GOAL OF MOTION CONSTRUCTIONS IN ENGLISH AND ROMANIAN. THE CASE OF 'A ALERGA' AND 'A FUGI'

ILEANA BACIU

1. PRELIMINARIES

The paper aims at trying to give an account of *goal of motion* constructions in English and Romanian. In particular, this paper was prompted by the existence of two verbs (*a alerga, a fugi*) as the Romanian equivalents for the verb *'run'* in English, and their distinct syntactic behaviour, as the examples below illustrate:

(1) (i)   Sue ran to the the park / station.   (i')   Maria a fugit în parc / la gară.
     (ii) Sue is running in the park.   (ii") Maria aleargă /* ??fuge în parc.
     (iii) Sam ran Mary to the station .   (iii''') ?A alergat-o / *a fugit-o pe Maria
                                                        până la gară.

Goal of motion is defined as one type of 'complex event' in which a motion event (process) is followed by the indication of the *endpoint* of such motion.

It is a well-documented fact that, in English, non-telic (unergative) manner of motion predicates like *to dance, to walk, to swim, to run* can be *coerced* into telic predicates in the context of prepositional phrases (PP), the prepositional phrase furnishing the 'telos' of the process denoted by the verb. In the examples below the preposition encodes *directed motion* and the entire construction qualifies as a *goal of motion construction:*

(2) (i)   The boy swam to the boat.
     (ii)   The lovers danced into the room.
     (iii)   The boat floated under the bridge.
     (iv)   They walked to the bridge.

Romanian, similar to other Romance languages, does not seem to exhibit this possibility: the combination of a manner of motion verb and a PP expresses only *located motion*; generally, a different strategy is employed to obtain the *directed* motion. The strategy employed is to use an inherently telic verb (i.e. a verb of *inherently directed motion* such as *a intra* = 'go in'; *a ieşi* = 'go out', *a ajunge* = 'get to / reach') to express the *endpoint of motion* and an adjunct to express *the manner of motion.* Another possibility is to use morphologically complex prepositions in the sense that they are formed of two or more prepositions (e.g. *până la / sub / în*).

The examples in (3) are possible translations of the the examples in (2i,ii). The examples in (4) give a more or less word for word translation of the examples in (2iii, iv). It is to be noticed that the prepositions only encode a '*located motion*' interpretation:

(3)   (i)   Băiatul a ajuns la barcă *înot(ând)*/ A înotat *până la* barcă.
               'the boy reached the boat swimming'/ 'swam until to the boat'
       (iii)   Îndrăgostiţii au intrat în cameră *dansând* / Au dansat *până în* cameră.
               'the lovers entered the room dancing'/ 'danced until in the room'

(4)   (i)   Barca a plutit sub pod.   (only 'located motion' reading)
       (ii)   S-au plimbat la pod.   (only 'located motion' reading)

As can be seen, the difference between Romanian and English with respect to the formation of *goal of motion constructions* resides in the impossibility of the first language to encode directed, telic motion by combining a manner of motion verb and a locating preposition. Romanian, as already mentioned, employs different strategies, as illustrated in (3). This difference, which characterizes other Romance languages (Italian, Spanish, Catalan), enabled Talmy to suggest a descriptive typological distinction between '*satellite-framed languages*' (e.g. English, German) and '*verb-framed languages*' (e.g. Spanish, Italian, Catalan, Romanian).

According to Talmy *verb-framed languages* are unable to encode telic motion (or '*result augmentation*', Levin and Rappaport-Hovav 1998) by means of the combination between a manner of motion verb and a point locating preposition because they employ a different '*lexicalization pattern*', actually '*conflation process*'; the verbs (characterized as + telic) conflate the *Motion* component with the *Path* component, hence the *Manner* component is lexicalized as an adjunct. *Sattelite-framed languages*, of which English is an example, involve conflation of *Motion with Manner*, hence the *Path* component (i.e. the telic component) is expressed by the PP. Compare the examples below borrowed from Mateu:

(5)   (i)   (E) The boy danced into the room.   MANNER + MOTION
       (ii)   (Cat) El noi entra a (loc. prep.) l'habitacio ballant. MOTION + PATH
       (iii)   (R) A intrat în (loc. prep.) cameră dansând.   MOTION + PATH

The descriptive typology offered by Talmy definitely needs to be accounted for in terms of a clear specification of the formal properties of verbal and prepositional lexical items in languages and in terms of some parameters of lexical semantic decomposition (cf. Hale and Keyser 1999, Folli and Ramchand 2001).

The matter is complicated even further, since, although Romanian can be assumed to be of the Catalan type, a closer examination of the data reveals the fact that in Romanian the contrast depends on a particular choice of verb (in a way similar to Italian). In (6) below the goal of motion interpretation becomes available with one of the two Romanian equivalents of the English verb 'run':

(6)   (i)   The boy is running in the park.   (located motion)
       (ii)   Băiatul aleargă / ???fuge în parc.
       (iii)   The boy ran to the park / station.   (directed motion)
       (iv)   Băiatul a fugit în parc / la gară.

In the next section we present the framework that would allow us to articulate the components that make possible 'result augmentation' of (unergative) process verbs (cf. Folli and Ramchand 2001). Next, following suggestions put forth by Folli and Ramchand, we discuss the English case of 'result augmentation' and finally we turn our attention to the Romanian data

2. THE FRAMEWORK

The theoretical framework assumed is the one launched by Hale and Keyser (1991 and foll.) and adopted by a large number of researchers. The common idea behind all the proposals is that the syntactic projection of arguments is based on event structure.

The particular proposal we have adopted is the version introduced by Ramchand (2002), Folli and Ramchand (2001) since they combine the constructional approach to argument projection with the intuition that event structure is, to a certain extent, lexically encoded. Folli and Ramchand (2001) propose an event structure with three event projections:

- vP introduces the causing event and licenses external arguments.
- VP specifies the nature of the change or process and licenses the object of change and process.
- RP gives the 'telos'. The R head has the function of integrating the state as the *result* of the previous change / transition.

In this event-structure decomposition, the VP projection, corresponding to the process component, is considered to be the only one which is obligatory for all non-stative verbs since it represents the concept of change which is a crucial component of any non-stative verb and a pressuposed condition for the concepts of both initiation and 'telos'.

The nominal positions associated with the projections have the following interpretations:

(7)   (i)   Specifier of vP: Initiator
      (ii)   Specifier of VP: Undergoer
      (iii) Specifier of RP: Resultee

The main difference between the system presented here and an argument structure specification lies in the abstractness of the role types and the fact that a single DP can appear in more than one specifier position.

The three-projection representation is complemented by two *event composition rules*, given below:

(8)   (i) Event Composition Rule I
          $e = e_1 \rightarrow e_2$: e consists of two sub-events, such that e_1 leads to or causes e_2 (Hale and Keyser 1993)
      (ii) Event Composition II

e= <e$_1$,e$_2$>: E consists of two sub-events such that e$_1$ and e$_2$ form a telic event structure where e$_1$ is the process/transition portion and e$_2$ is a state interpreted as the result state of the transition (Higginbotham 2000)

According to the authors (2001: 4), a "goal of motion construction" is "a result of the fact that RP is one of the three projections and it can be built and licensed both lexically and constructionally".

3. THE DATA

3.1. Adopting current asumptions, in English the combination of a *manner of motion verb* and a *preposition* can, in the majority of cases, indicate *directed motion* (alongside *located motion)*.

In certain Romance languages (Spanish, Italian, Romanian) only *located motion* is expressed by the combination *of a manner of motion verb and a PP*; the directed motion interpretation, as already mentioned, employs a different strategy, in particular the directed motion requires the use of an adjunct.

In other languages we get either located motion or directed motion depending on the choice of case, e.g. Latin. German, Russian. This cross-linguistic variation needs to be accounted for, one way or another.

(9)   (i)   The boat floated under the bridge. (ambiguous)
           (ii) Barca plutește sub pod. (locative)
           (iii) Barca trece sub pod plutind. (goal of motion)
                 'the boat passes under the bridge floating'

The situation is complicated by the fact that English also employs constructions that have only a locative interpretation, while some Romance languages may exhibit a goal of motion interpretation.

(10)   (i).   (R). Mingea s-a rostogolit sub masă. (ambiguous)
                        'the ball rolled under the table'
                   (I). La balla rotolò sotto il tavolo
           (ii)   The boy walked / ran in the park. (locative)

Given the facts above we assume with Folli and Ramchand (2001) that *goal of motion* is possible in Romance (Romanian in our particular case) and this reading is dependent on the *verb* and not the *preposition*. In English. on the other hand, the variation depends on the choice of the PP (Higginbotham 2000).

3.2. The English Data

According to recent research in the domain of *goal of motion* constructions in English, the possibility for this construction in English rests on the *preposition* chosen. Prepositions that combine with manner of motion verbs, allowing the goal of motion interpretation, are *dynamic* and are excluded from the context of stative predications as the examples below indicate:

(11)   Billy ran to the store.

*Billy was to the store.
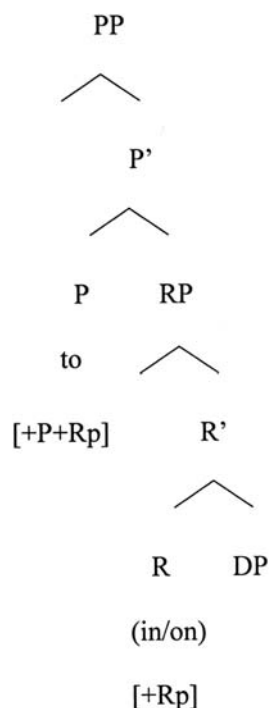The ball rolled into the water.
*The ball was into the water.

The properties of these prepositions have led Higginbotham (2000) to argue that (some) prepositions in English can be sub-eventally complex, i.e. they contain both a process (direction) and a final location (result). Similar suggestions have been made by Svenonius (2003). Koopman devides the PP into a *Path Phrase* and a *Place Phrase*.

According to Higginbotham (2000), these dynamic prepositions have the status of 'accomplishment' predicates, as they encode both the 'path' and 'the place' (endpoint of motion). The assumption is that the they have a complex semantic structure of the Event Composition II type :

(12) $e = \langle e_1 , e_2 \rangle$: e consists of two subevents, such that e_1 and e_2 form a telic pair; e_1 is the process/transition portion and e_2 is a state (the result state of the transition).

Within the analysis adopted, Folli and Ramchand (2001) translate the complex semantic structure of the preposition into a complex functional structure. The assumption is that accomplishment prepositions enter the syntactic derivation with two event projections. The 'direction' or 'path component' is rendered by P while the Place component is rendered by RP The path component is identified with the event position in the V:

(13)

```
                    PP
                    /\
                     P'
                    /\
                 P      RP
                to      /\
            [+P+Rp]        R'
                          /\
                       R     DP
                     (in/on)
                     [+Rp]
```

The preposition of this complex structure is attached to the verb in adjunct position creating a telic structure at the level of *outer aspect*, i.e the telic structure of the preposition is responsible for the goal of motion interpretation in English These complex prepositions have no co-occurence restrictions on them and, as we well know, they can be added to most motion verbs in English. Once the PP is deleted the construction is atelic. The atelic nature of the verb after deletion of the PP indicates that motion verbs in English do not encode an RP as part of their lexical specification. The goal of motion reading is due solely to the complex prepositional forms that encode both *path* and *telos*.

3.3. The Romanian Data

We turn our attention now to Romanian which is different from English falling, in a way, with Italian (Spanish, Catalan, etc.).

As already mentioned, while in English the verb encodes the *motion* and *manner* and the preposition encodes the *path* and *location* (the telos), in Romanian the same verb may express the '*manner*' but not '*directed motion'* since when they combine with a prepositional phrase the only reading is the atelic, locative reading:

(14)   (i)   The boat floated under the bridge.
       (ii)   Barca pluteşte sub pod.   (locative reading)
       (iii) Barca a intrat sub pod (plutind).   (goal of motion reading)
            'the boat went under the bridge floating'

As (14iii) shows, in order to get a *goal of motion interpretation a verb of directed motion* (unaccusative, telic) is employed and the manner is expressed on an adjunct.

In Romanian we identify a class of verbs of '*directed motion*' just like in English, Italian or Spanish,   namely: *a sosi* = 'to arrive', *a pleca* = 'to leave', *a intra* = 'to go in', *a ieşi* = 'to go out', which qualify as unaccusative verbs. Mateu (2001) quoting Mateu and Rigau (ms) suggests that from a syncronic perspective the conflation involved in these verbs can be regarded as "fossilized incorporation" (hence their *verb-framed nature*) : what corresponds to the telic path and what to the motion verb cannot be distinguished any longer. All these verbs in combination with morphologically simple prepositions such as *în* = 'in' or *la* = 'at' or *sub* = 'under' have a telic interpretation, as the example in (14iii) shows.

Moreover, most of these verbs may occur in the 'a fi + past participle' construction (like transitive verbs). e.g. *e plecat / e sosit de aseară = he is left / arrived since yesterday, e proaspăt ieşit de pe băncile facultăţii = he is come out of the faculty (i.e. graduated),* etc.

Along the lines suggested by Folli and Ramchand, within the class of what we call unergative *manner of motion* verbs we have identified two classes: the manner of motion verbs represented by verbs like *a pluti* = 'to float', *a se plimba* = 'to walk', *a înota* = 'to swim', *a dansa* = 'to dance' and verbs like *a se rostogoli* =

'to roll', *a sări* = 'to jump / to bounce', *a se târî* = 'to crawl', *a aluneca* = 'to slide'. Compare the following:

(15)   (i) Mingea s-a rostogolit / a alunecat *în bazin* într-o secundă / *timp de 10 secunde.
        'the ball refl.cl. rolled into the pool in a second / *for 10 secs' VS
        ? Mingea s-a rostogolit în bazin (timp de) 10 secunde şi apoi s-a oprit.
        'the ball refl.cl. rolled in the swimming pool for ten secs then it stopped'
    (ii) Băiatul a sărit în bazin într-o clipă / *timp de 2 minute.
        'the boy has jumped into the pool in no time / *for 2 minutes' VS
        Băiatul a sărit (în apă) 10 minute şi nu a obosit.
        'the boy jumped in water for 10 minutes and isn't tired
    (iii) Maria a înotat în bazin *în două ore / timp de 2 ore.
        'Mary swam in the swimming pool *in two hours / for two hours'
        Mingea a plutit în bazin *în două ore / timp de 2 ore.
        'the ball floated in the pool *in two hours / for two hours'

The examples in (15i,ii) above may have both an atelic and a telic interpretation (goal of motion) in the context of a prepositional phrase, while the ones in (15iii), within the same context, have an atelic reading. What is relevant here is that unlike the examples in (i) and (ii), those in (iii) may *only* have the atelic reading.

The examples above suggest that the telic reading of the sentences in (15i,ii) above cannot be due to the properties of prepositions. Moreover, these prepositions are perfectly suitable in stative configurations, qualifying as locative prepositions:

(16)   Maria este în casă / la gară.
            'Mary is in house / at station'
            Mingea este în / sub coş.
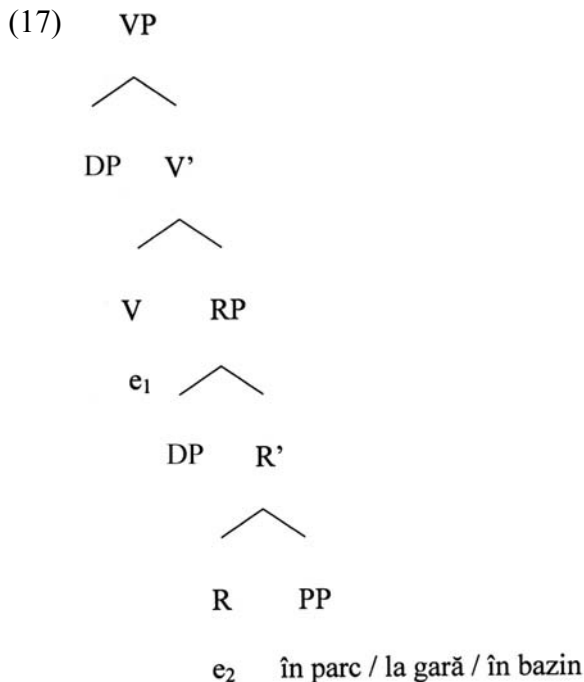   'the ball is in / under basket'

We may also come across the same prepositions in complex structures which are formed by two prepositions such as *până în / la* where the first one (i.e. *până*) has the semantic function to *measure out* the distance involved in the event of motion and the second has the semantic function to indicate the *final location* of the event. Actually, these complex prepositions qualify as *accomplishment* prepositions and can attach to any of the motion verbs (much like in the case of English).

To put it in a nutshell, almost all morphologically simple prepositions in Romanian have the *stative / locative reading*.

A possible and interesting explanation for the telic reading of the examples in (15 i, ii) is the one suggested by Folli and Ramchand (2001) for Italian. According to them, simple prepositions only have locative / stative reading and *the telic interpretation* is constrained by the *choice of the verb*. A certain group of unergative verbs is optionally specified in the lexicon as [+R].

The assumption is that the verbs which make possible the telic reading have a (default) feature that require the addition of *a result*. What this means is in line with Klipple (1997) and Higginbotham (2000) who claim that in Romance languages 'direction / aspect' is *mapped onto the verb and not outside it*, the PP always having a locative meaning.

Folli and Ramchand argue that this assumption can be perfectly accomodated by assuming that certain verbs obligatorily license an RP, and the locating prepositional phrase fills the complement position of the R head and specifies the *content* of the result state licensed by the verb. The implication then is that these verbs have a *complex structure*. The configuration suggested by Folli and Ramchand is the one in (11) below:

(17)   VP
        /\
     DP   V'
          /\
        V   RP
       e₁   /\
          DP   R'
               /\
             R   PP
            e₂   în parc / la gară / în bazin

The verb projects an RP and the point location preposition fills the complement position of the R head, specifying the content of the result event predicated of its specifier. The DP subject in the specifier position of the respective heads qualifies both as an Undergoer (specifier of V) and a Resultee (specifier of R). The PP indicating the endpoint of motion is *not* assumed to be an adjunct of the verb.

As far as the verbs *a fugi* and *a alerga* are concerned they represent typical examples of the two classes mentioned above and they seem to confirm the insights of all the above mentioned linguists. Consider the examples in (18):

(18)   (i) Sue ran to the station / to the park.   (directed motion reading)
                   Sue a fugit la gară / în parc.
              (ii) Sue is running in the park.   (locative reading)
                   Sue alearga / *fuge în park.
             (iii) Sam ran Mary to the station.
                   ?A alergat-o / *a fugit-o pe Maria până la gară.

As can be noticed, in Romanian we have two verbs that are used to translate the directed motion reading and the locative reading displayed by the verb 'to run' in English. In Italian, the equivalent verb is 'correre', and, as known, the difference in interpretation between the examples in (18i) and (18ii) is rendered by auxiliary choice: 'avere' for the atelic / locative reading and 'essere' for the telic / directed motion reading.

The definition we find for *a fugi* includes the *manner* feature and the *path* feature (direction / source): 'a se deplasa cu paşi repezi, a se mişca iute într-o direcţie'. The verb *a alerga* only includes in the definition the manner / motion: 'a merge cu viteză / a se deplasa cu paşi repezi'. Both are of Latin origin. The verb 'run' on the other hand is of Germanic origin and the definition only includes the manner of motion: 'go by moving the legs quickly' (cf. *a alerga*).

There is no doubt that the matter at hand requires further research but at first sight we notice that the two verbs are in fact lexicalizations of the 2 patterns displayed by the verb 'run'. We think that the existence of the two predicates are in fact proof that (i) simple prepositions in Romanian cannot be assumed to have a complex structure (Talmy, Higginbotham, Klipple) and (ii) certain manner of motion verbs are actually complex in point of their event structure.

The behaviour of the verb *a fugi* in Romanian reminds one of the behaviour of verbs like 'rise' 'dry' (the so called degree predicates) which are characterized as accomplishments / achievements predicates but which do not conceptualize the result / endpoint as such (Ramchand 2000). It is only in the context of prepositional phrases or APs that the final state is specified. Just like these verbs, the verb *a fugi* shows change of location / transition, but unlike these verbs it is not an alternating verb. Moreover the verb may, in certain contexts, denote only the process as such:

(19)   Ion fuge de mănâncă pământul / ca vântul.
                   'run for one's life/ like a lamplighter'

On the other hand, the behaviour of *a fugi* comes very close to verbs like *a sosi* 'to arrive', *a pleca* 'leave' *a veni* 'to come' (the last two of Latin origin) in the sense that it may occur in the 'a fi + past participle configuration' which characterizes unaccusative intransitives:

(20) (i)   e sosit de aseară
              'is come since last night'
      (ii)   e venit de mult
              'is come for a long time'
      (iii) e plecat acasă
              'is left home'

(iv)   e fugit de 2 zile
          'is run for 2 days'

Moreover, just like in the case of achievement predicates the 'in X time' construction has an *ingressive* reading (i.e. the event occurred after 5 minutes have elapsed), as can be noticed below:

(21)   A sosit / a plecat în 2 minute.
          A fugit la gară în cinci minute.

We should remember, nevertheless, that full-fledged activities in the context of 'in phrases' have the same interpretation.

To account for these verbs we will assume that just like in Italian, the verb *a fugi* belongs to the class of motion verbs that allow a process of *accomplishment creation* (i.e. event composition of the type e=$\langle e_1, e_2 \rangle$ due to a categorial feature 'R' which would license a PP result which actually allows the projection of RP which takes the PP as complement. The representation is given in (15) below:

(22)
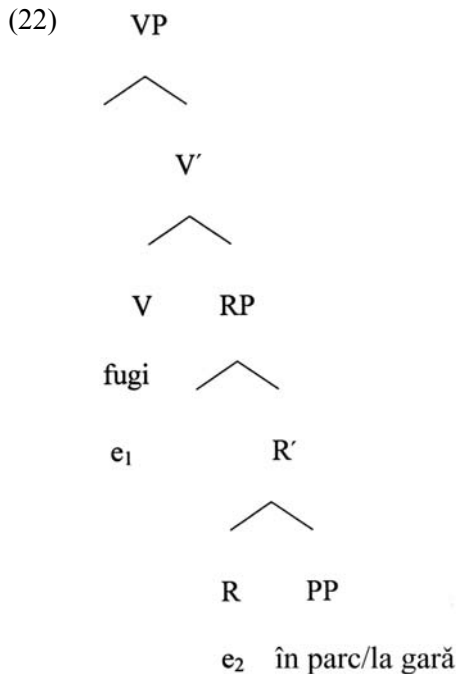
In the case of *a fugi*, as the representation shows, the PP is not assumed to be an adjunct of the verb but rather an argument showing the *end point* of motion. The PP semantically specifies the Result state licensed by the verb. This strategy of goal of motion construction is known as 'accomplishment creation'. The l-syntactic representation above is determined by a bundle of features that are carried by the verb in the lexicon: *a fugi* [+V (+R)]. The round bracketing indicates that the projection of RP is optional. The optionality of R accounts for the cases where *a fugi* shares the same configurations as *a alerga*.

The verb *a alerga* does not have any of the properties of *a fugi*. It never acquires a telic (goal of motion) interpretation in the context of simple locative prepositions, hence does not occur in the 'a fi + present participle' configuration, it has a transitive atelic use alongside the intransitive one (interpreted as the equivalent of 'chase somebody' rather than 'run smb to some place'). All in all, *a alerga* could be considered as a member of the true manner of motion verbs of the type *a pluti* 'float', *a se plimba* 'walk', *a dansa* 'dance', *a înota* 'swim' which according to Folli and Ramchand do not license the projection of an RP. In this case the lexical specification on the V will not include the feature [R] but rather [+v, +V] since these verbs have always been characterized as having external arguments. This verb, alongside the verbs mentioned, may occur in telic (goal of motion) configurations but only in the context of accomplishment prepositions, i.e. prepositions that are morphologically complex.

(16) A alergat până în parc / la gară.

The hypothesis put forth by Folli and Ramchand is that in such cases the verbs need not have the [R] feature since the prepositions themselves have a complex structure, i.e. are accomplishments, and are adjoined to any of the motion verbs (much like in the English case). These PP qualify as adjuncts. In these cases the complex prepositions transparently reflect their complex structure in their morphology, corresponding to the two heads of the semantic/syntactic decomposition proposed:

(17)
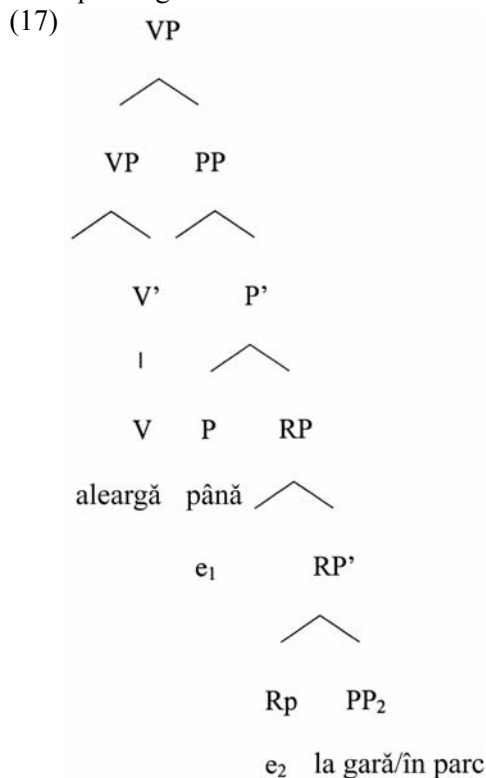
The representation above is in line with current proposals in the literature regarding the internal structure of PP: two projections PP and RP are analogous to Koopman's Path Phrase and Place Phrase.

4. CONCLUSIONS

As we have seen, 'goal of motion' interpretation can be taken as a cover term for two distinct processes, or lexicalization patterns: one at the level of inner aspect involving a specification of an RP on the verb, another one at the level of outer aspect, involving the adjunction of a PP that has an accomplishment interpretation. The two verbs 'a alerga' and 'a fugi' seem to confirm the fact noted by Talmy that Romance languages qualify as 'verb-framed' languages.

The path (unaccusative) interpretation of V +PP is only possible with verbs that have *directional force themselves* (*a fugi, a urca, a coborî*). This is so because in languages like Romanian / Italian, morphologically simple prepositions are purely locative.[1] What we have to stress here is that telic augmentation is only possible with verbs that do admit *a path-of-motion interpretation*.

REFERENCES

Baciu, I., D. Ionescu, 2003, "Past Participles and Unergative Verbs", *Bucharest Working Papers in Linguistics*, University of Bucharest Review.

Folli, R., G. Ramchand, 2003, "Event Structure and the Syntax / Semantics Interface. Evidence from Italian and Scottish Gaelic (ms.), Oxford University.

Folli, R., G. Ramchand, 2001, "Prepositions and Results in Italian and English: An Analysis from Event Decomposition"*, http://www.hum.uit.no/a/ramchand/rdownloads/folliramfin.pdf.*

Hale, K., J. Keyser, 1991, "On the Syntax of Argument Structure", *Lexicon Project Working Papers 14, Center for Cognitive Science MIT.*

Hale, K., J. Keyser, 1993, "On Argument Structure and the Lexical Expression of Syntactic Relations", in: Hale, K. & Keyser, J. (eds), *The View from Building 20: Essays in Honor of Sylvain Bromberger,* Cambridge, MA., MIT Press, 53–109.

Hale, K., J. Keyser, 1999, "Bound Features, Merge, and Transitivity Alternations", in: I. Pylkkanen et al (eds), *MIT Working Papers in Linguistics 35, Papers from the Upenn / MIT Roundtable on Argument Structure on the Lexicon.*

Higginbotham, J., 2000, *Accomplishments*, USC, University of Oxford.

Klipple, E., 1997, "Prepositions and Variation", in: A.M. di Sciullo (ed.), *Projections and Interface Conditions*, New York / Oxford, OUP.

Ramchand, G., 2001, *Aktionsart, L-syntax and Selection* (ms.), University of Oxford.

Ramchand, G. 2002, *First Phase Syntax* (ms.), University of Oxford.

[1] Higginbotham characterises Romance prepositions as Achievement prepositions. These prepositions, when combined with verbs which lack directional force themselves have only a stative locative interpretation. Compare: *Ion este la Maria*. / *Ion fuge la Maria* (Ion is AT Maria's place./ Ion is running TO Maria's place). Notice the two possible translations of the preposition LA in English.