Aspect Projections and Predicate Type

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0. Introduction.

An important issue in the investigation of the syntactic and semantic properties of different classes of predicates has been the question of whether the aspectual classification of a given predicate (Aktionsart, also called situational aspect, cf. Smith 1991) is a primitive feature of the verbal head of the predicate—part of its lexical entry—, or is rather a descriptive label for certain syntactic configurations of events and arguments. There is prima facie evidence in favor of both of these positions. Correspondingly, two different approaches to the syntactic representation of lexical aspect can be identified, differing primarily in whether movement of DP arguments to positions associated with certain aspectual interpretations is formally motivated for Case checking reasons, or is motivated primarily for the purpose of deriving those aspectual interpretations.

In this paper I will propose that aspectual information is encoded in the syntactic structure in the form of Event Phrases which correspond to the temporal subevents of the predicate. Argument DPs are linked to specific subevents in the process of moving to check Case, but there are projections which are simultaneously the locus of both Case checking and checking of aspectual features. The paper will proceed as follows. In sections 1 and 2, I review the evidence for the syntactical vs. lexical determination of aspect and the existing analyses of the syntax of lexical aspect. In section 3 I briefly consider the implications of these analyses for general principles of argument projection, in particular, Burzio’s generalization. In section 4 I sketch out the proposed analysis and show how it accounts for the observed properties of the different aspectual classes. Finally, in section 5 I offer a preliminary analysis of the well-known cases of unergative/unaccusative alternations, based on the proposal in section 4.

1. Is aspect syntactically or lexically determined?

Across languages there are examples of variable aspectual classification, most often in the form of activity/accomplishment alternations, which appear to be a function of syntactic differences, constituting strong evidence for the syntactic position. Typically, the accomplishment reading of the predicate is dependent on the syntactic properties of the direct object, although other differences (cf. the Bulgarian examples of (5)) may also come into play:

\[
\]
Spanish ((1a,b) from Zagona 1999; (3a,b) from Demonte 1992):

(1) a. María dibujó un círculo.  ACC: object DP with specified cardinality
   ‘Maria drew a circle’
   b. María dibujó círculos.   ACT: object DP with unspecified cardinality
   ‘Maria drew circles’

(2) a. El niño corrió.     ACT: intransitive
   b. El niño corrió medio kilómetro.   ACC: object DP (measure phrase)

(3) a. Irene pensó en una palabra durante toda la tarde.  ACT: PP
   ‘Irene thought about one word during the whole afternoon’
   b. Irene pensó una palabra *durante toda la tarde.   ACC: DP
   ‘Irene thought a word during the whole afternoon’

Finnish (Kiparsky 1998):

(4) a. Hän kirjoitti kirjei-tä  ACT: partitive Case
   ‘S/he wrote letters’
   b. Hän kirjoitti kirjeet  ACC: accusative Case
   ‘S/he wrote the letters’

Bulgarian (Slabakova 1997a):

(5) a. Ivan čet-e knigi  ACT: root verb alone
   Ivan read-3SG/AORIST books
   ‘Ivan read books’
   b. Ivan pro-čet-e knigi  ACC: preverb + root verb
   Ivan PV-read-3SG/AORIST books
   ‘Ivan read (a specified quantity of) books’

Evidence for the lexical position is the fact that syntactic factors appear to play no role in the identification of verbs as stative and/or achievement predicates. The cardinality of the object DP, for example, does not affect these two classes, as shown by (6a) for a stative predicate and (6b) for an achievement:

(6) a. La caja contiene periódicos viejos/los documentos sobre el caso.
   ‘The box contains old newspapers/the documents about the case’
   b. Los exploradores descubrieron islas desconocidas/un nuevo continente/el continente perdido de Atlántida.
   ‘The explorers discovered unknown islands/a new continent/the lost continent of Atlantis’

Further, certain morphosyntactic processes appear to be blocked by achievement verbs. Thus in Spanish aspectual telic se cannot appear with achievement verbs, in spite of its apparent compatibility with the telicity of the predicate:
Similarly, in Bulgarian preverbs (cf. (5) above) cannot appear with achievement predicates (Slabakova 1997). A straightforward way to account for these blocking affects (see for example Sanz (1996)), is to assume that telic se or the preverb must check some feature such as [+telic]. If the verb has this feature as part of its lexical entry, then the verb itself checks the feature, leaving se or the preverb with an illicit unchecked feature.3

Furthermore, lexical specification of the verb plays a role even in the cases of the apparently syntactically derived activity/accomplishment alternations. As noted by Verkuyl (1993), verbal features (expressed in his analysis as [±ADD TO]) and the nature of the thematic relationship between the verb and the object are also crucial in the determination of an accomplishment predicate. Cardinality of the object DP is a necessary but not sufficient condition.

Given this array of evidence, a reasonable assumption is that lexical properties of an individual verb must play some role, but that syntactic configurations, in particular, the structural relationship between a verb and its object, are also crucial. Let us turn, then, to the existing analyses of the syntax of aspect.

2. The syntactic representation of aspect.

Assumptions common to most syntactic analyses of aspect is that aspect is at least partially dependent on some type of structural relationship obtaining between the verb and certain functional categories, and that this configuration is related in at least some instances to the checking of accusative Case. As mentioned in the introduction, where the analyses differ is primarily in the motivation for movement and, concomitantly, in the featural contribution of the relevant functional head to the semantic interpretation.

Borer (1994) is perhaps the best representative of a group of analyses in which Aspect Phrase is viewed primarily as a lexico-functional category which directly contributes aspectual information to the interpretation of the clause. In her analysis of argument projection, there is an aspectual projection headed by Aspect [±EM] (event measure) whose specifier position both licenses the MEASURE interpretation associated with direct objects of accomplishment and achievement verbs (cf. Tenny 1994) and is the locus of accusative Case checking. In addition, a higher Aspect Phrase, Aspect [+OR(iginator)], may also sometimes be projected:

\[
(8) \quad [TP \ T [AspP (Spec) [\text{Asp'} \ Asp [\text{AspP Spec} [\text{Asp'} \ Asp \ VP ]]]]]
\]

\[
\quad [+OR] \quad [±ACC] \quad [±EM]
\]
Crucial to her account is the idea that arguments move specifically in order to get a particular semantic interpretation. For example, the argument of unaccusative verbs moves to [Spec, AspEM] to receive the aspectual interpretation of measurer of the event, although it receives no Case there and accordingly moves on to [Spec,TP]. A [+ACC] Spec and [+EM] head do coincide in the case of an accomplishment predicate such as (1a), but the motivation for movement even in this case is not the formal feature of Case but the interpretive feature of aspect.

In a somewhat similar vein, Slabakova (1997) proposes that the BECOME operator in the logical form of accomplishment and achievement verbs has syntactic status, projecting an Aspect Phrase, located between the two VP layers:

(9) \[ [VP NP-AGENT [V′ V-CAUSE [AspP Asp [VP NP-THEME [V′ V YP ]]]]] ]

As in Borer’s account, AspP is also the locus of accusative Case checking (cf. also Travis 1994, 1997); however, AspP is seen as the encoding of the verb’s Aktionsart.

A very different approach is taken by Schmitt (1996), who argues that certain aspectual interpretations arise from Spec-head configurations motivated by purely formal reasons. While not denying that verbal features do play a role, she argues that movement of the object to [Spec,AgrO] for the purely formal reasons of Case and phi-feature checking results in a configuration where the verb’s features and the object’s features (specifically, its cardinality) are visible to each other for the relevant aspectual interpretation. That is, the lexical features are licensed by syntactic movement which is not driven for interpretive reasons.

Zagona (1999) also views Agr phrases—purely formal projections within the clausal structure—as the locus of aspectual interpretation. She adopts Pustejovsky’s (1991) approach to aspectual classes as a function of subevent structure, and proposes that the aspectual interpretation of a given predicate arises from the linking of specific subevents to arguments of that predicate, via the Agr phrases. The aspectual classes are defined as in (10), with an example of each:

(10) States no subevents
Achievements E2 love THEME (EXPERIENCER)
         cross LOCATION EXPERIENCER
         | E2
Activities E1 dance (dance) (AGENT)
         | E1
Accomplishments E1, E2 draw THEME (AGENT)
E2 can be roughly understood as RESULT/CHANGE OF STATE and E1 as PROCESS/INCHOATE. As in Schmitt’s approach, licensing of the subevents is a by-product of D-feature checking in Agr. If there is no relevant subevent, then the Agr phrase is temporally inert.5

At first glance, it might appear that these analyses differ only in labels: the syntactic configuration for (certain) aspectual interpretations is established in either AgrOP or AspectP. But these different labels are a reflection of a very real difference: the motivation for movement. And while the configuration of accomplishment predicates is quite similar ([Spec, AgrOP] vs. [Spec, AspP]), the accounts for achievement predicates diverge significantly. For Zagona, for example, achievement predicates have only one subevent, E2, in their temporal structure, licensed in AgrSP via linking either to the subject of a transitive achievement predicate (cf. cross the line) or to the sole DP argument of an unaccusative achievement predicate such as die. In Borer’s proposal, the DP argument of an unaccusative achievement checks the aspectual feature of [+EM] in the same projection in which accusative Case is checked for transitive accomplishment predicates, and she barely mentions transitive achievements.

3. Burzio’s generalization and aspctual structure.

Chomsky (1995) proposes that Agr projections, lacking features of their own and existing only for theory-internal necessities of Case checking, should be eliminated from the grammar; without interface properties of their own, bare output conditions dictate that they not exist. The approach to aspect taken by Schmitt (1996) and Zagona (1999) claims that Agr projections do, at least for some clauses, play a role at the C-I interface, in that they provide the structure for aspectual calculation to proceed. But to the extent that syntactic properties of a DP object do not enter into aspctual calculation, then Agr projections either do exist independently of bare output conditions, or Case checking of the object proceeds in some other fashion, in which case Agr projections are in fact no more than Aspect projections. This will be the case of transitive statives (neither argument is linked to a subevent) and transitive achievements and activities (only the subject is linked to a subevent).

Consider the problem from a different perspective. Burzio’s generalization, if in fact it is a valid empirical generalization, states that the relationship between the availability of (structural) accusative Case for the object and an “external” thematic role for the subject is a biconditional one. Assuming that an “external” subject is structurally defined as the DP in [Spec, vP], i.e. in the specifier position of the higher VP, then for a clause to be fully compliant with bare output conditions, again we expect that such an external subject position will correlate with an aspectual role for the object. And again the correlation
will fail in the same three cases: transitive stative, achievements and activities. The only ideal cases are transitive accomplishments and unaccusative achievements. There is, in short, no obvious way to derive Burzio’s generalization in terms of aspectual properties of a predicate while simultaneously maintaining minimalist assumptions about phrase structure.

At the same time, it must be recognized that the correlation between transitivity and activity/accomplishment variations is extremely robust. As noted by Tenny (1994), many activity/accomplishment alternations in English involve the presence of some accusative Case-marked element in the accomplishment variation:

(11) a. cognate objects: laugh a mirthless laugh
    b. the X's way construction: homer his way into the hearts of America
       (example from Jackendoff 1990)
    c. overt reflexives: shave himself
    d. resultatives: laugh myself sick, run us ragged

It seems obvious that however aspectual interpretation is represented in the syntax, this link between transitivity and accomplishment readings should be captured. Similarly, the link between unaccusativity and achievement predicates is extremely robust: unaccusative predicates are either statives, lacking any internal temporal structure (cf. existir) or they are achievements, with only E2 in their temporal structure (cf. llegar ‘to arrive’, nacer ‘to be born’, morir ‘to die’). This correlation may be accidental, or it may be a function of the verb’s valence. The account to be proposed in the next section will, in fact, support the latter speculation.

4. Aspect phrases as event phrases.

The proposal offered here follows very closely the analysis of Zagona (1999), according to which aspectual calculation is fundamentally the linking of subevents to arguments. However, I propose that the locus of such linking is not Agr Phrase(s), but rather Event Phrase(s), and that such Event Phrases are not the site of any case checking. Suppose that we take the most straightforward approach to capturing Burzio’s generalization, by assuming with Chomsky (1995, 1998) that the locus of accusative Case checking is the (outer) Spec of vP. Thus, the head of vP, the upper ‘light’ v, carries the relevant Case checking feature, as proposed by Raposo and Uriagereka 1996. There is, then, no functional projection in which both accusative Case and aspectual features are checked. I further assume, following Schmitt 1996, that movement cannot be forced for interpretive reasons. Only the checking of formal features can motivate movement of arguments. However, by adapting Richards’ (1997) view of the role of strong and weak features in motivating movement before
Spell-Out, we will be able to capture the link between transitivity and accomplishment readings.

As we have seen, at least part of aspectual reading is dependent on the particular predicate: in a language such as Spanish, a verb may yield an accomplishment or an activity reading depending on the syntactic properties of its object, but an achievement predicate will not change to an activity, or a stative to an achievement (but see footnote 1). Part of a verb’s entry are the temporal subevents that are part of its meaning. Each temporal subevent must be licensed in the head of a corresponding Event Phrase. More specifically, for each temporal subevent in the verb’s argument structure, there is an Event Phrase in which the temporal subevent is identified by a process of theta-identification and whose Spec position is the locus of linking of that subevent to a particular DP argument of the verb.

Consider a transitive accomplishment as in (12), with the structure in (13):

(12) La niña comió un helado.
    ‘The child ate an ice cream.’

(13)

\[
\begin{array}{c}
\text{EP} \\
\text{E1} \quad \text{vP} \\
\text{DP_{Su}} \quad \text{la niña} \\
\text{v} \quad \text{EP} \\
\text{E2} \quad \text{VP} \\
\text{DP_{DO}} \quad \text{un helado} \\
\text{V} \quad \ldots \\
\text{come} \\
<e_1, e_2>
\end{array}
\]

The verb moves in the usual head to head fashion to functional projections higher in the clause; as it moves through the heads of the Event Phrases it theta-identifies the subevent in the head of each EP. The subject DP \text{la niña} must move to [Spec,TP] for EPP reasons, thereby checking and deleting both its uninterpretable Case feature and the uninterpretable phi-features of T. Correspondingly, the object DP \text{un helado} will check Case and phi-features on v. By assumption movement to the Spec positions of the Event Phrases cannot be forced. However, the DP can move through Spec of the relevant Event Phrase on its way to its Case checking position; it simply cannot stop there.
This is an example of overt movement ‘driven’ by a weak feature which is legitimiz ed by the fact that the movement chain ultimately ends in a position licensed by a strong feature, as proposed by Richards (1997). Thus movement of the object DP to check Case will move through [Spec, EP2], linking the object to the subevent RESULT/CHANGE OF STATE, and movement of the subject DP to [Spec, TP] will move through [Spec, EP1], linking it to the subevent PROCESS/INCHOATE. The only crucial assumption that must be made is that movement of the object to the outer Spec of vP is in fact overt.7

In contrast to the accomplishment predicate in (13), a transitive stative such as saber ‘to know’ in (14) will appear in a structure such as (15), lacking event phrases entirely:

(15)   La niña sabe español.
       ‘The child knows Spanish.’

(16)   
    \[ \begin{array}{c}
    \text{vP} \\
    \text{DP}_{\text{S}} \\
    \text{la niña} \\
    \text{v} \\
    \text{VP} \\
    \text{DP}_{\text{DO}} \\
    \text{español} \\
    \text{V'} \\
    \text{sabe} \\
    \end{array} \]

Because the verb is transitive, the upper vP is projected, which raises the question of how to interpret the subject of such a verb, given that it appears in the configuration associated with the role of agent. There are two possible justifications for this structure. One could conceive of the external role in a broader sense as ‘originator’ rather than, strictly speaking, ‘agent’.

A third case is represented by a transitive achievement such as (16), with the corresponding structure in (17):

(16)   La niña cruzó la meta.
       ‘The child crossed the finish line’
Lacking the subevent corresponding to E1, an achievement predicate such as cruzar can identify only one subevent, E2, which is linked to the subject DP when it moves through [Spec,EP] on its way to [Spec,TP]. Suppose now that this EP is projected between the two layers of the VP. Theta identification of the temporal subevent will proceed unproblematically. However, now the DP which will link to that subevent is not the agent DP la niña, but rather the location DP la meta. This, I assume, will result in a convergent derivation, but with an anomalous interpretation, since part of the verb’s lexical entry also specifies the argument theta-role to which the temporal subevent must link (cf. (10) above). The structure corresponding to this derivation is given in (18):

An example of an unaccusative achievement is given in (19) and (20). Lacking vP and hence accusative Case, the DP argument moves to [Spec,TP] via [Spec,EP]:

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(17)  
\[
\begin{array}{c}
\text{DP}_{\text{Su}} \\
\text{la niña} \\
\text{V'} \\
\text{VP} \\
\text{DP}_{\text{DO}} \\
\text{la meta} \\
\text{V'} \\
\text{cruzó} \\
\text{\textless e_2\textgreater}
\end{array}
\]

(18)  
\[
\begin{array}{c}
\text{vP} \\
\text{DP}_{\text{Su}} \\
\text{la niña} \\
\text{V'} \\
\text{EP} \\
\text{E2} \\
\text{VP} \\
\text{DP}_{\text{DO}} \\
\text{la meta} \\
\text{V'} \\
\text{cruzó} \\
\text{\textless e_2\textgreater}
\end{array}
\]
The child arrived home

A potentially more problematic case is a transitive activity predicate with a DP object of unspecified cardinality as in (21); the corresponding structure is given in (22):

The child ate ice creams

Given the occurrence of the verb *comer* with accomplishment readings (cf. (12)), we know that this verb, like many others, may have E2 as part of its temporal subevent structure. However, even if the direct object DP moves through [Spec,EP], it doesn’t have the necessary feature to be linked to that temporal subevent. In this respect, the proposal here has nothing new to add to what is already known about the interaction of the syntactic properties of DP objects with the aspectual properties of this class of verbs. It is equally
plausible, as proposed by Borer (1994), that the DP object does not check accusative Case at all, but rather partitive Case, in which case no linking of the DP argument to the temporal subevent can be established at all, although this raises the not trivial problem of whether \( v \) is then left with an unchecked Case feature.

Note, however, that not all activity predicates have the ‘potential’ to license an E2 type subevent—it is simply not part of their lexical entry at all. Such will be the case, for example, with a prepositional verb such as \( \text{alardear de} \) ‘to brag about’, which, unlike the example of \( \text{pensar (en)} \) in (3), has no transitive counterpart (example (23) from Demonte (1992):

(23) \[ \text{La mujer alardea *(de) su hijo en el gabinete del primer ministro.} \]

‘The woman brags of her son in the cabinet of the primer minister’

As a final example in this subsection, consider the structure of activity to accomplishment alternations exemplified by the English cases of (11), which I will term, informally, accomplishments by means of syntactic ‘augmentation’. An example is the resultative predicate of (24):

(24) The girl hammered the nail flat in an hour.

(25)

[Diagram with symbols representing the structure of the sentence]

What the structure in (25) is intended to capture is the idea that in this case the temporal subevent of E2 is added to the argument structure by the secondary predicate. The verb moves to E2 and forms a complex predicate with the resultative, and then excorporates. The DP, as before, moves through [Spec,EP]. Apart from the added temporal subevent, what all of the constructions of (11) have in common is the presence of an accusatively marked DP. This follows from the approach presented here: only by virtue of having
5. **Unaccusative/unergative alternations.**

I will turn my attention in this final section to a long-standing problem in aspectual syntax, the unaccusative-unergative alternations exemplified by the Italian sentences in (26):

(26)a. Gianni ha corso.
   ‘Gianni has run’

b. Gianni è corso a casa.
   ‘Gianni has [BE] run home’

c. Ne sono corsi due a casa.
   ‘Two of them have [BE] run home’ (Hoekstra and Mulder 1990)
The well-known empirical fact illustrated by the data in (26) is that with the addition of a goal PP, the otherwise unergative verb (in this example, *correre*) shows all of the diagnostics of an unaccusative, namely, auxiliary selection of *be (essere)* rather than *have (avere)* and *ne*-cliticization with a postverbal quantified subject. This phenomenon is quite general, although manifested in different ways in different languages. Without the goal PP, which adds the aspectual role of TERMINUS in the terminology of Tenny 1994, a predicate such as *correre* in (26a) is an activity. Surprisingly, however, the predicate with the goal PP displays the syntactic characteristics of an achievement predicate.

There are a number of syntactic tests to distinguish achievements from the other aspectual classes. First of all, Zagona (1999) observes that achievements in Spanish are the only aspectual class which does not license temporal PPs headed by *por*:

(27) a. Pedro abrió ventanas por dos minutos. ACT
   ‘Pedro opened windows for two minutes’
 b. Pedro abrió las ventanas por dos minutos. ACC
   ‘Pedro opened the windows for two minutes’
 c. Susana amó a Pedro por un año. STA
   ‘Susana loved Pedro for a year’
 d. *Susana descubrió la respuesta por un minuto. ACH
   ‘Susana discovered the answer for a minute’

Consider in this light the behavior of *correre* ‘to run’ with a goal PP:

(28) a. El niño corrió por diez minutos. ACT
   ‘The child ran for ten minutes’
 b. *El niño corrió a casa en diez minutos/*por diez minutos. ACC
   ‘The child ran home in ten minutes/*for ten minutes’

Secondly, achievements cannot appear in the English construction *finish V-ing*, nor with the Spanish equivalent construction *terminar de* followed by infinitive (cf. Sanz 1996), while the other eventive predicates may appear here:

(29) a. Ana finished eating her lunch./Ana terminó de almorzar.
 b. Ana finished drawing circles./Ana terminó de dibujar círculos.
 c. *Ana finished arriving./*Ana terminó de llegar.
 d. *Ana finished discovering the answer./*Ana terminó de descubrir la respuesta.

Again, these predicates pattern with achievements in the presence of a goal PP:

(31) a. The child finished running./El niño terminó de correr.
 b. The child finished running a mile./El niño terminó de correr una milla.
c. *The child finished running home./*El niño terminó de correr a casa.

Finally, achievements cannot appear in Spanish (and in the Romance language generally) in the simple present with a continuous reading (Giorgi and Pianesi 1997); only a habitual reading is possible:

(31)a. El niño come/está comiendo una manzana.
     ‘The child eats/is eating an apple.’

b. El niño come/está comiendo manzanas.
    ‘The child eats/is eating apples.’

c. El niño descubre/está descubriendo un gusano en la manzana.
    ‘The child discovers/is discovering a worm in the apple’

Once again, these predicates when paired with a goal PP pattern with achievements:

(32)a. El niño corre por la calle desnudo.
     ‘The child runs through the street naked’

b. ??El niño corre a la escuela.
    ‘The child runs to the school’

c. Todos los días el niño corre a la escuela, ya que se levanta tarde.
    ‘Every day the child runs to school, since he gets up late’

Recall that without the goal PP these predicates are activities; that is, their lexical entry includes as part of their argument structure the temporal subevent $E_1$. Recall further that unaccusative predicates are either statives or achievements, but never accomplishments. Now if a sentence such as (32b) does in fact have an achievement predicate, this means that the only temporal subevent present in the structure is $E_2$, linked to the subject DP. Where does this subevent come from? I would claim that it is added to the aspectual structure of the sentence by the goal PP. Descriptively, the PP adds an endpoint to the action, so $E_2$, RESULT/CHANGE OF STATE, must be present. The argument which undergoes the change of state is the subject DP.

What is unexpected is that $E_1$ must ‘disappear’ from the syntactic representation. Why should this be? Note that in all of the cases examined in section 4, a subevent is linked to a DP: not all DPs are linked to a subevent (cf. the two arguments of transitive statives, or the internal argument of transitive achievements and activities), but all subevents are linked to a DP. Zagona (1999) expresses this in terms of licensing: D-feature checking licenses Event Phrases. We can conceptualize this as a type of temporal role criterion: every temporal subevent must be linked to one and only one DP, and every DP may be linked to one and only one temporal subevent. Thus, $E_1$ cannot appear in the structure of a sentence such as (32b), because there is no DP for it to link to.
The structure of (32b), on this account, is therefore something along the lines of (33):

(33) \[
\begin{array}{c}
\text{EP} \\
\text{E2} \\
\text{VP} \\
\text{DP} \\
\text{V'} \\
\text{V} \\
\text{PP} \\
\text{P} \\
\text{DP} \\
<e_2> \\
\end{array}
\]

We can conceive of the preposition as adding the E2 temporal role to the V as a type of incorporation, or simply as feature movement alone. This is very similar in spirit to Kratzer’s (1996) proposal that in sentences with non-active voice, preposition incorporation into Voice creates a syntactically derived external argument. Here I am proposing that preposition incorporation into the verb can create a syntactically derived temporal argument. In addition, it must be assumed that the verb has the option of not ‘assigning’ (i.e., theta-identifying) the E1 which is otherwise part of its argument structure, along the lines of non syntactic projection of the object of otherwise transitive verbs such as eat.

The proposal that temporal subevents must be uniquely linked to one DP argument explains another correlation between syntactic valence and aspectual class which, to my knowledge, has not received a syntactic account: unergative verbs appear to all fall in the class of activity predicates, which have only one temporal subevent, E1. Unergative verbs such as prepositional verbs exemplified by the Spanish example of alardear de ‘to brag about’ necessarily have only one non-PP argument, the subject DP. Even if (at least a subset of) unergative verbs are analyzed as covert transitives, as in Hale and Keyser (1993), the lack of a link between any DP argument and a potential E2 can be explained on the assumption that the covert object does not move to check structural Case. Hence, movement to [Spec,EP2] will be disallowed, since this movement would not be forced by formal features.

The intriguing fact about these unaccusative/unergative alternations is that there aspectual interpretation, in particular, the achievement reading of the unaccusative variant, can be shown to be a syntactic phenomenon, subject to the unique linking requirement on subevents to DP arguments. The lexical meaning of the predicate, in terms of its subevent structure, indicates the number of Event Phrases which can be potentially licensed, but ultimately purely syntactic requirements will yield the final aspectual reading. The conclusion of this paper must be, therefore, that aspect is syntactically determined.
Notes

1. There is also evidence of stative/achievement alternations as a function of syntactic differences, although in this case the issue is complicated by the fact that sentential aspect (e.g., the choice between imperfect and preterite in the past) also appears to play a role. However, the nature of the interaction between lexical aspect and sentential aspect will not be dealt with in this paper.

2. Throughout the paper I will use the following abbreviations: ACT (activity), ACC (accomplishment), ACH (achievement) and STA (stative).

3. Zagona (1996) provides an alternate account of the ungrammaticality of (7b), according to which aspectual se can occur only with an affected object which undergoes a change of state. Se acts as a verbal operator which binds the subevent of the result of the change of state. This account, for reasons that will become obvious, is much more compatible with the view of aspect proposed in this paper.

4. The representations in (10) should not be understood as formal schemata, but rather as an informal representation of the linking between certain thematic roles assigned by a given verb to specific temporal subevents. As will be discussed in section 4, I assume that part of the information in a verb’s lexical entry are the temporal subevents contained in its argument structure and the (DP) arguments to which these subevents are linked. One formal way to represent these aspects of a verb’s meaning would be to adapt Jackendoff’s (1990) two-tiered approach to LCS representations, with one tier representing thematic roles and another aspectual roles.

5. For a similar analysis, according to which AgrS is the locus of identification of the initiator of the event (akin to Borger’s (1994) Aspect [+OR]) and AgrO is the locus of identification of the delimiter of the event, see Ritter and Rosen 1998.

6. The notion of theta-identification as used here is borrowed from Baker and Travis (1998) who, however, use it for slightly different purposes, namely, to establish a relationship between the event argument of a verb and an abstract STAGE operator which they propose in the representation of progressive clauses.

7. Although this is not the most common assumption on object Case checking in Spanish, it is not a novel one, either. As far back as Johnson (1991) there have been arguments put forth in favor of the proposal that objects in English move overtly from their base position; a more recent proposal along these lines can be found in Runner (1995, 1998). For Spanish, Ordóñez (1997) argues that at least in VOS sentences, there is overt object shift.

8. The exact cause of this restriction is not clear, particularly given the ambiguity of por phrases with accomplishment predicates such as (27b): the temporal interval expressed by the por phrase can express either the duration of the activity of the agent, i.e., E1, or the duration of the result state of the object,
that is, E2. It is therefore not clear why por phrases cannot modify the sole
subevent, E2, of achievement predicates.

9. Achievements are possible in the simple present in a narrative context, as
for example the case of on the scene sports reporting: El atleta portugués cruza
la meta y gana el campeonato ‘The Portuguese athlete crosses the finish line
and wins the championship’. This is distinct from what Giorgi and Pianesi
(1997) call the continuous reading of the present, the interpretation according to
which an event in progress at the time of speaking is reported.

10. Schmitt (1996) also proposes a preposition incorporation type analysis for
these predicates; however, in her analysis it is the object of the preposition
which checks Case and accordingly the relevant aspectual feature in [Spec,
AgrO]. If the aspectual feature is the temporal subevent of RESULT/CHANGE OF
STATE, as assumed here, then it cannot be the object of the preposition which
is linked to this feature.

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