

# STAGES OF GRAMMATICALIZATION FOR THE MODAL *PUTEA*

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**Abstract.** This paper argues that the Romanian modal *putea* ‘can’ went through a repeated re-analysis, reaching various stages of grammaticalization. The configurations underlying each stage differ from each other insofar as the modal merges at different levels in the clause hierarchy. This analysis accounts for: (i) the ambiguous deontic or epistemic reading of modal constructions out of the context; and (ii) the productive infinitive complementation for *putea*, in contrast to other verbs.

**Keywords:** possibility modal, grammaticalization, pragmaticalization, bare infinitive, speech acts.

## 1. INTRODUCTION

This paper focuses on the status of the modal *putea*, which occurs with various complements and shows some preferential usages from a diachronic perspective, as illustrated in (1) to (5)<sup>1</sup>.

- (1) El nu poate [<sub>DP</sub> așa ceva].  
he not can that something  
‘He is not capable of something like that.’
- (2) Ar putea domnia-sa [<sub>TP</sub> a- i lumina sufletul].  
would could lord-his to-INF him light-INF soul-the  
‘His highness might enlighten his mind.’  
OR ‘His highness could enlighten his mind.’
- (3) Ar putea domnia-sa [<sub>TP</sub> să- i lumineze sufletul].  
would could lord-his to-SUBJ him lighten-SUBJ soul-the  
‘His highness might enlighten his mind.’  
OR ‘His highness could enlighten his mind.’
- (4) Domnia Sa i- ar putea [<sub>?P</sub> (\*a) lumina sufletul].  
lord-his him would could to-INF light-INF soul-the  
‘His highness might enlighten his mind.’

<sup>1</sup> The data and the following discussions focus on the behavior of *putea* in texts and in standard register. Regional variations are not included.

OR ‘His highness could enlighten his mind.’

- (5) Poate [<sub>CP</sub> că domnia-sa îi va lumina sufletul.]  
 might that lord-his him will light soul-the  
 ‘It may be that his highness will enlighten his mind.’

The examples in (1) to (5) display different types of complements for *putea*: nominal in (1) and sentential in (2) to (5); the latter are all of the declarative type, but differ in the type of inflection: full-fledged infinitive in (2), subjunctive in (3), bare infinitive in (4), indicative in (5). Despite the variation in the embedded inflection, three of these constructions may yield an equivalent ambiguous reading (i.e., either deontic or epistemic) when taken out of the context. Diachronically, the constructions in (1) and (2) are out of use, while (3), (4) and (5) show steady productivity.

These observations raise two theoretical questions that I address in this paper: (i) Why is the ambiguity between deontic and epistemic readings not resolved configurationally? That is, why don’t we have a specific word order or selection constraints to indicate that the reading in (2) to (4) is either epistemic or deontic? (e.g., as in English or Spanish; see van Gelderen 2003 and Picallo 1990, respectively); and (ii) Why are constructions with bare infinitives, as in (4), productive, when infinitives have been replaced by subjunctives in complement position to all lexical verbs? (see Mišeska-Tomić 2006 for an overview of this process in the Balkans).

Any formal approach to these questions adopts a grammaticalization perspective insofar as the lexical verb in (1) became a modal verb, as in (2) to (5). However, when it comes to determining the degree of grammaticalization and the impact such a process has on the syntax of the modal, the inquiry may proceed on two different paths: it either assumes that the modal maintains a steady categorial status, but shows variation in the selectional properties of its complements; or it assumes that the modal itself undergoes changes in its categorial sub-class, with the consequence that each categorial change triggers a different type of complementation.

The first path has been already explored in the literature (Avram 1999, Avram & Motapanyane 2000), by defining *putea* as a thematically deficient verb that selects a variety of sentential complements. Although this analysis accounts for cross-linguistic disparities in the syntax of the modal, it runs into some descriptive and theoretical problems. Empirically, this analysis predicts that constructions as in (4) should allow for optional clitic climbing, on a par with their Romance equivalents; however, clitic climbing is obligatory in (4). Furthermore, this analysis leaves opened the question of why infinitive complementation is so productive and preferred in constructions as in (4), when verbs of any semantic class display only subjunctives in their sentential complements. On the explanatory side, this analysis relies heavily on the variation in the s(emantic)-selectional properties of the modal, which is theoretically undesirable, as it assigns an unreasonable load to the lexicon.

In this paper, I adopt the second path of inquiry, where the modal is re-analyzed several times as a different verbal element; that is, as a lexical verb in (1), as a raising verb in (2) and (3), as a functional verb in (4) and as a verbal pragmatic head in (5). Naturally, these elements differ in their c(onstituent)-selection, predicting the variation in the range of complementation. This approach assigns the major workload to the computational system, since the type of modal possibility is read off the syntactic configuration. I argue that constructions as in (4) are monoclausal, so clitic climbing is the only option for clitic merging. From this angle, the oddity of bare infinitive versus subjunctive complementation to *putea* becomes irrelevant, since the modal and the bare infinitive become a complex inflectional form, on a par with complex tenses (e.g., ‘will’ + infinitive) or complex moods (e.g., ‘have’ + infinitive), to which the subjunctive replacement did not apply.

Theoretically, this path of inquiry is compatible with diachronic cross-linguistic predictions on modals, which show categorial flexibility and variation rather than stable verbal status over a long period of time (e.g., Roberts & Roussou 2003 for English and Greek; Mišeska-Tomić 2006 for Balkan modals). From a biolinguistic perspective, grammaticalization represents a major mechanism for exploiting the computational asymmetry (Di Sciullo 2005) with consequential expansions in the functional domains of linguistic derivations. From this perspective, recursive grammaticalization of the modal is expected as a default mechanism for coping with semantic mapping to syntax at the stage of first language acquisition.

## 2. THEORETICAL FRAMEWORK

As assessment tools for the status of *putea* this inquiry relies on the mechanisms for language change defined in Roberts & Roussou (2003); on the cartographic representation of modal syntax proposed in Cinque (1999); and on the proposal to incorporate speech act projections at the left periphery of clauses, as independently argued for in Baker (2008), Sigurdsson (2004), Speas & Tenny (2003) a.o.

In Roberts & Roussou (2003), grammaticalization arises from the re-analysis of an element by merging it at a higher level in the hierarchical derivation of the clause. For example, van Gelderen (2003) shows that instead of merging *can* as a V(erb) root, the modern English speaker merges it either as an Asp(ect) head or as T in the inflectional domain of a full-fledged verb. Items reanalyzed at a higher level in the hierarchy are more recent and preferred on the grammaticalization scale.

From Cinque (1999) I adopt the conversion of semantic modality to functional modal features associated with Mod heads, as in (6).



All these concepts are applied within a cartographic framework compatible with the Minimalist Program (since Chomsky 1995).

### 3. THE FIRST STAGE OF GRAMMATICALIZATION

The lexical verb in (1), carrying the semantics of capability, has been reanalyzed as a modal of possibility by merging it as a grammatical rather than a lexical item in the derivation. This reanalysis yields construction as in (2) and (3), repeated for convenience.

- (2) Ar putea domnia-sa [<sub>IP</sub> a- i lumina sufletul.]  
 would could lord-his to-INF him light-INF soul-the  
 ‘His highness might enlighten his mind.’  
 OR ‘His highness could enlighten his mind.’
- (3) Ar putea domnia-sa [<sub>IP</sub> să- i lumineze sufletul].  
 would could lord-his to-SUBJ him lighten-SUBJ soul-the  
 ‘His highness might enlighten his mind.’  
 OR ‘His highness could enlighten his mind.’

The tests in (8) indicate that, in (2) and (3), *putea* is a non-argumental, raising verb. Note that constructions with full-fledged infinitives, as in (2), have disappeared from modern Romanian, but they appear in texts until the beginning of the 20<sup>th</sup> century, so speakers still have good passive judgments. The tests are, thus, applied to both constructions whenever possible, and they yield the following observations:

- The structure is bi-clausal because the complements may be fronted to Top.
- (8) a. ?[Să plece imediat] ar fi putut și el.  
 to-SUBJ leave immediately would be could and he  
 ‘As for leaving immediately, he could have done so, too.’
- b. ?[A- i alina sufletul] numai Domnul o putea.  
 to-INF him sooth-INF soul-the only Lord-the would could  
 ‘As for soothing his soul, only the Lord may do so.’
- *Putea* is non-thematic because it disallows DPs (8c) or indirect interrogatives (8d) in the complement position, which indicates lack of s-selection.
- (8) c. \*(N)-am putea ceva.  
 not would-1PL could something  
 Intended: \*‘We could not anything.’

- d. \*Am putea ce să facem/a face.  
would-1PL could what to-SUBJ do-1PL to-INF do-INF  
Intended: \*'We could what to do.'
- In such structures, DP movement (overt or covert) applies to the embedded subject; there is obligatory agreement between *putea* and the embedded subject.
- (8) e. (Copiii) pot/ (\*poate) [să plece toți (copiii) mâine.]  
children can-3PL/can-3SG to-SUBJ leave-3PL all children tomorrow  
'The children can all leave tomorrow.'
- f. (Domnii) putură/ (\*putu) [a ședeă toți (domnii) la taifas.]  
lords-the could-3PL/could-3SG to-INF sit all lords-the at talk  
'The kings could all sit down to talk.'
- The non-thematic *putea* may occur in non-raising constructions, where the matrix subject position is filled by a null pronominal with arbitrary features (8g). Control verbs do not take such forms (8h) since they require sharing of the subject with the embedded verb.
- (8) g. S- ar putea [să plecăm toți mâine.]  
se-ARB would-3SG could to-SUBJ leave-1PL all tomorrow  
'It could be that we'll all leave tomorrow.'
- h. \*S- ar începe [să plecăm toți.]  
se-ARB would-3SG start to-SUBJ leave-1PL all  
ok. Am începe să plecăm toți.  
would-1PL start to-SUBJ go-1PL all  
'We would all start to leave.'
- *Putea* is compatible with passive constructions in the complement position (a property of raising versus control verbs; see Davies & Dubinsky 2004).
- (8) i. Ziarul poate să fie citit de elevi.  
newspaper-the can-3SG to-SUBJ be-3SG read by students  
'The newspaper can/must be read by students.'
- j. Cartea putu [lesne a fi dezlegată.]  
letter-the could easily to-INF be-INF understood  
'The letter could be figured out easily.'

In conclusion, when *putea* selects full-fledged infinitive and subjunctive complements, it behaves as a non-thematic versus lexical verb, with typical verb raising properties.

The change in the categorial status of *putea* from a substantive to a non-thematic verb can be formalized by assuming that the argument structure of verbs takes the configuration of a vP shell (Chomsky 1995, following Larson 1988). Within the vP shell, *putea* is merged as ‘little’ v instead of V root, as shown in (9).

(9) [TP Mood/T<sub>can</sub> Mod<sub>can</sub> [<sub>vP</sub> v<sub>can</sub> [TP Mood/T...]]]

In (9), *putea* lost the lexical properties that generate an argument structure, and functions only as a ‘light’ verb, which assigns a “process” or “state” dimension to the semantics of the selected substantive verb (Ogawa 2001). In the case of the modal, the local V root must be non-existent, as the selected substantive verb occurs in the embedded complement (full-fledged infinitive or subjunctive)<sup>2</sup>. Direct merging in ‘little’ v triggers a raising verb property on *putea* (i.e., lack of local V root means lack of thematic role features), while saving its [possibility] semantics. The inflection applies to the modal in the same way it applies to substantive verbs, by triggering cyclic obligatory movement from ‘little’ v to the highest inflectional head (Mood/T). However, unlike the corresponding lexical verb (e.g., in (1)), the raising verb *putea* may be read not only as deontic but also as epistemic possibility, since its semantics is no more strongly anchored in the lexicon. More precisely, *putea* remains lexically specified for [possibility] features, but its exact interpretation is read off the syntactic structure: if the [possibility] features are checked off against the modal features in one of the Mod heads lower than T, the interpretation is deontic (i.e., *putea* scopes over vP only); if checking is delayed up to Mod above T, the interpretation is epistemic (i.e., *putea* scopes over the entire clause). The checking location is decided in the Numeration, by associating the intended modal feature with a certain Mod head.

An important observation on the structures in (2) and (3), with the underlying pattern in (9), is their morpho-syntactic equivalence. That is, in both structures *putea* is a non-thematic verb that selects a non-tensed complement whose verb is preceded by a mood marker (i.e., *a* for infinitive, *să* for subjunctive). Thus, replacement of infinitives by subjunctives took place within the same sentence pattern, by switching the value of only one feature (i.e., from - to + [finite]). Contrasting with this morpho-syntactic equivalence, the infinitive in (4) is ‘defective’ insofar as it drops the mood maker. Dropping the mood marker may indicate either a preferential non-spelling of *a* or the elimination of the functional projection to which *a* belongs. The next section argues for the latter analysis.

<sup>2</sup> Ogawa (2001) looks at ‘light’ verbs (e.g., Fr. *faire*) but does not provide an explicit analysis for raising verbs. The suppression of V root in (9) is my inference.

#### 4. THE SECOND STAGE OF GRAMMATICALIZATION

In constructions as in (4), repeated for convenience, *putea* takes a bare infinitive stem as complement (i.e., the infinitive mood marker *a* ‘to’ is missing).

- (4) Domnia-sa i- ar putea [(\*)a lumina sufletul.]  
 lord-his him would could to-INF light-INF soul-the  
 ‘His highness might enlighten his mind.’  
 OR ‘His highness could enlighten his mind.’

This construction is very productive in modern language and displays the same reading possibilities as the subjunctive construction in (3), that is, deontic or epistemic interpretation, depending on the context. The semantic equivalence between (4) and (3) raises these questions: If the subjunctive structure in (3) is productive and semantically equivalent, why is (4) equally productive? Furthermore, if, historically, the subjunctive replaced the infinitive in the sentential complements to verbs, why would that process make an exception for *putea*?

The answer to these questions relies on the status of the grammatical mood feature: is the dropping of *a* due to its non-spelling or to the elimination of MoodP from the derivation? The first possibility is present in Romanian in stylistically marked contexts (10a), in ‘have’ with indirect interrogatives, or in regional varieties (10c).

- (10) a. Ducă- se unde- o vrea!//  
 go-3SG.SUBJ SE where will want  
 Doream \*(să) se ducă unde- o vrea.  
 wished-1SG to-SUBJ SE go-3SG.SUBJ where will want  
 ‘S/he can go wherever s/he wants.’
- b. N- am ce- i (\*a) face.  
 not have-1SG what to-him/her to-INF do-INF  
 ‘There’s nothing I can do for him/her.’
- c. Nu știu la cine (\*a) striga.  
 not know-1SG to whom to-INF call-INF  
 ‘I don’t know whom to call.’

In (10a), the absence of the subjunctive mood marker *să* triggers the movement of the subjunctive verb stem above the level of clitics. Hence, the functional features associated with *să* (i.e., grammatical mood and illocutionary force) are still present, despite the lack of the mood marker, since they are checked against the verb itself.



High verb movement is not possible in the embedded context, where the illocutionary force is missing; so the mood marker becomes obligatory. In (10b, c), the *wh*-element triggers verb movement to the complementizer field – CP (presumably, to FocusP); the mood marker is obligatorily deleted since the checking of the mood feature free-rides on verb movement. Again, despite the absence of the mood marker, the feature associated with it persists in the structure to ensure the TP complement to C. Thus, the examples in (10) indicate that the deletion of the mood marker is not a default option, but it applies only in well-defined circumstances. This kind of deletion does not affect the underlying structure, which derives the embedded clause up to Mood/T. Thus, the constructions in (10) rely on the same configuration as the constructions in (2) and (3); accordingly, we expect subjunctive replacement to apply successfully in these contexts, which is correctly the case<sup>3</sup>.

Constructions as in (4) do not fit this pattern: such constructions are stylistically neutral, they cannot be associated with illocutionary force and cannot accommodate *wh*-extraction between *putea* and the infinitive verb. Hence, for (4), it is reasonable to assume that deletion of *a* means deletion of the functional feature of grammatical mood, so no embedded Mood/T is derived. Confirmation comes from the tests proposed in sections 4.1 to 4.7, which amount to the analysis of these structures as monoclausal derivations in which *putea* and the bare infinitive merge as one complex inflectional form.

#### 4. 1. The clitic position

In constructions as in (4), proclitics are obligatorily attached to *putea*, not to the infinitive stem (11a). This restriction is also seen in complex tenses, where proclitics appear in front of the auxiliary, not in front of the past participle (11b). Such restrictions do not apply to bi-clausal structures, where proclitics must appear on the infinitive stem, and to the right of the mood marker (11c). Hence, *putea* and the bare infinitive behave like a complex tense form rather than a construction with clause union.

- (11) a. Nu-i pot (\*i) risipi.  
           not them can     them scatter-INF  
           ‘I cannot scatter them.’  
       b. Nu i- am (\*i) risipit.  
           not them have them scattered

<sup>3</sup> The standard register displays only the subjunctive equivalents to the constructions in (10).

- ‘I have not scattered them.’
- c. Nu (\*i) pot [a- i risipi.]  
not them can to-INF them scatter-INF  
‘I cannot scatter them.’

Obligatory clitic climbing observed for constructions as in (4) is thus explained through the monoclausal status of *putea* with a bare infinitive.

#### 4.2. Constituency

Further evidence for the morphological fusion between *putea* and the bare infinitive comes from a constituency test: *putea* and the bare infinitive disallow separations, as shown in (12b), whereas separation is possible between *putea* and the full fledged infinitive, as in (12c). Hence, *putea* and the bare infinitive belong to the same phrasal constituent, on a par with auxiliary-verb strings, as in (12a).

- (12) a. \*[Risipit] nu i- am.  
scattered not them have  
Intended: ‘Scatter them, I did not.’
- b. \*[Risipi] nu-i pot.  
scatter-INF not them can  
Intended: ‘Scatter them, I cannot.’
- c. ?[A- i risipi] nu pot.  
to-INF them scatter-INF not can  
‘Scatter them, I cannot.’

#### 4.3. Morphemic status

Unlike the auxiliary ‘have’, *putea* is not a clitic on the verb, so verb ellipsis fails under ‘have’ but not under *putea*, as in (13a, b).

- (13) a. \*Ea a venit, dar el nu a.  
she has come but he not has  
Intended: ‘She has come, but he has not.’
- b. Ea poate veni, dar el nu poate.  
she can come-INF but he not can  
‘She can come, but he cannot.’

The non-clitic status of *putea* means that the modal and the verb must occupy different head slots, although they form one inflectional constituent.

#### 4.4. Hierarchy

The need for different head slots for *putea* and the infinitive stem is further supported by the location of the feminine clitic pronoun *o* ‘her’, which stays in AgrO and encliticizes on the first infinitive or past participle form that qualifies as a free morpheme. Consider the placement of *o* ‘her’ in (14).

- (14) a. Am invitat- o // Am invita- o.  
 have invited her// would invite-INF her  
 ‘I have invited her.’// ‘I would invite her.’
- b. Am putut- o invita// Am putea- o invita.  
 have could-PASTP her invite-INF// have can-INF her invite-INF  
 ‘I could invite her (in the past).’// ‘I could invite her (eventually).’
- c. \*Am putut invita- o// \*Am putea invita- o.  
 have could-PASTP invite-INF her// have could-INF invite-INF her

In (14a) *o* ‘her’ encliticizes on the verb, not on the auxiliary, because the auxiliary is a clitic itself. In (14b), *o* ‘her’ encliticizes on *putea*, not on the verb; in the presence of *putea*, the embedded verb rules out clitic attachment, as in (14c). Hence, *putea* is a free morpheme that supports clitics, and the only one situated in the hierarchical location compatible with enclitics; so the bare infinitive must be in a lower position, incompatible with enclitics.

#### 4.5. Location in relation to AgrOP

Kayne (1989) argues that verbs are spelled-out as past participles when they check the features of AgrOP (object agreement). AgrOP comes lower than T in the hierarchy (i.e., converting to the cartography in (6), AgrOP must be immediately lower than  $T_{future}$ ). Romanian *putea* occurs in past participle (15) and meets the enclitic *o* ‘her’; hence, it must transit through AgrO. Thus, *putea* is merged in a Mod head (e.g., either [obligation] or [ability/permission]) and moved through AgrO to T.

- (15) Am putut-o ajuta.  
 have could-Past.P. her help-INF  
 ‘I could help her.’

#### 4.6. Location in relation to post-verbal subjects

Romanian is a VSO null subject language, so the subject bare quantifier in post-verbal position signals the in-situ Spec,vP (Alboiu 2002, Hill 2002). Both

*putea* and the infinitive stem precede this bare quantifier in (16). Hence, they are both above Spec,vP.

- (16) (Cineva) le- a putut ajuta (cineva) pe toate.  
 somebody them has could help-INF somebody on-all  
 ‘Somebody could help them all.’

#### 4.7. Location in relation to adverbs

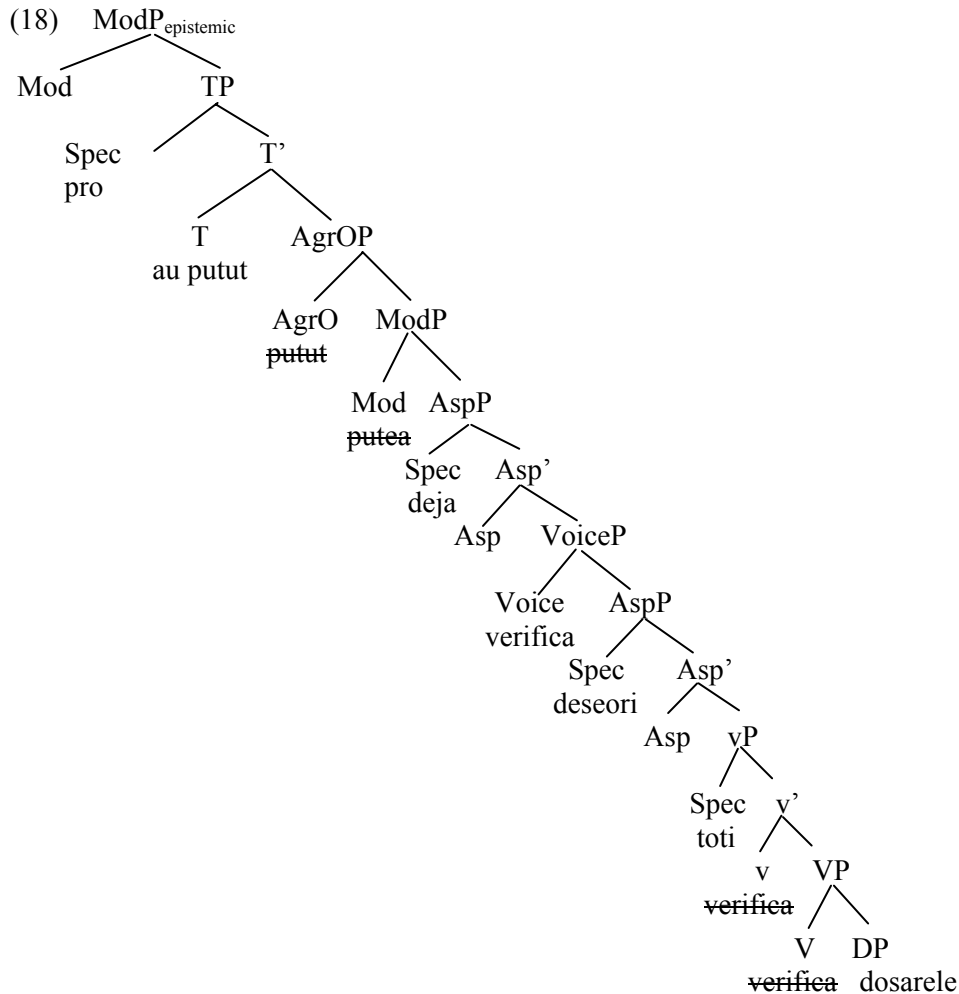
In Cinque’s (1999) hierarchy, ‘already’ is merged higher than ‘often’, and both occur above vP. This hierarchy extends to Romanian, as in (17a). Within this hierarchy, *putea* surfaces above ‘already’, whereas the infinitive stem surfaces above ‘often’, as in (17b).

- (17) a. Am verificat deja deseori (\*deja) dosarele.  
 have-1SG checked already often already files-the  
 ‘I’ve already checked oftentimes the files.’  
 b. Au putut deja verifica deseori toți dosarele.  
 has could already check-INF often all files-the  
 ‘They all could already check quite often the files.’

Within the framework in (6), this word order indicates that *putea* is in T (i.e., preceding all the Aspectual heads in which the adverbs may merge), whereas the bare infinitive is lower, above ‘often’ - generally assumed to merge just above vP. The verb displays only an infinitive stem, so it does not reach the AgrOP level; also, its irrelevance for tense features indicates that low  $T_{\text{anterior}}$  is also excluded as a location. By elimination, the verb must surface in Voice, which would explain its invariable *infectum* stem. So, *putea* and the infinitive verb belong to the same inflectional field, with *putea* in T, and the verb in Voice.

#### 4.8. Summary

Tests of clitic placement, constituency, verb ellipsis and word order indicate that *putea* has been re-analyzed as a functional element that merges directly in a low Mod head (instead of V). Co-occurrence with ‘have’, as well as inflection morphemes for subject agreement, tense and past participle, also indicate that *putea* moves from Mod to T (via AgrO), whereas the infinitive stem moves from V root to Voice, that is, to a lower head than the Mod head in which *putea* has originated. This yields an underlying configuration as in (18).



In (18) *putea* merges directly in a low Mod head, where it checks the modal features, and subsequently moves to T. The reading is deontic. The configuration allows for further movement to Mood<sub>epistemic</sub>, as needed. That is, *putea* may delay the checking of the modal features and target the higher Mod head, which would yield an epistemic reading. From this point of view, the functional verb *putea* provides the same interpretive alternatives as the raising verb *putea*, because, in both cases, the merging site is low enough to allow for low Mod heads checking, and the obligatory movement to T provides the opportunity for further movement to high Mod head, when the latter is activated.

Although this analysis adopts a cartographic framework, a note is in order about a minimalist approach to the derivation in (18). Such an approach would simplify the hierarchy by eliminating the low Mod head when it is not checked.

That is, considering that elements merge in the derivation only as triggered by functional features present in the Numeration, *putea* with epistemic reading merges directly in T (i.e., triggered by tense/agreement) and is probed by  $\text{Mod}_{\text{epistemic}}$ . Conversely, when possibility features are associated with low Mod heads, they trigger the merging of *putea* (which is then probed by T), and a  $\text{ModP}_{\text{epistemic}}$  is no more derived<sup>4</sup>.

## 5. THE THIRD STAGE: PRAGMATICALIZATION

Among the uses of the modal, the construction in (5), repeated for convenience, stands out because *poate* has an invariable (versus inflected) form and it only allows for an epistemic reading.

- (5) Poate [<sub>CP</sub> că domnia-sa îi va lumina sufletul.]  
 might that lord-his him will light soul-the  
 ‘It may be that his highness will enlighten his mind.’

This section argues that, in (5), the modal has been re-analyzed further up in the clause hierarchy, as a speech act (SA) head. As shown in (7), SAP is derived outside the core grammar (i.e., CP), at the interface of syntax with conversational pragmatics<sup>5</sup>. Hence, the re-analysis of *poate* as SA may be referred to as *pragmaticalization*, rather than *grammaticalization*, although the computational mechanism is the same. The definition of *poate* in (5) as a SA head relies on the observations and the tests below.

### 5.1. Lack of inflection

*Poate* in (5) is an invariable form that fails to behave as a verb: it disallows negation, clitic pronouns and auxiliaries, as shown in (19a). Hence, *poate* does not have an IP/TP domain.

- (19) (\*nu) (\*i) (va) poate că trimite o scrisoară.  
 not him will can that sends a letter  
 Intended: ‘S/he may not send a letter to him in the future.’

<sup>4</sup> This minimalist analysis reaches the same prediction as Wurmbrand (2001), i.e., modals in complex tenses are always deontic. Wurmbrand’s justification is that the merging of the auxiliary in T forces the merging of the modal at a lower level. Romanian, however, may take exception to Wurmbrand’s rule because the tense auxiliaries are clitics and attract *putea* as lexical support in T; subsequent head-to-head movement may apply to the aux+modal string, so an epistemic reading is possible, although not often used.

<sup>5</sup> The SA head carries a cluster of features that subsumes the features associated with Mood in (6).

## 5.2. Lack of a vP shell

*Poate* in (5) has no thematic roles, on a par with the raising version in (2), (3); therefore no VP is projected, and the structure would consist only of a ‘little’ *v* as matrix clause, since an inflectional field is also absent. The main problem with such an analysis is that *poate* should be uninterpretable as a modal: ‘little’ *v* does not carry [possibility] features, and there is no other functional projection in the matrix clause. Thus, the fact that *poate* has an epistemic value indicates that the modal has access to a functional domain, and that domain could only be at the clausal left periphery projected by the indicative verb. Thus, the configuration in (5) is monoclausal, and, in this context, *poate* is a grammatical verb (auxiliary, light or raising).

## 5.3. Non-adverbial behavior

Since *poate* is not a verb in (5), it must be a sentential adverb, because it maintains the [V] feature and has exclusive propositional scope. Indeed, this is the classification in traditional grammar. In (6), an adverb *poate* would be located in the Spec of Mod<sub>epistemic</sub>.

However, this classification is not supported by the morpho-syntactic comparison with sentential adverbs. The objections involve the pattern of grammaticalization, the phrasal properties and the merge location.

### 5.3.1. Grammaticalization

*Poate* in (5) emerges from the grammaticalization of a verbal element; this is untypical for the sentential adverb class, where adverbs are derived from adjectival stems, not directly from verbs or nouns (e.g., long infinitive *fire* ‘be’ (also used as regular noun) > adj. *firesc* ‘natural’ > adv. *firește* ‘naturally’//PP *în mod firesc* ‘in way natural’/‘naturally’ = evidential interpretation). Along this line, an epistemic adverb is expected to emerge from the paradigm of the long infinitive stem *putere* ‘to be capable’ > adj. *puternic* ‘strong/capable’ > adv. (lexical gap). Contrary to this prediction, *poate* is a frozen inflected form of the verb and does not fit the derivational morphology rule.

### 5.3.2. Phrasal structure

*Poate* in (5) rules out modifiers, as shown in (20a), and fails to alternate with equivalent adverbial PPs, as in (20b). However, adverbs that can acquire a sentential interpretation, such as ‘surely’ in (20c), display both modifiers and alternation with PPs.

- (20) a. \*mai/foarte poate  
 more/very can  
 b. \*în mod poate  
 in way can  
 c. mai/foarte sigur; în mod sigur  
 more/very surely in way sure

Lack of a phrasal structure, where modifiers could merge, and lack of alternation with equivalent phrasal constituents indicate that *poate* is a non-projecting free morpheme (vs. adverb), which merges as a head, not as a maximal projection<sup>6</sup>. Hence, *poate* in (5) is not located in the Spec of Mood<sub>epistemic</sub>, because only XPs may merge as Specifiers.

Briefly, derivational morphology and syntactic tests indicate that *poate* in (5) is not an adverb, but a functional head with [V] features. Considering the tests in section 5.1, the functional features triggering the merging of *poate* do not belong to the IP/TP domain. Accordingly, the merging site for *poate* must be a functional head above this domain.

#### 5.4. The site of re-analysis

*Poate* in (5) has as sibling the form *par-* ‘seem’, re-analyzed with ‘that’ as *parcă* ‘seems-that’, as in (21a).

- (21) a. Poate/par-că vine.  
 can/seem that comes  
 ‘S/he might come.’/ ‘S/he’s seemingly coming.’

The origin of *parcă* ‘seems-that’ is visible in the non-raising version of the bi-clausal, non-thematic construction in (21b). A more awkward construction with *poate* is also available along the same pattern (21c).

- (21) b. Se pare că vor veni.  
 SE-ARB seems that will-3pl come  
 ‘It seems that they are coming.’

<sup>6</sup> The same analysis is proposed in Hill (2007) for frozen expressions (e.g., *din fericire* ‘from fortune’/‘fortunately’) and for other phrasal constituents re-analyzed as single heads (e.g., *bineînțeles* ‘of-course’, *peșemne* ‘probably’), which disallow modifiers and alternation with PPs. All these elements have only one interpretation (evaluative, evidential or epistemic) and merge as SA heads (or in the respective Mood heads in (6)). These elements contrast with the class of adverbs, which are phrasal, may take predicational or propositional scope, and vary their interpretation according to the hierarchical location.



- c. ??Se poate că vor veni.  
SE-ARB can that will-3PL come  
'It is possible that they'll be coming.'

The version in (21b) suggests that re-analysis applied to the non-thematic verb, which lost its inflectional status, and reached the same non-projecting functional morpheme status as the complementizer 'that', with which it fused. Hierarchically, the re-analysis of this verb must have taken place above CP. Similar distribution of *putea* as a non-thematic verb (21c) allows for a similar identification of the source of re-analysis.

In a formal hierarchy, the head preceding the indicative 'that' belongs to the pragmatic field, and it is labeled SA in (7). This head is easily convertible to Mood<sub>epistemic</sub> in (6). Direct merge of *poate* in SA explains why the only available reading is epistemic: from that position, *poate* has no access to the lower Mod heads in the structure. Predictably, the pragmatic *poate* should be able to co-occur with the grammaticalized *poate*, but the latter may only have a deontic interpretation; this is shown in (22).

- (22) Poate că prietenii mei pot pleca mai devreme.  
can that friends-the my can-3PL leave-INF more early  
'Perhaps my friends can leave earlier.'

### 5.5. Spell-out consequence

Location of *poate* in (5) in the SA head has an impact on how the clausal phase is closed off. The general rule is that sentence typing complementizers, like the indicative 'that', fulfill the phase closing function, and as such, they are obligatorily spelled-out in Romanian, as in (23a). However, since the hierarchical derivation in (5) continues beyond 'that', it is expected that the SA head takes over the phase closing function. Hence, the spell-out of 'that' could become optional. This is, indeed, the effect in constructions as in (5), where 'that' may or may not intervene between *poate* and the elements of IP/TP, as shown in (23b)<sup>7</sup>.

- (23) a. Credea el [<sub>CP</sub> \*(că)- i va lumina Domnul sufletul].  
believed he that him will light Lord-the soul-the  
'He believed that the Lord will enlighten his mind.'  
b. Poate [<sub>CP</sub> (că)- i va lumina Domnul sufletul]  
can that him will light Lord-the soul-the  
'It may be that the Lord will enlighten his mind.'

<sup>7</sup> In the GB version of the theory, obligatory 'that'-indicative follows from compliance with s-selection, lexically encoded on the matrix verb. In the case of *poate*, since it is a functional vs. lexical head, the obligatoriness of 'that' is lifted.

In conclusion, if we consider that adverbs are substantive lexical items, *poate* in (5) does not qualify as such: It is a free morpheme with [V] features but has no projecting properties; it merges in a head with pragmatic features, above the indicative CP, but it belongs to the CP unit (i.e., it heads a mono-clausal structure). Thus, the invariable *poate* qualifies as a pragmatic marker.

## 6. CONCLUSIONS

This paper focused on two properties of the Romanian constructions with the possibility modal *putea*: (i) the ambiguous deontic or epistemic reading of modal constructions out of the context; and (ii) the productive infinitive complementation for this modal, when all other verbs select only subjunctive complements.

I argued that the axis of grammaticalization for *putea* provides natural explanations for these two properties, as well as for their side effects. More precisely, three stages of re-analysis have been proposed for *putea*: (i) as a raising verb; (ii) as a functional verb; (iii) as a pragmatic marker. The raising and the functional *putea* merge low in the clause hierarchy (i.e., ‘little’ v and Mod, respectively), which gives it predicational scope, yielding a deontic interpretation. All Romanian verbs move obligatorily to T, and *putea* is no exception, in both configurations. High verb movement (e.g., to Mood<sub>epistemic</sub>) allows *putea* to take propositional scope, yielding an epistemic interpretation. Hence, the syntax of *putea* is such that it provides opportunities for either deontic or epistemic readings within the same clausal configuration, be it bi-clausal (for the raising verb *putea*) or mono-clausal (for the functional verb *putea*). There is no question of optionality in these configurations since the functional features for deontic or epistemic modality are decided in the Numeration.

The distinction between the raising verb *putea* and the functional verb *putea* provides the key for understanding why *putea* continues to thrive with infinitive complements, whereas other verbs display replacement of the infinitives with the subjunctives in their sentential complements. Crucially, the functional verb *putea* and the bare infinitive verb combine as one inflectional form (versus two inflectional domains related through clause union in other Romance languages), so replacement with the subjunctive does not apply, since this process concerns only bi-clausal constructions. The side effect of this configuration is the obligatory clitic climbing on the functional *putea* in Romanian.

Finally, the intriguing invariable form *poate* ‘maybe’ that occurs only with indicative complements has been explained by the re-analysis of the modal *putea* as a SA head, which accounts for its morpho-syntactic behavior and exclusive epistemic interpretation. As a side effect, this analysis brings *poate* within a wider class of elements with exclusive sentential reading and ‘that’-indicative complementation, where the spelling of ‘that’ is optional. It appears that *pragmaticalization*, through the re-analysis of lexemes as SA heads, is a productive process but it is compatible only with items with [V] features.

It is impossible to draw a timeline for the three stages of grammaticalization of *putea*, except for the fading out of the full-fledged infinitive complements. The old texts are already at the stage of the raising verb *putea*, which alternates with *putea* + bare infinitives, and may also display *poate că* structures. Theoretically, higher re-analysis in the tree hierarchy indicates a more recent stage (Roberts & Roussou 2003), which becomes the preferred version in colloquial language – while formal registers are expected to be more conservative and adopt the re-analysis at a later time. From this point of view, Romanian is puzzling, because the colloquial register makes equal use of *putea* with subjunctive (older analysis) and bare infinitive (more recent analysis) complements. Moreover, the formal register promotes the bare indicative over the subjunctive, up to a point<sup>8</sup>. The inquiry into this discrepancy between theoretical predictions and usage data may provide insight into the mechanisms of inter- and intra-speaker variation, but this will make the topic of another study.

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<sup>8</sup> I constructed a questionnaire with nine constructions in which *putea* may take either a subjunctive or a bare infinitive complement. I distributed the questionnaire to 30 women (aged 40 and above), all native speakers of standard (versus regional) colloquial Romanian and asked them to chose the complementation they find adequate for addressing members of their family. Then, I distributed the same questionnaire to five teachers of Romanian grammar (junior high school level). The teachers’ option for bare infinitives was significantly higher. Asked why they prefer the infinitive, three teachers (independently) answered that the infinitive provides a “cleaner expression” (*limbă îngrijită*).

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