Evaluative Adjectives are Davidsonian States

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Abstract. The aspectual properties of evaluative adjectives (EAs), such as *brave* and *cruel*, have been the object of a vivid debate, as they pattern with individual-level predicates (ILP) with respect to the interpretation of bare subjects and their inability to function as depictive adjuncts but, like stage-level predicates, they can have an episodic reading. In addition to this, among adjectives they exhibit exceptional aspectual properties, such as taking the progressive. In this paper, we concentrate on EAs in English and Spanish and argue that they can be characterised as Davidsonian-states, that is, stative event predicates. However, since EAs alternate clearly between two distinct readings–suggesting that the event is not part of the adjective's lexical entry (unlike D-state verbs such as *sleep* or *wait*)–we analyze them as ILPs with the ability to predicate of two sorts of subject: an individual or an event. In the first case they behave like ILPs, in the second they exhibit all the aspectual properties associated with eventive predicates.

Keywords: evaluative adjectives, individual-level, stage-level, events, states

1. Introduction

There is no consensus with regard to the semantic/aspectual value of so-called evaluative adjectives (EA), exemplified here for English (1) and Spanish (2):

(1) brave, careful, clumsy, considerate, courteous, cowardly, crazy, cruel, cunning, dumb, farsighted, foolish, generous, humble, idiotic, impudent, intelligent, kind, masochistic, mean, nice, noble, polite, rude, sadistic, selfish, silly, skilful, stupid, thoughtful, wise.

(2) *cruel* 'cruel', *cuidadoso* 'careful', *patoso* 'clumsy', *considerado* 'considerate', *cortés* 'courteous', *valiente* 'brave', *tonto* 'stupid', *generoso* 'generous', *modesto* 'modest', *maleducado* 'rude', *prudente* 'cautious', *audaz* 'bold', *molesto* 'obnoxious'.

(3) Jeanne is foolish.

(4) Jeanne is often foolish.

Following Carlson (1977), EAs are commonly analysed along the lines of individual-level predicates (ILP) denoting a generic, habitual or otherwise permanent property (3). The difficulty with this initial assumption is that EAs appear with an episodic interpretation in a variety of contexts (4), which often leads to (or at least suggests) the conclusion that EAs should be treated as stage-level predicates (SLP) (Lakoff 1966; Martin 2008), or as both SLPs and ILPs (Stowell 1991), or that EAs–and only EAs–can combine with an agentive/eventive copula (Partee 1977; Geuder 2002).

The range of previous analyses is indicative of the special status of EAs, yet the extent to which this is so is not necessarily evident from a survey of the literature. One of the objectives of this study is to apply a battery of tests to EAs. The result will show that, within the lexical

category of adjectives, there is a set of properties that only EAs have. In the remainder of this section we classify EAs with respect to the data that point to an ILP analysis (§1.1), a SLP analysis (§1.2) and, finally, those that suggest that EAs do not pattern neatly with respect to the individual/stage distinction (§1.3). In §2, we complement the preceding data by showing that EAs are the only group of predicative adjectives to pass the standard tests for eventivity and argue for a Davidsonian-state analysis (Maienborn 2005) (§2.1). In doing so, we (i) propose that EAs have an ILP lexical entry and that the event variable is picked up derivationally and (ii) reassess Maienborn's treatment of the denotation of adjectives (§2.2). In §3, we present our analysis, arguing that EAs alternate in the sort of subject they take: when they take an individual-denoting subject, they behave like an ILP; if instead they take an event-denoting subject, they are representationally parallel to verbal D-states such as *sleep* and *wait*, and we explain why, aspectually, EAs can behave like event-denoting verbs. In §4, we compare alternative accounts.

1.1.   EAs as ILPs

The classic tests were rooted in the observation that predicative adjectives could be divided into two classes based on whether or not they allow *there*-insertion (Milsark 1974; Carlson 1977):

(5)   a. Several policemen were available.
        b. There were several policemen available.
(6)   a. Several policemen were Spanish.
        b. *There were several policemen Spanish.

These data were used to draw the distinction between state-denoting SLPs (5) and property-denoting ILPs (6). EAs pattern with ILPs in this respect (7).

(7)   a. Several policemen were brave.
        b. *There were several policemen brave.

Moreover, since the structure of Carlson's ontology allows stages to be recategorised as the individual sort–but not vice-versa–the former class of predicate is predicted to have more readings than the latter. This prediction is confirmed with respect to the interpretation of bare plural (8) and indefinite (9) subjects. While ILPs only have a generic interpretation (8b, 9b), SLPs have a generic and an existential (8a, 9a):

(8)   a. Doctors are available. ($\exists$ (SL)/$\forall$ (IL))
        b. Doctors are well-read. (*$\exists$/$\forall$)
(9)   a. A doctor is available. ($\exists$/$\forall$)
        b. A doctor is well-read. (*$\exists$/$\forall$)

In this context, EAs again behave like ILPs:

(10)   a. Doctors are patient. (*$\exists$/$\forall$)
        b. A doctor is patient. (*$\exists$/$\forall$)

A third test. SLPs function as depictives (11). Neither ILPs (11), nor EAs (11) do:

(11) a. Peter arrived {angry/drunk/sick}.
      b. *Martha arrived {French/old/tall}.
      c. *John arrived {brave/cruel/modest}.

Finally, verbs such as *consider* or *judge* only accept ILPs. EAs are also accepted by these verbs:

(12) a. ??Peter is {considered/judged} {angry/drunk/sick}.
      b. Martha is {considered/judged} {French/old/tall}.
      c. John is {considered/judged} {brave/cruel/modest}.

This section outlined some tests that have motivated the individual/stage distinction and justify classifying EAs as ILPs. In the next section we will see data arguing the opposite.

1.2.   EAs as SLPs

Episodic adverbs such as *sometimes*/*always*/*often* have been argued to pick out SLPs and exclude ILPs (13). Kratzer (1995) analysed this contrast as Vacuous Quantification. On that proposal, the temporal quantifier requires a spatiotemporal variable in its restrictor, but ILPs do not have one (13b).

(13) a. John is {sometimes/always/often} {angry/drunk/sick}.
      b. #John is {sometimes/always/often} {French/old/tall}.
      c. John is {sometimes/always/often} {brave/cruel/nice}.

When-clauses cut the cake the same way, with EAs patterning with SLPs:

(14) a. When John is drunk, he is really drunk.
      b. #When John is tall, he is really tall.
      c. When John is cruel, he is really cruel.

A third test. Perception verbs take SLPs as their complements (15a), not ILPs (15b). Fernald (1999) notes that, with perfective aspect in the matrix clause, EAs are fine (15c). We add that if the copula is overt (15c'), they are perfect:

(15) a. I have seen Tim {drunk/naked/angry}.
      b. *I have seen John {tall/old/French}.
      c. I have seen Lyle clever (on several occasions).   [Fernald 1999: 54, (35a)]
      c'. I have seen Lyle be {brave/clever/pedantic} (on several occasions).

The data in this section and the last show that EAs break both ways with respect to well-known tests: EAs seem equally well-classified as ILPs or SLPs.

1.3.   Exceptional behaviour among adjectives

This situation is complicated by other phenomena which involve EAs and, to the best of our knowledge, no others. First, EAs are the only adjective class that takes the progressive systematically (16a). Prototypical ILPs and SLPs lack this property on a non-coerced reading:

(16) a. John is being {modest/rude/silly}.
      b. *John is being {Malian/old/tall}.
      c. *John is being {angry/sick/drunk}.

Second, EAs accept modification by agent oriented adverbials such as *on purpose* or *deliberately* (17). They also combine with verbs such as *to convince, to force, to oblige* or *to persuade*, which evidence the intentional character of the subject (18), and they allow the imperative (19). No other adjective class displays this pattern without a meaning shift.

(17) a. John has been {cruel/obnoxious/rude} on purpose.
      b. Martha has been deliberately unfaithful to her husband.
(18) a. Astérix convinced Obélix to be {careful/nice/obnoxious}.
      b. Abbott convinced Costello to be unfaithful to his wife.
(19) a. Don't be {obnoxious/pedantic/rude}!
      b. Be {generous/nice/smart}!

Third, in Spanish, EAs license the adjectival complement *con* 'with' that is interpreted as introducing the entity towards which the behaviour is directed (20). This interpretation is not otherwise allowed by this preposition, which is normally comitative (21a) or causal (21b).

(20) Juan fue cruel con su padre.
      Lit. Juan was cruel with his father, 'Juan was cruel to his father'
(21) a. Juan vino con Luis.
         'Juan came with Luis'
      b. Con las prisas, Juan olvidó las llaves.
         Lit. With the haste. Juan forgot the keys, 'In a rush, Juan forgot his keys'

There are three other properties that single out EA copulative sentences. EA predicates can be bound by anaphoric *to happen* expressions, which require the presence of an event (22a vs. 22b).

(22) a. John was extremely rude to his father in the kitchen. This happened shortly before most of the guests arrived.
      b. John was extremely anxious for the whole afternoon. ??This happened shortly after he realized he had forwarded a confidential e-mail to all of his contacts.

Second, they are welcome in pseudo-cleft constructions with the dummy verb *do* (23a). No other adjective class allows it (23b).

(23) a. What John did at the party was (to) be extremely obnoxious (to all his father's guests).
      b. ??What John did at the party was (to) be extremely {nervous/tall}.

Last, it is a well-known property of English that the morphological present tense does not refer to a temporal point in the present if the verb is eventive. Instead, the progressive form is used (24a). If the predicate does not contain an event, the morphological present tense is fine (24b,c).

(24) a. John {is reading/*reads} (right now).
b. John {*is knowing/knows} French (*right now).
c. The bag {*is weighing/weighs} 1 kg (right now).

Copulative sentences containing EAs have the same restriction (25a vs. 25b,c).

(25) a. John {is being /*is} cruel to Mary (right now).
b. Jeanne {*is being/is} {tall/old/Malian} (*right now).
c. Jeanne {*is being/is} {sick/tired/nervous} (right now).

1.4.   Summary of the results thus far

Diagnostics	ILP	SLP	EA
a) *There* insertion	–	+	–
b) Existential reading of bare NP/indefinites	–	+	–
c) Depictives	–	+	–
d) *consider, judge*	+	–	+
e) Episodic adverbs (*whenever*, *often*, etc.*)*	–	+	+
f) Complement of perception verbs	–	+	+
g) Progressive form	–	–	+
h) Agentive modifiers	–	–	+
i) Affected object reading with *con*	–	–	+
j) This happened	–	–	+
k) What *pro* did was...	–	–	+
l) Present tense in a present reading	+	+	–

In (a-d) EAs pattern with ILPs. In (e-f) with SLPs. In (g-l) with predicates of events. With respect to the traditional ILP/SLP distinction the data pattern in §1.1 and §1.2 is difficult to appraise because EAs seem to go both ways. Nevertheless, the tests from §1.3 *do* form a unified class: they are standard for probing for an event variable, and in this domain EAs behave uniformly like predicates of events. In §2 we will see more confirming data and reassess the character of the stage-level tests. Once that is done, it will be clear that EAs do not behave like SLPs at all, but alternate between an individual-level and an eventive reading.

2.   EAs as D-states

EA compatibility with the progressive is one of the main cues that lead some authors (Arche 2006; Marín 2010) to propose that EAs have a dynamic component which is lacking in other adjectives. This property, combined with the possibility of an agentive reading, strongly

suggests that they can contain an event somewhere in their representation, thus explaining why EAs pass eventivity tests that have been associated with stage-levelness:

a)   The event provides temporal quantifiers with a spatiotemporal variable.
b)   The event licenses EAs as complements of perception verbs.

Nevertheless, closer inspection of these two tests shows that clear examples of SLPs do not function as complements to perception verbs on the intended reading when the verb is overt:

(25)   I saw John (to) be tired in the kitchen.

Without 'to', (25) is ungrammatical and with it, the meaning of 'see' changes to 'notice'. On standard assumptions, the perception verb test is sensitive to eventivity, yet the status of (25) militates against concluding that SLPs have a spatiotemporal variable. Meanwhile, that both EAs and SLPs are compatible with temporal quantifiers supports the conclusion that both predicate classes contain a temporal variable for the quantifier to bind. But, we are not forced to conclude that both EAs and SLPs must contain the same kind of variable. If we consider again the results from section 1, there is a pre-theoretical three-way split among predicative adjectives: EAs, SLPs and ILPs, with EAs oscillating between an eventive and an individual-level character.

In §2.1 we show that, indeed, EAs pass a number of other accepted eventivity tests that suggest that an event is somehow involved. We take EAs' consistent behaviour with respect to eventivity tests to be a significant fact. For this reason, in this paper we explore a quasi-D-state analysis of EAs (Maienborn 2005). D-states are stative predicates analysed as containing a spatiotemporal variable in their representation (26), in opposition to Kimian-states, which are semi-abstract entities with only a temporal dimension. K-states lack the spatial axis of Davidsonian events. Analyzing EAs as D-states accounts for the set of properties exhibited in §1.3, which follow if there is an event present somewhere in the argument structure of the predicate. To give an example, just like EAs, predicates classified as D-states allow for the progressive form (27).

(26) $[[sit]] = \lambda x \lambda e[sit(e)$ & theme$(e,x)]$
(27)   a. John is {sitting/sleeping/waiting}.
          b. The cat is lying down.
          c. The lamp is glowing.

With respect to the three-way split in the data presented above, Maienborn's conception of K-states seems to capture prototypical SLPs perfectly. In fact, for Maienborn, adjectives can only be K-states, while verbs are not restricted in this way. In §2.2, we build on Engelberg's (2005) arguments that Maienborn's view of adjectives is untenable. But first, we introduce further evidence pointing to the presence of an event.[2]

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[2] Due to the limited scope of this paper, we cannot pursue a full justification for maintaining grammatical distinctions between predicative adjective classes, *contra* Maienborn. In what follows, we assume that different classes exist, limiting our remarks to what is necessary for the current discussion of the properties of EAs.

2.1.   EAs behave like D-states

It is generally accepted that events have at least three ontological properties (Maienborn, 2005):

a)   They are perceptible.
b)   They can be located in space and time.
c)   They can vary in the way they take place.

From these properties a set of eventuality diagnostics can be derived:

(i)   Eventive expressions can be infinitival complements of perception verbs.
(ii)   Eventive expressions combine with locative and temporal modifiers.
(iii)   Eventive expressions combine with manner adverbials, instrumentals, comitatives, etc.

D-states are those predicates that–while satisfying the Subinterval Property and, thus, being classified as states–pass tests related to these properties, as they–unlike K-states–contain an event. We have already seen that EAs are acceptable as complements of perception verbs:

(28) a. I saw John be/being rude to Mary.
        b. I heard this really mean girl be/being obnoxious to him.
        (cf. "This really mean girl keeps being obnoxious to me", Google)
(29) a. *I saw John be/being happy (with Paul).
        b. *I heard this really mean girl be/being angry (at Joey).
        c. *I saw Pete be tired.

Second, eventive verbs and D-states allow for locative and temporal modifiers. EAs do as well.

(30) a. John was rude yesterday at his parents' place.
        b. Mary was nice this morning at the meeting.

EAs also allow for manner modification.

(31) a. Max was elegantly modest at the reception last night.
        b. John Galliano was abrasively forthright.
        c. George Bush was unflinchingly belligerent.
(32) a. *Max was elegantly {angry/drunk/French/sad/tall/tired/young} at the reception last night.
        b. *John Galliano was abrasively {angry/drunk/French/sad/tall/tired/young}.
        c. *George Bush was unflinchingly {angry/drunk/French/sad/tall/tired/young}.

Lastly, in addition to taking the progressive, both D-states and EAs allow a habitual present tense interpretation (Dowty 1979):[3]

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[3] In saying that EAs can have an event argument and an agentive subject, the conclusion could be drawn that EAs are dynamic (Arche 2006; Marín 2010). However, as many other D-states (i), they do not show signs of

(33) a. Peter (usually) {sleeps/waits} (in the corridor).
      b. Martha is (normally) {cruel/honest/nice} (to her employees).

The sum of these properties points strongly to the presence of an event in the structure of the predicate. This would involve considering EAs on a par with D-states, that is, as predicates of events. However, there are different ways to implement this idea. We can see two of them:

a)   The event variable is part of the adjective's lexical entry.
b)   The event is associated with the adjective through composition.

In the next section, we discuss why the first is problematic. In §3 we will explore the second in depth.

2.2.   Against including the event in the lexical entry

To start with a representation as neutral as possible, the semantic representation in (34) has the event argument as part of the adjective's lexical entry, in parallel with eventive verbs (26).

(34) $[[A]] = \lambda x \lambda e \lambda P[P(e) \ \& \ theme(x,e)]$

The representation, as desired, is one of D-states. However, this solution has two immediate shortcomings. First, it fails to address the interpretative alternation: we have shown that EAs alternate neatly between either an individual-level property reading or an eventive reading. In contrast, D-states don't alternate in this exclusive fashion. Although D-states can be interpreted as generics (35), on this reading they are still interpreted as a (generic) relation between individuals and events, while the generic reading of an EA only attributes a property to an individual (36). In other words, while (36) says that Jeanne is/was a modest person, (35) does not simply mean something like Jeanne is/was a sleeper, but that there is/was some relevant regularity between events of sleeping and Jeanne. We interpret this as an indication that EAs can be detached from their event variable, but verbal D-states cannot.

(35)   Jeanne {sleeps/slept} (in the corridor).
(36)   Jeanne {is/was} modest.

Second, including the event in the lexical entry raises morphological complications. If EAs were just like verbal D-states, the question of why EAs in languages like English and Spanish can be adjectives and nouns–but never verbs–would be intractable. Stipulating that these adjectives cannot be used as verbs even optionally–even though they are both identical lexically–because of some morphosyntactic quirk would be a brute force characterisation that would break an analytically and theoretically desirable isomorphism between syntax, morphology and semantics. Taken together, these semantic and morphological arguments

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dynamicity, understood as change through time, as illustrated by their inability to combine with adverbs such as *slowly, gradually* or *little by little*, which are oriented to the progression of an action (ii):

(i)   a. *Jeanne {slept/was sleeping} {slowly/gradually/little by little} (in the car).
        b. *Jeanne {waited/was waiting} {slowly/gradually/little by little} (in the hall).
(ii)   *John {was/was being} {brave/foolish/modest/rude} {slowly/gradually/little by little}.

converge on the second option listed above–the one in which there is no event in the EA lexical entry.

Now, we are in a position to discuss Maienborn's treatment of adjectives. Maienborn proposes that all predicative adjectives have the lexical entry of simple properties of individuals (37a). They then combine with the copula, whose function it is to introduce the K-state argument (37b). Verbs, on the other hand, are unrestricted: they can be K-states (38) or have an event variable in their lexical entry ((38) being a D-state entry). Furthermore, the ILP/SLP distinction is argued to be orthogonal to the K-state/event classification. Thus, Maienborn proposes a dichotomy that runs along morphological lines: verbs can be of various sorts, but adjectives are uniform. And not only are they uniform–they do not contain any eventuality variable (in the broad sense) at all.

(37)   a. $[[A]] = \lambda x \lambda P[P(x)]$
          b. $[[be]] = \lambda x \lambda z \lambda P[z \approx [P(x)]]$
(38) $[[V]] = \lambda x \lambda z \lambda P[z \approx P(x)]$
(39) $[[V]] = \lambda x \lambda e \lambda P[P(e) \ \& \ theme(x,e)]$

This last point has already been questioned by Engelberg (2005). Considering the range of typological variation with respect to grammatical category and copulas, Engelberg suggests that separating the state variable out from the adjective's lexical entry is difficult to maintain. One reason among many that he discusses is that it leads to undesirable cross-linguistic ontological variability. For instance, there are many languages which essentially lack the adjectival category. A consequence for a theory that posits a state-variable introducing copula is that predicates with the same meaning will be categorized differently. So, languages in which 'adjectives' surface morphologically as verbs will have a lexical entry such as (38) for *tired*, while in English and Spanish the same predicate will have one like (37a). With consequences like this one, the idea that adjectives can only be properties of individuals is undermined.[4]

Indeed, for predicates like *tired*, it seems more plausible to include the state argument in the lexical entry, i.e. even adjectives can have a lexical entry like (38). Once we have reason to posit lexical entries that include the K-state argument, it becomes clear that the conception of a K-state as a state holding in the temporal dimension fits squarely with prototypical SLPs– even though Maienborn proposes that the ILP/SLP distinction is orthogonal to the K-state/event distinction.

Now that we have reason to posit adjectival lexical entries that include state arguments, the question that arises is: how many sorts of lexical entries for predicative adjectives are there? In §1-2 we saw what appeared to be a three-way distinction between EAs, SLPs and ILPs. However, EAs actually alternated in an exclusive fashion: they behaved as either ILPs or D-states. This being so, the answer provided here to the question just posed is that predicative adjectives come with two sorts of lexical entries: SLPs have an entry like (38) and ILPs like (37a), i.e. simple properties of individuals. EAs are the special case: they have an ILP lexical entry, but can be predicated of two sorts of subject: predicated of an individual, they behave like ILPs, predicated of an event like a D-state. With respect to lexical entries, we are, in

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[4] See Engelberg (2005) for discussion of other typological obstacles.

effect, maintaining the Carlsonian division between state-denoting properties and properties of individuals. The interesting result is that, in the inventory of predicative adjectives, we have not found a class that behaves as if it had an event variable in its lexical entry. In this sense–and in light of Engelberg's discussion–our proposal represents a minor rearrangement of Maienborn's.

3.   Our proposal

In this section we develop our account. It is commonly noted that EAs have individual-level and an eventive readings (Arche 2006, 2010; Bennis 2000; Fernald 1999; Landau 2010; Stowell 1991). We argue that they follow from the sort of subject the predicate composes with. For the remainder of this paper, we set aside further comparison with SLPs and non-alternating ILPs.

3.1.   The individual reading

The syntactic structure we propose for the individual reading is that in (40). Following Bowers (1993), Baker (2002) and Hale & Keyser (2002), we adopt a theory of lexical categories on which adjectives do not introduce their subjects directly, but via the functional projection PredP, which provides them with a specifier position for the subject. Following Bowers, we treat Pred° as a lambda-operator, which provides the adjective with an argument and introduces a constant in its specifier, saturating the position.

(40)   [$_{PredP}$ John [$_{Pred'}$ Pred [$_{AP}$ cruel]]]
(41) $\lambda x[cruel(x)](j)$

We follow Hale & Keyser (2002) in their proposal that Pred° denotes an unbounded state, along the lines of a simple central coincidence preposition that puts two elements in a containment relation. In other words, the structure in (40) states that John is contained in the set defined by cruel, i.e. that John is cruel. Combining this structure with the property denoting lexical entry of the predicate (41) explains the trivial ILP entailment: in the absence of any other aspectual information, there is an inference that the property is temporary persistent.

3.2.   The event reading

Our proposal is that the event reading is obtained when the subject of PredP is not an individual, but an event, as represented in (42).

(42)   a. [$_{PredP}$ [e] [$_{Pred'}$ Pred [$_{AP}$ cruel]]]
       b. $\lambda x[cruel(x)](e)$

Compositionally, this structure gives the reading in which a particular action is cruel, and is representationally similar to a D-state, a predicate with an event argument. Given that individuals and events share the same semantic type (<e>) and their difference is sortal, no type shifting is necessary for any of the heads involved with respect to the structure proposed in (42).

This structure explains several of the special properties of EAs. First and foremost, the presence of an event provides the structure with a spatiotemporal variable, accounting for the fact that when EAs act as restrictors of temporal quantifiers, a behavioural connotation becomes salient. Secondly, it provides the structure with the event that is needed for its D-state characteristics: the event can be modified by locative, temporal and manner modifiers (43), and it licenses the structure as a complement of a perception verb. It also explains why the structure can be referred to through a *This happened* anaphor, as there is an event to refer to, and why it allows for cleft constructions with *do*.

(43) ...was elegantly modest at the reception yesterday...
      [...modest(e) & elegant(e) & at the reception(e) & yesterday(e)...]

As we will see below, it also explains why the entailment that the grammatical subject of the sentence has the property described by the adjective (44) does not goes through: the DP and the adjective are never in a predication relationship.

(44) John is being rude to Mary   ↛   John is rude

3.3.   Properties, analysis and predictions of the structure with an event

Before further considering the way in which this event subject explains the properties of EAs and considering other evidence in favour of the analysis, let us first analyse the adjectival complement *con* 'with' in Spanish, which can only have an affected entity reading with EAs, as it will illuminate other properties of the construction. We propose that the adjectival complement *con* is introduced as the complement of the AP.

(45) [$_{PredP}$ [e] [$_{Pred'}$ Pred [$_{AP}$ A [$_{pP}$ Juan [$_{p'}$ p [$_{PP}$ con [$_{DP}$ María]]]]]]]
                        ...John   to   Mary

We follow Svenonius' (2008, 2010) proposal that prepositions can be divided into a functional and a lexical layer. The functional layer in this structure introduces the figure (Juan), while the ground (María) is introduced by the lexical part. This division is reminiscent of the distinction between the lexical verb and the Voice head, or, in general, of the proposals that severe the external argument from the rest of the predicate. Remember that the agentive reading of the grammatical subject and the affected argument reading of the preposition *con* are not allowed by other adjectives, and is exclusive to the event reading of EAs. We suggest that the agentive inference is licensed when the preposition *con*, together with its functional structure, are c-commanded by an event variable. The lexical P *con* on its agent-affected entity reading is endowed with an uninterruptable event feature [ue]–capturing the property that prepositions do not express events, but can be integrated in event structures when combined with verbs. When c-command holds, the prepositional structure is licensed.

(46) [$_{PredP}$ [e] [$_{Pred'}$ Pred [$_{AP}$ A [$_{pP}$ Juan [$_{p'}$ p [$_{PP}$ con$_{[ue]}$ [DP María]]]]]]]
(47) R(j, m)

How is the interpretation that Juan is the agent of this event obtained? At the level of *p*P, an underspecified relation R between the figure and the ground is established (47). When the event argument is introduced, however, it establishes a checking relationship with the

prepositional heads, which have introduced the relation between Juan and María. This is what makes the relation be interpreted as intermediated by the event, and thus, Juan is interpreted as its agent–being the external argument in the prepositional structure–and María as its affected object.

(48)   [$_{TP}$ John$_j$ [$_{T'}$ is ... [$_{PredP}$ [e] [$_{Pred'}$ Pred [$_{AP}$ cruel [$_{pP}$ t$_j$ [$_{p'}$ p [$_{PP}$ con [$_{DP}$ María]]]]]]]]]]
(49)   John was being rude   ↦   John is rude

The agent DP in (48) becomes the subject of the clause, moving over the hierarchically higher event argument because the categorical features associated with each one of these elements. On the standard assumption that T attracts only nominal elements, the agent DP is the closest constituent that satisfies this condition.

If we consider again the lacking entailment on the event reading (49), a consequence of this derivation is that whenever the event variable is present, it is predicated of the adjective and the individual-denoting subject is generated in Spec,pP (48). The entailment with respect to John does not hold because the property is never predicated of him. Additionally, we explain why the event reading implies an affected individual, whether that individual is specified (Mary in (48)) or left unspecified (49).

The structure we are presenting leads us to expect that there be cases in which the event argument is overtly materialized. This is confirmed. Consider the following sentences, presented in Spanish so the affected-object reading of *con* can be tested:

(50)   La   guerra fue   cruel   con   los   niños.
         the   war   was   cruel   to   the   children

In such cases, when the event argument contains nominal features, it becomes the subject of the clause, as expected with the proposed structure. In cases like (50), the DP *the war* starts in Spec,pP and raises to Spec,PredP (51). The interpretation of the structure in (51) concords with intuitions that it is the war itself which affects the children–and not the actions of some other unspecified agent during the war.

(51)   [$_{TP}$ the war$_w$ [$_{T'}$ was ... [$_{PredP}$ t$_w$ [$_{Pred'}$ Pred [$_{AP}$ cruel [$_{pP}$ t$_w$ [$_{p'}$ p [$_{PP}$ to [$_{DP}$ the children]]]]]]]]]]

An alternative derivation, one where the event DP is merged in PredP with a distinct agent in Spec,pP, is excluded due to case licensing conditions. In (52), *Juan* does not receive case.

(52)   [$_{TP}$ the war$_w$ [$_{T'}$ is ... [$_{PredP}$ t$_w$ [$_{Pred'}$ Pred [$_{AP}$ cruel [$_{pP}$ *Juan [$_{p'}$ p [$_{PP}$ with [$_{DP}$ Mary]]]]]]]]]]

Furthermore, event nominal DP subjects allow us to test a prediction made by our analysis of the agentive reading. In our proposal, the agentive reading is produced by the prepositional structure but licensed by the event, so it can only occur in cases such as the structure presented here for EAs. If this is true, we expect that, whenever the event is embedded inside a bigger structure and there is no c-command, the preposition is not licensed. This is, again, confirmed. Consider (53). As the DP *la guerra* is embedded inside the CP, it cannot license the preposition *con* on its affected object reading.

(53) Que   haya una   guerra es   cruel {para/*con} los   niños.
     that   there.is a   war   is   cruel {for/with}   the   children

Consider, finally, the fact that nominal predicates containing EAs can appear in the progressive form. As noted by many before us (Parsons 1990), the progressive form takes an event and gives a state as a result. Intuitively, the fact that EAs take the progressive form is explained by the proposal that an event argument is contained there, but we need to be more precise since, in our characterisation, the event is in a specifier position, and thus not contained as part of the information in the head selected by the progressive aspectual head.

Our proposal is the following. Given that Pred^o is a head with aspectual information, it can enter into an agreement relation with its specifier (see also Brucart 2009 for a related idea in his discussion of a distinct topic). This happens when Pred's specifier also contains aspectual information, as is the case when it denotes an event. In the structure (54), the subject of predication passes its eventive features to the head, thus enriching its aspectual information.

(54) [$_{PredP}$ [e] [$_{Pred'}$ Pred$_{[Asp+e]}$ ...

At this point, a head that is not eventive in and of itself carries event semantics by virtue of what its specifier contains. At that point, the event information becomes visible for the aspectual progressive head to select. If this explanation is on the right track, several predictions should be confirmed. First, trivially, we expect the progressive form to be accepted by an EA with an overt event subject. This is confirmed:

(55) La   guerra está   siendo especialmente cruel con   los   niños.
     the   war   is   being specially   cruel with   the   children

Second, and more importantly, we expect that in other cases where there is predication of an event nominal, the progressive form should be accepted, independently of whether the adjective is an EA or not. This is again confirmed by the data.

(56) La   fiesta está   siendo maravillosa.
     the   party is   being wonderful
(57) La   crisis está   siendo complicada.
     the   crisis is   being complicated

Third, the mechanism of aspectual sharing from specifier to head is, as we have presented it, a result of some heads carrying aspectual information. Pred is an instance of such situation, but it should not be the only one. More specifically, given that Pred is–according to Hale & Keyser (2002)–an instantiation of a central coincidence preposition, we expect other better established central coincidence prepositions to behave in a similar way. The prototypical case of a central coincidence preposition is *in*, which in Spanish translates as *en*. We thus expect a locative sentence with a preposition such as *en* and an event subject to allow the progressive form. This is again confirmed.

(58) Mi   primera   experiencia   como WWOOFer   *está siendo en* Francia.
     my   first   experience   as   WWOOFer   is   being in France
     'My first experience as a WWFOOer is taking place in France' (Google)

4.   Comparison with alternative accounts

Given the overwhelming number of papers that have addressed various subsets of these phenomena, this section is devoted to a short comparison with previous approaches. There are two families of treatments. The first includes coercion/stage-level analyses (Fernald 1999; Martin 2008). The second treats EAs as essentially individual-level and either (i) attributes special properties to some other element in the structure (Arche 2006, 2010; Rothstein 1999), or (ii) provides them with an event variable in a way similar to what we are proposing here (Stowell 1991; Landau 2010).

First of all, we consider EAs' behaviour with respect to standard eventivity tests to be far too consistent to merit a coercion analysis. Fernald (1999) proposed coercion in light of the ease with which EAs take the progressive–even remarking that it is difficult to justify calling it coercion (Fernald 1999: 52). In short, in our view, within a framework that has access to Davidsonian events variables, pursuing a coercion account seems akin to missing a generalization.

Considering stage-level approaches (Martin 2008), the differences are clear. For us, lexically, EAs are always ILPs. Proposing that what we called the event reading is stage-level confronts at least two problems that we do not have to face: (a) the behaviour of these adjectives with respect to the interpretation of their subjects is clearly characteristic of individual-level predicates, and (b) the fact that in languages, such as Spanish, where the choice of the copula is at least partially dependent on the individual/stage distinction, the event reading selects the prototypical individual-level copula (Arche 2006).

Let us move then to the proposals that treat EAs as individual-level predicates. Arche (2006) proposes that it is not an event variable, but the Goal preposition in complement position (59) which induces a dynamic activity reading.

(59)   Mary was cruel to John.

First, treating (59) as a dynamic activity does not seem quite right because, as already pointed out (cf. footnote 3), EAs do not combine with adverbs oriented to the progression of an action, such as *slowly, gradually* or *little by little* ((60a,b) vs. (61)):

(60)   a. *John {is/was} slowly {rude/modest} (to Mary).
        b. *John was rude (to Mary) little by little.
(61)   Mary {ate her breakfast/ran} slowly.

Second, associating the eventivity directly to the prepositional phrase begs the question of why this eventivity is not available in all the other uses of the same preposition. In the case of Spanish, also discussed by Arche, we saw that under an EA, the preposition *con* 'with' can get a reading which is not allowed when it combines with other verbs. The question is what makes this interpretation possible, and what restricts its appearance if it is due to some dynamicity or eventivity being codified by the preposition itself. Why is the affected entity reading not found in many other cases, where the only reading acceptable is a comitative? There are no reasons to doubt that prepositions can integrate in the event structure of a verb and provide it with ingredients that are interpreted as part of the verb's aspectual

representation, but this does not mean that the prepositions carry aspectual meaning. It would be enough to say–as we suggest in our analysis–that they speak a language that can be understood by aspectual structure, even if their meaning contribution is not literally 'aspect'.

Another option is to associate the eventivity to the information provided by the copula. Rothstein (1999) proposes that the bare adjective denotes a state, but adjective+copula denotes an eventuality, which in turn accounts for the possible agentive properties of EAs. What remains unclear on this approach is (a) why the (non-)agentive ambiguity can show up in data independently of the presence of the copula (see small clause data above); (b) why traditional ILP data such as 'Mary is cruel' are unambiguous; (c) if all bare adjectives denote states and adj+copula denotes an eventuality, exactly how classic SLPs differ from EAs is not obvious. The difficulties raised by an eventive copula account complement the Maienbornian view that it is the copula that introduces a state. Any approach that puts the weight of explanation on the copula itself goes too far in that it glosses over the existence grammatical distinctions among adjectives.

Our approach is reminiscent of Stowell (1991) and Landau (2010), as it shares the idea that EAs are ILPs that can associate with an event variable. The crucial matter, then, is *how* the event is introduced. Let us first address Stowell's proposal.

The focus of Stowell (1991) is the intuition that when EAs appear with an infinitival, i.e. *John was stupid to wash the car*, the individual-level entailment disappears. For this reason, it is proposed that the event is contributed by the infinitive. While the intuition that the individual-level entailment is not there, the surprising fact of the matter (facts due to Kertz 2006) is that in these infinitival constructions, EAs continue to behave like ILPs. Here is bare plural, *there*-insertion, and weak/strong subject data from Kertz (2006) illustrating the point:

(62) a. American consumers are smart.   (*∃/∀) (ILP)
     b. American consumers are smart to buy foreign goods.   (*∃/∀) (ILP)
     c. American consumers are eager to buy foreign goods.   (∃/∀) (SLP)
(63) a. *There were lawmakers smart.   (ILP)
     b. *There were lawmakers smart to endorse the proposal.   (ILP)
     c. There are lawmakers eager to endorse the proposal.   (SLP)
(64) a. SOME/*Sm people are smart.   (ILP)
     b. SOME/*Sm people are smart to request a waiver.   (ILP)
     c. SOME/ Sm people are eager to request a waiver.   (SLP)

These examples show–via the strongest independent individual-level diagnostics–that the presence of the infinitive does not shift an ILP into a non-individual-level reading. Just as there were reasons given above to suspect that the eventivity is located in the preposition, here we find evidence against putting it in the infinitive.

A second difficulty for Stowell is that EAs are analyzed as ILPs that become eventive via the additional merger of the event located in the infinitival. However, the predication relationship responsible for the individual-level entailment is always present. The consequence is that it is unclear how this entailment is actually supposed to be obviated. On our proposal, the obviation is explained by the lack of predication of the individual in the eventive case.

Derivative of this is another fact that our proposal captures. We proposed that the grammatical subject of the event reading (e.g. John in *John is being stupid*) is generated in Spec,*p*P. On the other hand, the data in (62)-(64) show that EAs continue to be unambiguously individual-level when an infinitive is present. Therefore if the presence of a PP entails the eventive reading while the presence of the infinitive does not allow for the eventive reading, the ungrammaticality of (65) (and every variation of it) follows.

(65)   *John was cruel to Mary to leave.

With the variety of theoretical options that we have seen so far, Landau (2010) is an important point of comparison because it places the ambiguity of EAs squarely in the lexicon: EAs have two lexical entries, one individual-level, the other eventive. Setting aside a proposal specific evaluation, this account serves to make an observation about any analysis that posits a lexical ambiguity. In saying that EAs have a lexical entry that includes an event variable, the prediction is automatically made that there should exist a class of adjectives that is unambiguously eventive. To our knowledge, this prediction is not met. It is precisely the EA class that comes the closest to being eventive, but we have argued that it does not require including the event variable in the lexical entry. The absence of any independent evidence supporting the claim that an adjective can be lexically eventive argues against doing so for just this special case.

5.   Conclusions

In this paper we have argued in favour of a solution to the mixed aspectual properties of EAs. We have argued that their special properties, that single them out inside the class of adjectives, are explained without the need to introduce any lexical ambiguity. We have maintained the traditional idea that predicative adjectives can essentially be divided up into state-denoting SLPs and property denoting ILPs. This required a departure from Maienborn's view that all adjectives are property denoting in their lexical entry and become K-states once combined with the copula. We considered that the independent considerations provided by Engelberg (2005) (among the many others who have argued that a 'copula' solution–whether state or event introducing–is problematic) already justified a reassessment of Maienborn's treatment of adjectives.

We thus proposed returning to a Carlsonian style lexical classification of predicative adjectives. EAs are indeed the most difficult case. Instead of a lexical ambiguity, we proposed that EAs are special because, while having an individual-level denotation, they are compatible with an event variable subject–which constitutes a distinction in sort, not in type. This allows us to maintain a coherent vision of the morphosyntax of languages like English and Spanish–especially in absence of any other class of adjective that would independently support positing eventive lexical entries for adjectives in such languages. Thus, our analysis is a D-state analysis of EAs in the sense that these adjectives can compose with an eventive subject. They are distinct from true D-states because, for true D-states (which surface as verbs in the languages discussed here), the event variable is part and parcel of the lexical entry. While there remain many open questions, one of the overarching objectives and contributions of this paper was to fill out the empirical issues that need to be addressed when discussing EAs. The most promising result in this regard was a certain empirical consistency: while EAs seem like solid ILPs in the traditional sense, they also pass every standard test for eventivity.

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