix clause, as in (38d).

- (38) a. Am văzut demult [că Ion lăcomește la mâncare].  
 have.1 seen long.ago that Ion is.greedy at food  
 ‘I’ve noticed long ago that Ion is greedy with food.’  
 b. [Că Ion lăcomește la mâncare] am văzut demult.  
 that Ion is.greedy at food have.1 seen long.ago  
 ‘That Ion is greedy with food I have notice long ago.’  
 c. L-am văzut demult pe Ion [că lăcomește la mâncare].  
 him-have.1 seen long.ago DOM Ion that is.greedy with food  
 d. \*[că lăcomește la mâncare] l-am văzut demult pe Ion.  
 that is.greedy at food him-have.1 seen long.ago DOM Ion

- Sensitivity to islands (Davies 2005) also attests to a movement analysis of the DOM-ed DP, as in (39), where the ungrammaticality indicates the presence of a complex NP island.

- (39) a. Ion mirosise faptul [că Maria își aranja plecarea].  
 Ion smelled fact.the that Maria DAT.REFL arranged departure.the  
 ‘Ion figured out the fact that Maria was arranging her departure.’  
 b. Ion o mirosise pe Maria [că-și aranja plecarea].  
 Ion her smelled DOM Maria that-DAT.REFL arranged departure.the  
 ‘Ion figured out that Maria was arranging her departure.’  
 c. \*Ion o mirosise pe Maria faptul [că-și aranja plecarea].  
 Ion her smelled DOM Maria fact.the that DAT.REFL arranged departure.the

- Reconstruction into the embedded clause also signals a movement chain (Barss 1986; Bruening 2001). Reconstruction is successful in these constructions, as in (40b), based on (40a), where the raised DP *maică-sa* ‘his mother’ contains a variable bound by the quantifier *fiecare* ‘each’ in the embedded clause.

- (40) a. Văd [că măică-sa îl iubește pe fiecare așa cum e].  
 see.1SG that mother-his him loves DOM each as how is  
 ‘I see that their mother loves each of them just as they are.’

- b. O văd pe maică-sa [că-l iubește pe fiecare așa cum e].  
 her see DOM mother-his that-him loves DOM each as how is  
 ‘I see that their mother loves each of them just as they are.’

This movement crosses the phasal CP, a fact reinforced by the absence of adjacency between the raised DP and the CP.

The syntactic testing so far clarifies two points: the DOM-ed DP involves movement (versus prolepsis); and this movement targets a non-argumental position (given reconstruction effects and movement across a phasal CP), so it is necessarily distinct from ECM. We do not dwell on the discussion of how RtoO may involve A'-chains, as well as A-chains, since that is discussed in detail in Alboiu & Hill (2013). For the purpose of this paper, it is sufficient to state that evidential clauses involve the RtoO of the DP subject across phasal CP, and that such movement triggers (i) indirect evidentiality; and (ii) a change in the source of information, either through reports or through inferences (e.g., evaluation of the subject of the embedded predication).

Importantly, this analysis extends to constructions where the embedded clause is a free relative, as in (41). Movement across a CP with *wh*-features is generally different from movement across *că*-CP, as the former blocks competing A'-bar movement. This is not the case with RtoO:

- (41) a. L-am văzut pe Toni în ce fel se poartă pe lângă șefă.  
 him-have seen DOM Toni in what way REFL behaves by around boss  
 ‘I saw in what way Toni behaves around the boss.’  
 b. Mi-ai spus în ce fel se poartă Toni pe lângă șefă.  
 to.me-have told in what way REFL behaves Toni by around boss  
 ‘You told me in which way Toni behaves around the boss.’  
 c. \*Mi-ai spus (pe) Toni în ce fel se poartă pe lângă șefă.  
 to.me-have said DOM Toni in what way REFL behaves by around boss  
 d. Mi-ai spus despre șefă, în ce fel se poartă Toni pe lângă ea.  
 to.me-have said about boss in what way REFL behaves Toni by around her  
 ‘Regarding the boss, you told me in which way Toni behaves around her.’

In (41a), RtoO takes place across the *wh*-constituent in the embedded CP, whereas in (41b) it does not. Both matrix verbs are mono-transitive, but the perception verb allows for RtoO, whereas the ‘say’ verb does not, see (41c). This shows that there is a functional feature that gets checked through RtoO in the ‘hear’ sentence but not in the ‘say’ sentence. Instead of RtoO, the latter displays prolepsis in (41d). Hence, there is a syntactic generalization that reflects a semantic divide, instead of the expected clause typing divide: CP-‘that’ and CP-*wh* behaves similarly for RtoO under perception verbs, but not under verbs of other semantic classes.

Accordingly, for RtoO contexts as in (2c) we reach the generalization in (42).

- (42) Indirect evidentiality = checking of [E] on *v* through DP movement to A-bar Spec,vP

## 7. CP COMPLEMENTS

Our discussion has shown that perception verbs in Romanian may select a DP, a reduced  $C_{\text{def}}P$  or a full-fledged/phasal CPs as their complement. In the latter case, the presence of a morphosyntactic evidential feature, [E], triggers RtoO. Here we briefly return to CPs in complement position and without RtoO. We first saw such cases when we discussed the two types of *cum*: the free relative *cum* CP is phasal, and qualifies as a complement to the perception verb. More examples are provided in (43).

- (43) a. Aud cum (\*Maria) bate (Maria) covoarele.  
 hear.1 that Maria shakes Maria mats.the  
 ‘I can hear how Maria is shaking/beating the mats.’  
 b. Vede cum din ceriuri luna lunecă și se coboară  
 sees that from skies moon.the slides and REFL comes.down  
 ‘He sees the moon sliding down from the skies.’ (Eminescu, Scrisoarea a IIIa)  
 c. Am auzit cum trage fiecare spuza pe turta lui.  
 have.1 heard how draws each embers.the on loaf.the his  
 ‘I heard how everyone draws the embers on his loaf of bread (to cook it).’

As a free relative, (43a) allows for post-verbal subjects only, unless the subject has a topic reading, in which case it may occur pre-verbally, as in (43b). However, while in (43b) the phasal *cum*-relative denotes direct evidentiality, the free relative with *cum* is also compatible with an indirect reading, as seen in (43c). So the full-fledged CP complement is not restricted for the type of evidential reading (which arises compositionally from the sentence). This is in sharp contrast to the small clause  $C_{\text{def}}P$  *cum*, which we saw in Section 5.2 to be restricted to direct evidentiality, arguably due to the intrinsic properties of the complementizer *cum* and the syntactic configuration in which the embedded subject is processed in the matrix VP domain.

The same observations apply to full-fledged/phasal CP complements introduced by other *wh*-phrases and by *că*, as shown in (44): while (44a, b) involve sensory evidence, (44c, d) have inferential readings.

- (44) a. Am văzut ce culoare avea rochia.  
 have.1 seen what colour had dress.the  
 ‘I saw what colour the dress was.’  
 b. Văd că e murdar pe mâini.  
 see.1 that is dirty on hands  
 ‘I see his hands are dirty.’  
 c. Am văzut pe unde se scurg informațiile.  
 have.1 seen through where REFL flow information.PL.the  
 ‘I realized/understood how the information was leaking.’  
 d. Am văzut că n-avem de ales.  
 have.1 seen that not-have of choose.SUP  
 ‘I realized that we have no choice.’

The conclusion is that, in the absence of an [E] feature probe, phasal CP complements are unrestricted for evidential reading because they do not need to observe any structure preserving requirements (such as ECM). The evidential reading depends only on the lexical properties of the constituents involved.

## 8. CONCLUSIONS

Using perception verbs as an empirical basis, this paper aimed to sort out the correlation between type of evidential reading (i.e. direct versus indirect) in relation to the type of constituent selected in complement position. This is ground breaking work, since no previous attempt has been made in this respect for Romanian (or, to our knowledge, for Romance languages). Our investigation has reached the following results:

Direct and indirect evidentiality in Romanian is mapped in two ways: (i) lexically, through the semantic selection of the perception verb; or (ii) syntactically, when the configuration constrains the type of evidential reading. For (i), the complement could be a DP or a full-fledged, propositional CP, and the reading can be either direct or indirect evidentiality, the latter having an undisclosed source. For (ii), the complement is either a  $C_{def}P$  (which restricts the reading to direct evidentiality), or a propositional CP with RtoO resulting from the presence of an evidential feature, [E], on the matrix vP (which restricts the reading to indirect evidentiality with known source of evidence).

Theoretically, this paper contributes to the debate on pseudo-relatives in Romance by demonstrating that constructions in which the perception verb is followed by an ACC DP and a CP do not qualify as pseudo-relatives in Romanian, and only some of them can qualify as small clause  $C_{def}Ps$ . On the other hand, the Romanian examples revealed a different construction, which attests to the presence of evidentiality in the set of functional features: the [E] feature that is mapped on v (instead of T or C in other languages) and that probes into its complement domain.

Therefore, going back to our initial question as to whether evidentiality may involve morpho-syntactic processing, the answer is definitely positive. For a comprehensive account on how languages encode the source of evidence, future studies on evidentiality cannot take into account only the morphological marking and lexical properties but must also factor in the syntax.

## REFERENCES

- Alboiu, G., 1999, "(De)-Focussing and object raising in Romanian", *Canadian Journal of Linguistics*, 44, 1, 1–22.
- Alboiu, G., 2002, *The Features of Movement in Romanian*, București, Editura Universității din București.
- Alboiu, G., 2009, "Null expletives and Case: The view from Romance", in: P. J. Masullo, E. O'Rourke, C.-H. Huang (eds), *Romance Linguistics 2007*, Amsterdam, John Benjamins, 1–19.
- Alboiu, G., 2010, "A-Probes, Case, and (In)Visibility", <http://ling.auf.net/lingBuzz/001163>
- Alboiu, G., V. Hill, 2013, "Evidentiality and the Dual A/A-bar Nature of Romanian Raising to Object", Ms. <http://www.yorku.ca/galboiu/publications.html>. Paper presented at NELS 42, November 11–13, 2011 (Toronto); and GLOW 36, April 4–6, 2013 (Lund).



- Aikhenvald, A. Y., 2004, *Evidentiality*, Oxford, Oxford University Press.
- Avram, L., 2003, "An Aspectual Analysis of Gerunds", *Revue roumaine de linguistique*, XLVIII, 203–219.
- Avram, L., 2012, "Perfectivity might not scope over modality", *Bucharest Working Papers in Linguistics*, XIV, 1, 111–131.
- Barss, A., 1986, *Chains and Anaphoric Dependence: On Reconstruction and Its Implications*, Ph.D. dissertation, MIT, Cambridge, Mass.
- Bowers, J., 2002, "Transitivity", *Linguistic Inquiry*, 33, 183–225.
- Bruening, B., 2001, *Syntax at the Edge: Cross-Clausal Phenomena and the Syntax of Passamaquoddy*, Ph.D dissertation, MIT.
- Burzio, L., 1986, *Italian Syntax: A Government-Binding approach*, Dordrecht, D. Reidel Publishing C.
- Cinque, G., 1992, "The Pseudo-Relative and Acc-ing Constructions after Verbs of Perception", *University of Venice Working Papers in Linguistics*, CLI-92.I.2.
- Cinque, G., 1999, *Adverbs and functional heads. A cross-linguistic perspective*, New York, Oxford University Press.
- Chomsky, N., 1995, *The Minimalist Program*, Cambridge MA, MIT Press.
- Chomsky, N., 2008, "On Phases", in: R. Freidin *et al.* (eds.), *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, Cambridge, The MIT Press, 133–167.
- Cornilescu, A., 2002, "Rhematic focus at the left periphery. The case of Romanian", in: R. Bok-Bennema, B. Hollebrandse, B. Kampers-Manhe, P. Sleeman, *Romance Languages and Linguistic Theory 2000: Selected Papers from 'Going Romance 2000'*, Amsterdam, John Benjamins, 77–91.
- Cornilescu, A., 2001, "Observații privind interpretarea acuzativului prepozițional în limba română", *Actele Colocviului Catedrei de limba română*, București, Editura Universității din București, 25–40.
- Cornilescu, A., 2002, "Direct object at the left periphery", *Bucharest Working Papers in Linguistics*, 4, 1–15.
- Cruse, A., 2010, *Meaning in Language*, Oxford, Oxford University Press.
- de Haan, F., 1999, "Evidentiality and Epistemic Modality: Setting Boundaries", *Southwest Journal of Linguistics*, 18, 83–101.
- Dobrovie-Sorin, C., 1994, *The syntax of Romanian*, Berlin, Mouton de Gruyter.
- Edelstein, F., 1972, *Sintaxa gerunziului românesc*, București, Editura Academiei.
- Faller, M., 2002, *Semantics and Pragmatics of Evidentials in Cuzco Quechua*, Ph.D. dissertation, Stanford University.
- Friedman, V. A., 1986, "Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian", in: W. Chafe, J. Nichols (eds), *Evidentiality: the linguistic coding of epistemology*, Norwood, Ablex, 168–187.
- Guasti, M. T., 1993, *Causative and Perception Verbs. A Comparative Study*, Torino, Rosenberg & Sellier.
- Hill, V., 2013a, "From preposition to topic marker: Old Romanian PE", in: T. Biberauer *et al.* (eds), *Lexical, Morphological and Informational-Structure Interactions*. Oxford: Oxford University Press (to appear).
- Hill, V., 2013b, "The direct object marker in Romanian: a historical perspective", *Journal of Australian Linguistics*, 33, 3 (to appear).
- Hill, V., L. Tasmowski, 2008, "Romanian Clitic Doubling: a view from pragmatics-semantics and diachrony", in: D. Kallulli, L. Tasmowski (eds), *Clitic Doubling in the Languages of the Balkan*, Amsterdam, John Benjamins, 133–163.
- Irimia, M. A., 2009, "Romanian evidentials", *University of Pennsylvania Working Papers in Linguistics* 15, 1, article 13. <http://repository.upenn.edu/pwpl/vol15/iss1/13>
- Irimia, M. A., 2010a, "Some remarks on the evidential nature of the Romanian presumptive", in: R. Bok-Bennema *et al.* (eds), *Schriften der Kleist-Gesellschaft*, Amsterdam, John Benjamins, 125–144.

- Irimia, M. A., 2010b, "How to disambiguate an evidential construct? Taxonomy and compositionality of Romanian verbal complexes with evidential semantics", *Language Typology and Universals*, 63, 4, 322–332.
- Jakobson, R., 1957, *Shifters, Verbal Categories, and the Russian Verb*, Cambridge MA, Harvard University Russian Language Project.
- Kayne, R., 1984, *Connectedness and Binary Branching*, Dordrecht, Foris.
- Kayne, R., 1991, "Romance clitics, verb movement and PRO", *Linguistic Inquiry*, 22, 647–687.
- Lasnik, H., 2003, *Minimalist Investigations in Linguistic Theory*, London/New York, Routledge.
- Massam, D., 1985, *Case Theory and the Projection Principle*, Ph.D. thesis, MIT.
- Miller, G. D., 2000, *Nonfinite Structures in Theory and Change*, Oxford, Oxford University Press.
- Motapanyane, V., 1989, "La position du sujet dans une langue à l'ordre SVO/VSO", *Rivista di Grammatica Generativa*, 14, 75–103.
- Motapanyane, V., 1995, *The implications of complementation in Romanian*, Padova, Unipress.
- Noonan, M., 1985, "Complementation", in: T. Shopen (ed.), *Language Typology and syntactic description. Volume II: Complex constructions*, Cambridge, Cambridge University Press, 42–140.
- Ordóñez, F., 1998, "Post Verbal Asymmetries in Spanish", *Natural Language and Linguistic Theory*, 16, 313–346.
- Panhuis, D., 1984, "Prolepsis in Greek as a discourse strategy", *Glotta*, 62, 26–39.
- Pesetsky, D., E. Torrego, 2004, "Tense, Case, and the Nature of Syntactic Categories", in: J. Gueron & J. Lacarme (eds.), *The Syntax of Time*, Cambridge, The MIT Press, 495–539.
- Rafel, J., 2000, "From Complementizer to Preposition: Evidence from Romance", *Probus*, 12, 67–91.
- Rigter, B., F. Beukema, 1985, *A Government and Binding Approach to English Sentence Structure*, Apeldoorn, Van Walraven.
- Rizzi, L., 1997, "The fine structure of the left periphery", in: L. Haegeman (ed.), *Elements of Grammar*, Dordrecht, Kluwer, 281–339.
- Rizzi, L., 2004, "Locality and the left periphery", in: A. Belletti (ed.), *Structures and Beyond. The Cartography of Syntactic Structures*, vol. 3, New York, Oxford University Press, 104–131.
- Plungian, V. A., 2001, "The place of evidentiality within the universal grammatical space", *Journal of Pragmatics*, 33, 349–357.
- Speas, M., 2004, "Evidentiality, logophoricity and the syntactic representation of pragmatic features", *Lingua*, 114, 3, 255–276.
- Vasiliu, E., S. Golopenția Eretescu, 1969, *Sintaxa transformățională a limbii române*, București, Editura Univers.
- Wiemer, B., 2007, "Lexical markers of evidentiality in Lithuanian", *Rivista di Linguistica*, 19, 1, 173–208.
- Willett, T., 1988, "A cross-linguistic survey of the grammaticization of evidentiality", *Studies in language*, 12, 51–97.