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Rethinking Depictive Secondary Predicates. A Pair-Merge approach and the Adjunct Condition[1]

Violeta Demonte
violeta.demonte@uam.es
Universidad Autónoma de Madrid (Spain)

ABSTRACT.

In this article I will propose a new analysis of depictive secondary predication structures. Previous studies of these structures are framed within different approaches: C-command / categorial approaches (Williams 1980, Rothstein 1983, 2001, Demonte 1988, Mallén 1991, Bowers 1993, among others), C-command and Multiple Agree approaches (McNulty 1988, Irimia 2012), linearization after 'Lateral Movement' and attachment of identical eventive heads (Gallar 2017), or Parallel-Merge approaches (Irimia 2012, You 2016). Following Chomsky (2019) and Bošković (2020), among others, I will claim here, first, that adjunct depictive secondary predicates start as members of a Pair-MERGE(d) conjunction/ adjunction structure which is unlabeled. There are as many members of these pair merged phrases as modifiers in a sentence, and they are unbounded and unstructured. Pair merged structures are in principle opaque and non-sensible to syntactic operations. However, since they are semantically and syntactically conjoined phrases they have each a Link element. This Link merges at the edge of the phase at which the modifier is conjoined thus allowing extraction out of the opaque domain. I will suggest that perhaps Tagalog expresses overtly these links. I will previously present a detailed description of the properties of DPS in Spanish.

KEYWORDS.

Secondary predication. Adjunct condition. Merge. Pair-Merge. Predicate composition. Feature sharing. Tagalog linkers.

1. Introduction

This paper has a twofold goal: the first one is to try to act on some of Chomsky's (2019) ideas regarding the two basic operations of a Minimal core syntax, one for structures with arguments, the other for structures with

[1] Es un gran placer dedicar este trabajo a la Prof. Ana María Brito, distinguida lingüista y hermosa persona. Su trabajo ha impulsado y enriquecido la lingüística portuguesa y la lingüística romance. Su amistad me ha brindado siempre calor y simpatía. Le deseo felicidad y fecundidad en esta nueva etapa de su vida.

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adjuncts. The second goal is to revisit the main data and generalizations coming from the various previously developed analyses of depictive secondary predicates. These developments are framed within different approaches: C-command / categorial approaches (Williams 1980, Rothstein 1983, 2001, Demonte 1988, Mallén 1991, Bowers 1993, among others), C-command and Multiple Agree approaches (McNulty 1988, Irimia 2012), linearization after 'Lateral Movement' and attachment of identical eventive heads (Gallar 2017), or Parallel-Merge approaches (Irimia 2012, You 2016).[2] I will try to rebuild these analyses relying on the idea that adjunct depictive secondary predicates are better derived under the minimalist operation of Pair-MERGE in its last version, set in Chomsky (2019) with antecedents in Chomsky (2004, 2013). I will also rely on Bošković's (2020) argument for a unification of the Coordinate Structure Constraint (CSC) and the Adjunct Condition (AC) in a view of grammar which intends to satisfy third factor principles like the Minimal Search Principle (MSP) or the Phase Impenetrability Condition (PIC).

The scope of this paper is modest: 1) to isolate a number of syntactic characteristics of depictive secondary predicates that feature their adjunct condition, which makes them islands by definition, and 2) to sketch the idea that the way these properties show in different languages can be better understood if we consider depictive secondary predicates as a sequence, or concatenation, of sets that attach to another set in a separate plane (Pair-MERGE). The head of the pair-merged segment can be or cannot be headed by a kind of Linker (Link) similar to the linkers found in Tagalog. I will try to show that when the attached set has a null unlabeled head (when the adjunct and the modified element do not share features) it remains an island and extraction is banned. When it has a label, (on a par with a feature sharing operation which gives rise to labeling) it can be moved to the edge of a phase (or it can have an escape hatch), thus becoming accessible to

[2] There are also semantic approaches to depictive predicates arguing, for instance in Maruta (1995), that they are V' or VP modifiers, similar to adverbials (modifiers of an action or modifiers of a motion/ change eventuality), and they are not predicates. Whatever the descriptive condition of these elements either an adjectival secondary predicate or an adverbial, it is clear that they are adjuncts and they share properties with other adjuncts. More significant are McNulty's (1988) or Irimia's (2012) semantic approaches where the syntactic derivation is led by the idea that different types of secondary predicates are determined by the aspectual condition of the verb (see also Demonte 1991), as well as Napoli (1989) who asserts that the key to subject-predicate relationships in these constructions is theta role assignment. Despite their interest, I will consider semantic constraints on predication only laterally.

extraction operations in principle inaccessible for islands.[3]

This idea could be problematic. Song (2020: 364) suggests that we have two alternative approaches to adjunction and that those "based on labeling (manipulating categories) are more advantageous than those based on Pair MERGE (a specialized UG operation)". Chomsky (2019: 50-52) strongly upholds Pair-MERGE and indicates that extraction out of adjuncts (and conjuncts) is related to the possibility to move x (a category) to the edge of a phase. This possibility establishes a difference between strong phases, opaque for extraction: that you can't extract from (you have to go first to the edge of the phase and then you can move on), versus "weak phases, unaccusatives and passives, you can extract without first moving to the edge of the phase" (Chomsky 2019: 52). The main idea will be that conjuncts/ adjuncts are in fact unlabeled structures, thus you can't extract out of them, for these it is only possible to extract to the edge; and they get their label (*Label resolution*, Chomsky 2013) when they have 'features' that project and trigger movement to the edge of a phase with a link(er) constituent.

The number of explanations available for the complex behavior of DSP, which are on a par with the number of proposals for adjunctions, suggest that maybe the best approach at this moment will be the simplest one and with the widest empirical coverage.

The Spanish examples, and the judgments about them used throughout the text, come in part from Demonte (1988) where the empirical material was extensively elaborated and contrasted. I want to note that extraction from adjuncts (and, in general, extraction out of islands), apart from weakly explored, is a territory where it is not easy to get clear cut judgements. In the spirit of Bošković (2020) I will try to deduce the, so to say, degrees of awkwardness from independent principles.

The structure of this paper is as follows. The Introduction in section 2 will present significant characteristics of depictive secondary predicates and the main generalizations on their syntax, which will frame the empirical basis for the proposal to be developed. In section 3, I will present the main lines of Chomsky (2019) version of Pair-MERGE and I will develop my Pair MERGE based theoretical analysis just mentioned. I section 4, I will briefly

[3] In Demonte (1998) this idea was articulated by stating that the predicative adjunct is incorporated to or reanalyzed with the maximal projection of VP, namely AspP, so aspect is what licenses the VP domain.

present data of depictive secondary predicates in Tagalog which appear to empirically support Chomsky's idea that in adjunct constructions there is a Link (similar to a conjunction) attracting the predicate, and thus originating movement to the edge of the phase and further up.

2. The data and some questions about them

In this section I will try to isolate relevant characteristics of depictive secondary predicates which will be the basis for the theoretical-descriptive explanation of the adjunct behavior of secondary predicates.

2.1. Two types of depictive secondary predicates

Many interesting theoretical questions arise when we have to characterize secondary predicates. As is well known, "secondary predicates", are those elements predicated of an argument which is theta-marked by another lexical head. A classical distinction is established (Rothstein 1983) between "depictive" secondary predicates and "resultative" secondary predication. In this paper I will only refer to "depictive" predicates, those that are not subcategorized by the verb. Depictive secondary predicates [DSP] split into two subtypes: subject-oriented secondary predicates [SOP], as in (1), those whose subject is the external argument (grammatical subject) of the sentence, and object-oriented secondary predicates [OOP], as in (2), those whose subject is the direct object or internal argument:

(1) *Marta* despidió a su hija *tristísima*.
Marta said-good-by to her daughter very sad(ly).'

(2) Mi madre compró la *lavadora rota*.
'My mother bought the washing machine broken' (In the interpretation: The machine was broken at the moment in which my mother bought it).

2.2. Cooccurrence, unordered sequencing

DSP of the two classes can occur in a single clause, as in (3), in this case the order OOP / SOP is strongly preferred maybe due to linearization reasons. More important, predicates of the same class cooccur in a single sentence. Generally, the order between them appears to have no restrictions, the alternative orders generally do not imply different interpretations, and the secondary predicates can be separated by commas. Examples (4a, b) and (5) show that English is similar to Spanish in this respect, but I will not pursue this matter here:

(3) *Juan*$_i$ comió {la *carne*$_j$ *cruda*$_j$ *contrariado*$_i$} / ??? la carne contrariado cruda}
'Juan eat the meat raw, annoyed.'

(4) a. pro$_i$ comieron {la *carne*$_j$ *cruda*$_j$ (,) *tierna*$_j$} / {la carne tierna, cruda}
b. They eat the meat raw, tender (Rothstein 1983: 40, from Simpson 1982)

(5) *María*$_i$ movió la mano {*débil*$_i$ (,) *emocionada*$_i$} / {emocionada, débil}
'María waved her hand weak(ly), moved.'

These examples indicate that we are in front of an unstructured, unbounded sequence of predicates that can be generated at different dimensions, although they have a common subject. I will try to suggest some lines to implement this type of adjunct structures in terms of Pair-MERGE. As noted by Chomsky (2019: 50), unbounded unstructured cases like (3) to (5) indicate that "there are unboundedly many dimensions as adjective phrases are independently adjoined to the host such that you can add any number of adjuncts at any point". However, You (2016: 125) has proposed that sentences like (3) and (4) should be derived by Parallel Merge, namely, two planes/ syntactic objects are constructed in parallel that, at a given point, "are joined together, taking a shared element as a grafting point". I do not intend to discuss this alternative here; I only note that in a multidominance structure where you join independently created constituents to a basic spine, you create strange dominance relations, aside from other questions. In the cases above we do appear to have an unstructured sequence of predicates.

2.3. Lexical-semantic restrictions for the licensing of depictive predicates

As largely noted, and as illustrated by previous examples, secondary predicates relate specifically to the process referred in the clause and at the same time ascribe properties to individuals. So they are event oriented and participant oriented. This double ascription has certain restrictions. Irimia (2012: 206) claims that DSP cannot be licensed by pure stative verbs, as in (7a). However, she also asserts that this situation improves under certain conditions, for instance, when the adjectival predicate has a temporal modifier, as in (7b):

(7) a. *Jake owned a car *young*. (Winkler 1997, ex.6)
b. Jake owned a car ***when*** *young*.

Restrictions do not hold equally for both types of depictive predicates. In Spanish, SOP can occur with almost all kinds of aspectual verbs although certainly in certain contexts (state verbs, for instance) presence of an intensifier improves acceptance, a question that I will not address here but that I believe can be accommodated to the proposal I will develop in sections 3.2. and 3.3. Consider the series in (8) (similar to Demonte 1988):

(8) a. Pedro ama (incluso) *deprimido*. (state)
'Pedro loves depressed.'
b. Luis siempre trabaja *sonriente*. (activity)
'Luis always works smiling.'
c. Enrique se dio cuenta *sereno* de lo complejo de la situación. (achievement)
'Enrique realized calm how complex the situation was.'
d. El pintor dibujó una naturaleza muerta *feliz*. (accomplishment)
'The painter painted a still life happy.'

The descriptive generalization appears to be that SOP can be licensed by all kinds of verbs irrespective of their aspectual class. Now, since SOP and the two types of DSP describe a property that holds during the event they are not possible with individual-level predicates:

(9) María entró en la habitación *cansada*/ **loca* /**alta*.
'Maria entered the room tired /*crazy/*tall.'

Licensing of OOP is more constrained. Simplifying, OOP coappear mainly with activity verbs, as in (2), (3), above, and in (10) below:

(10) Pedro devolvió el libro *roto*. (activity, depictive)
'Pedro returned the book broken.'

They are awkward or unacceptable with accomplishment and state verbs, which do not codify a process (compare (11a) and (11b) with (11c)):

(11) a. *Pedro sabe el teorema válido. (state)
'Pedro knows the theorem valid'.
b. *Comprendió la noticia *correcta* en su formulación. (achievement)
'(S)he understood the news correct in its formulation.'
c. Velázquez pintó a Inocencio X *sentado*. (accomplishment / activity)
'Velázquez painted (to = object marking P) Inocencio X *seated*.'

The rule of thumb is that OOP adjectives are compatible with activity and accomplishment verbs (that imply a process) in as much they can build a 'complex predicate' with them. A complex predicate, in more traditional terms, is a 'restructuring' / 'reanalysis' configuration. I will retake the intuition underlying this approach through the idea that adjunct coordinated secondary predicates can move up to the edge of the vP/ AspP when they share features with another constituent. Irimia (2012) formalizes complex predicates as a result of parallel merging of $Pred_1$ (the main verb) and $Pred_2$. Demonte (1988) proposed that certain OOP are submitted to a 'reanalysis' process which places them in the V' projection, thereby explaining their syntactic behavior. In effect, it could be relevant in this regard that in some languages the depictive can *overtly* incorporate into the main predicate. The following examples, due to Irimia (2012), are from Alamblak (Sepic family of Papua New Guinea):

(12) ALAMBLAK (Bruce 1984: 175-6; van der Auwera & Malchukov 2005, ex. 38)

a. Miyukham fa-**nfri**-më-an-m.
Fruit eat-raw-REM.PST.-1.SG. -3PL.
'I ate the fruit raw'.
b. Yënr fëhm hti-**bro**-më-r-m.
child pigs see-big- REM.PST.-3.SG. -3PL.
'The child saw the pigs (as being) big'. (From Irimia 2012: 208)

These depictive predicates preserve their own prosodic domain (they can be focus, for instance), yet they 'incorporate' obeying semantic and syntactic aspectual matching with the main predicate. Later on and within the discussion I will briefly consider Tagalog sentences with DSP where DSP are related to their subjects with an explicit marker which is named a linker (LNK) (Scontras & Nicolae 2014), independently of the position of the 'subject' of this predicate (see (26) in 3.3. and the Tagalog data in 4.).

Although apparently unrelated, I want to note at this moment that DSP cannot be predicated of indirect objects

(13) *Le di a *Juan*$_i$ las noticias *borracho*$_i$
'I told John the news drunk'.

2.4. Extraction out of depictive secondary predicates. Opacity to syntactic operations

Adjuncts are syntactic objects which, descriptively, satisfy the following characteristics. They are not theta-marked by any element of the sentence in which they occur: they are not selected. They are optional and they have constituency (they have a head and a symmetric complement). Moreover, they are in principle not accessible to syntactic operations, they are opaque constituents (Huang 1982), and, consequently, they are islands. Secondary predicates fulfill all three conditions and should obey the "Adjunct Condition" (AC), which states that "extraction out of adjuncts is disallowed". Yet, voiding of this condition occurs in many languages as we will see in the next section in which I will come back more thoroughly to it regarding DSP.

In this subsection I simply want to present the paradigms of extraction out of adjunct secondary predicates, both SO and OO. We can establish the following descriptive generalizations as to extraction out of DSP. *Extraction out of SOP* is in general disallowed and gives rise to strong ungrammaticality, as in (14a'). However, when the 'complement' of the SOP is lexically selected by the secondary predicate, as in (14b') (or when the predicate is an unaccusative verb, as in (14c)), there are significant differences in the strength of the violation of the AC. Yet the generalization is that grammaticality increases when the main verb and the SC appear in strict adjacency.

(14) *Extraction out of SOP*

a. *La soprano* cantó el aria [*emocionada* por tantos aplausos]
'The soprano sang the aria [excited by so much applause]'

a' *¿Por qué$_i$ cantó el aria la soprano [emocionada t$_i$]?

a'' ? ¿Por qué$_i$ **cantó [emocionada** t$_i$**]** el aria la soprano?

b. *Luisa* recibió el premio [*dispuesta* a celebrarlo]
'Luisa received the award [ready to celebrate.]'

b' ??¿A qué$_i$ recibió Luisa el premio dispuesta t$_i$?

b'' ¿A qué$_i$ **recibió dispuesta** t$_i$ Luisa el premio?

c. *Pedro* **llegó agotado** de la larga jornada.
'Pedro arrived exhausted from the long journey.'

c' ?/^{0k} ¿De qué$_k$ llegó Pedro agotado t$_k$.?

c'' ¿De qué$_i$ **llegó agotado t$_i$** Pedro?
'From what did Pedro arrived exhausted?'

On the other hand, extraction out of OOP is in general disallowed and it gives rise to ungrammaticality, as in (15a', b'). The strength of the violation weakens or disappears when the secondary predicate immediately follows the verb, as in (15a'', b'') and that is what Bošković (2020) names a 'contingent' relation, that is, they are lexically related, they make a complex predicate.

(15) *Extraction out of OOP*

a. Tú encontraste el *libro* [*roto* en tres pedazos]
'You found the book broken in three parts.'

a' *¿En cuántas partes$_i$ encontraste [el libro] [roto t$_i$]?
'In how many parts did you find the book broken?'

a'' ¿En cuántas partes$_j$ **encontraste [roto** t$_j$] [el libro]?
'In how many parts did you find broken the book?' (From Demonte 1988: 33)

b. Velázquez pintó a *Inocencio X sentado* en un sillón de terciopelo
'Velázquez painted *Inocencio X seated* on a velvet chair.'

b' *¿En qué (tipo de) sillón$_i$ pintó Velázquez a Inocencio X [sentado t$_i$]?

b'' ?¿En qué (tipo de) sillón **pintó sentado** Velázquez a Inocencio X?
'On what (kind of a) chair did Velázquez paint *Inocencio X seated*?'

In the following section I will try to provide an explanation for this series of facts. This explanation will intend to show that Pair MERGE, as briefly delineated in Chomsky (2019), with base on Chomsky (2004) and Bošković (2020), among many others, could set a reasonable attempt to account for adjuncts overcoming AC. Apparent violations of the AC are found in many languages and illustrated by the just mentioned Spanish DSP in (14) and (15) as well as by examples that will be provided in the following section.

3. Pair Merge and the Adjunct Condition

3.1. Pair Merge

Chomsky (2019) is an attempt to most clearly state the motivation for the two main syntactic operations for building structures proposed mainly after Chomsky (2004). These operations are the symmetric operation of Set Merge which forms binary sets, as in (16), and the asymmetric operation of Pair Merge which form sequences, as in (17):

(16) SET MERGE: (a, b) → {a, b} (arguments)

(17) PAIR MERGE: (XP, YP) → <XP, YP> (adjuncts)

The first operation produces unordered pairs, the second, ordered pairs. Quite metaphorically, as noted by Oseki (2015: 294), the formulation of the second operation establishes that adjuncts are pair merged on a separate plane, this is the reason for which they are invisible to be probed for extraction: they are in another dimension, beyond the search domain of the probe. According to Chomsky (2004) Adjunction/Pair MERGE is required by C–I to achieve *predicate composition*: instead Set MERGE achieves the *duality of semantics*, argument structure vs discourse oriented/ information related, scopal, edge properties (Chomsky 2004: 118, Chomsky 2019: vii). However, Pair Merge sacrifices the minimalist and evolutionary advantages of the theory, because, as Collins (2017: 52) points out, it has to be stipulated as an independent UG operation, which goes against the strong Minimalist thesis (SMT), "language keeps to the simplest recursive operation" (Song 2020: 362). To avoid multiplicity of operations some authors dispense with Pair Merge and advocate for "Simplest Merge" (concatenate) (Hornstein 2009) assuming that when two phrases (XP, YP) merge but share no features, adjunction cannot be labeled. Regarding this view of Pair Merge briefly summarized it is important to recall that other authors (for instance Bošković 2014, 2018) have established that adjuncts are not by nature opaque and can be in the search domain of a probe if they are available at an escape-hatch which is the edge of a phase. We will come back to this in the following section.

To Chomsky (2019) what "makes sense" is to provide a "genuine explanation", "one that meets the crucial conditions of learnability and evolvability" (2019: 56). So, if linguistic explanation can reduce the first factor (UG, the simplest computational operation) to MERGE, that problem will be solved, because there will be no questions of learnability (there is no learning) and of evolvability (you will satisfy third factor, computational efficiency). In the fourth lecture in this series, Chomsky, even if very programmatically, makes various proposals regarding Pair MERGE which try to tackle the mentioned problematic questions. Pair MERGE is considered as the second simplest operation but it is set apart from Set-MERGE since while the first operation forms sets, Pair-MERGE forms sequences. So, although two operations are necessary, they are the simplest ones and have their own conceptual necessity. More strictly Chomsky (2019: 22) claims that "They

are not two different operations. These are just the two possible cases of the single operation".

Basically, Set-MERGE is intuitively necessary for symmetric constituents such as heads and their complements, the head giving the label for the set. Now, some constituents, namely adjectives, adverbials of different classes, or other kinds of modifiers are asymmetrical and they can give rise to asymmetrical unbounded coordination, like in the following example from Chomsky (2019: 49):

(18) *I met someone young, happy, eager to go to college, tired of wasting his time, …*

or in our examples (3), (4) and (5) above, I repeat one of them for the sake of convenience:

(19) *María*$_i$ movió la mano {*débil*$_i$ (,) *emocionada*$_i$} / {emocionada, débil}
'María waved her hand weak(ly), moved'. (= (5) above)

In line with Bošković (2020) who tries to unify the Coordinate Structure Constraint and the Adjunct Condition, Chomsky conjectures that these adjuncts form a conjunction with the element to which they attach, a reasonable view that I will not thoroughly exam in this note, but that I will basically assume, leaving aside for further research its complete elaboration. In the fourth lecture in this series, Chomsky makes a new suggestive proposal saying that these adjuncts:

> form "a sequence which begins with some conjunction, and then contains elements, each of which is predicated of something. So we have a sequence of elements that looks like this, with links L1" "that's the basic object that gives you unbounded coordination" (Chomsky 2019: 50),

(20) < CONJ, < S1, L1 >, . . ., < S*n*, L*n* > >

In a system which minimizes resources it is plausible to think that adjuncts conceived in that way (sequences of phrases) do not have a label (since they do not have a head to project), however they could become

labeled under certain conditions. Moreover, if sequence of phrases attaching to something as adjuncts are that way, the relevant question is what the link(er) is, and what does it do. In the quite cryptic discussion about this question in Chomsky (2019), the author seems to suggest that the link(er) is the categorizer, actually, n, v, a in the basic cases, and these categorizers are in fact phase markers[4] and we can have both weak and strong phase markers. More specifically, the presence of this extra morphological element will make the phase strong and will allow extraction just out of the edge of the phase. When there is no link(er) the AC will hold and extraction out of an adjunct will not be possible.

In the next section I will play around these very general ideas. I will assume that adjuncts/ conjuncts are by default unlabeled, they get a label when they associate with a link(er). I will assume that linkers can be either explicit morphological elements such as *na* in Tagalog or they can be sets of features that are syncretic with other morphological units. These features trigger *Feature sharing* which induces movement to the edge of a phase, thus permitting voiding AC effects.

3.2. The Adjunct Condition

The following generalization, first established by Huang (1982) as the *Condition on extraction domains*, has played a central role in the development of many other ingredients of the theory of formal syntax that we will not be able to deal with here. I am referring to the above mentioned Adjunct Condition (AC):

(21) Movement out of adjuncts is disallowed (= adjuncts are opaque to movement).

The empirical effect of the AC is seen in the constructions in (22):

(22) a. *Who did Mary cry [ADJ after John hit <who>]? (Huang 1982: 503)
(*Extraction from an adverbial clause)*

[4] "In fact, I think elements like n and v have been somewhat misinterpreted. They're not just nominal and verbal categorizers; they're basically phase markers." (Chomsky 2019: 52)

b. *Which paper did you read Don Quixote [ADJ before filing <which paper>]?
(Nunes & Uriagereka 2000: 21) *(Extraction from an adverbial clause)*

Nevertheless, sentences in (23) show that the AC can be violated. In the examples (23a) and (23b) the wh-phrase is extracted out of adjuncts that are secondary predicates

No AC:

(23) a. What did John arrive [ADJ whistling <what>]?
(Borgonovo & Neeleman 2000: 200)
b. What did John drive Mary crazy [ADJ trying to fix <what>]?
(Truswell 2007: 1356) (Taken from Oseki 2015: 305)

The AC is voided also in extractions out of PP in adjunct clauses

(24) a. What$_i$ did you come around [to work on t$_i$]?
b. What$_i$ did Christ die [to save us from t$_i$]? (Truswell 2011: 131) (Taken from Bošković 2020: 232)

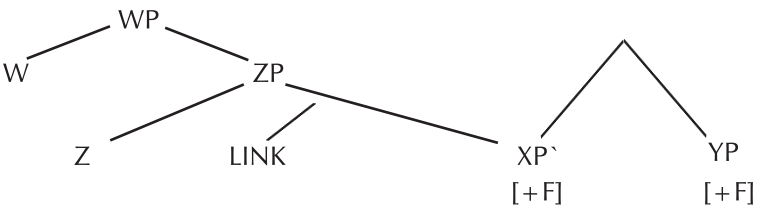
It is also voided in some of our examples in (14c') and (15a'''), extractions out of DSP, which I repeat below for the sake of convenience:

(25) a. ?/^{0k} ¿De qué$_k$ **llegó agotado$_k$** Pedro? *(Extraction from SOP)*
b. ¿En cuántas partes$_j$ **encontraste [roto** t$_j$] [el libro]? (*Extraction from OOP*)

I propose the configuration in (26) for the phrase structure representation of adjuncts OOP. This representation is similar to Oseki (2015: (13)). He names this a "two peaked structure". I consider that this could be adequate also for the attachment of conjunct/ adjuncts in a structure derived from Pair MERGE. If this structure is tenable, we can make the additional claim that contrasts like the one in (25b) (coming from the contrast between (15a'), (15a'') and (15''')), where the extraction is grammatical when the secondary predicate stands immediately after the verb, are the result of movement

of YP to the edge of XP for reasons of feature sharing.[5] We have such an operation since, as said, to get an acceptable derived structure the DSP and the verb have to be considered as a kind of complex predicate where the DSP and the main verb are lexically compatible. To be more explicit YP (=ADJ) in (26) will move to the edge of the phase XP:

(26) *Conjoined adjunction:*



My first assumption, as said and as has been noted by Oseki (2015), is that since pair merged adjuncts are symmetric *phrases*, a labeling algorithm will not be able to assign a label to them. If this is so, extraction of YP, and out of YP, will not be possible since movement out of unlabeled constituents is banned. Now, we can also assume, as in Chomsky (2013), that it is possible for structures <XP, YP> to be labelled in some specific syntactic processes such as Feature Sharing. This assumption allows us to claim that, by Feature Sharing, YP in (26) moves to the edge of the phase XP, as shown by LINK in the representation, and consequently it can undergo the feature sharing needed for labeling. Hence, there is no labeling problem and movement out of the adjunct YP to the CP, as in the examples (23) to (25), gives grammaticality. In other words, given the *Phase Impenetrability Condition* (PIC), which states that movement out of phase XP proceed via the edge of XP, movement out of a phase must proceed successive-cyclically, targeting the edge of the phase. Observe that this process is visible in Spanish where we need the DSP adjacent to the verb (at its edge). Observe moreover that if

[5] Bošković (2018, 2010) claims that only elements that are base-generated at an adjunct edge can be moved out of adjuncts. In this way he avoids the traditional ban on movement out of moved elements. Base generation of adjuncts/ conjuncts at the edge of a phase takes place when phases have an agreeing specifier. On an alternative view, Oseki (2015: 309), in the line of Chomsky (2004, 2013) and Hornstein (2009), argues that if XP and the adjunct share some feature [+F], as in (26), the adjunction structure <XP, YP> will be labeled (as I have also assumed) and there will be no reasons to have two peaked structures which are possibly opaque for adjunction, because it will come to be dominated by FP. I will not take any side on this regard.

feature sharing after movement occurs at the edge of the phase there are no problems with the PIC if there is an element at the phase edge which *agrees* with YP. Although still at a very speculative level, I suggest that the content of the agreeing features proposed in (26) is related to the lexical relatedness between DSP and the verb needed in order for the secondary predicate to appear immediately after the verb. These are the structures which allow extraction out of the adjunct. Let us remind the contrast between (25b) and its counterpart in (27) (= (15a)). (27a) is ungrammatical because you cannot extract a PP from an adjunct and move it straightforward to CP, while in (27) (= (25b) and (15a'')) extraction of such a PP is grammatical because the adjunct [*roto en varias partes*] first moved to the edge of VP and then the complement PP is moved to CP yielding (25b), repeated as (27):

(27) ¿En cuántas partes$_j$ **encontraste [roto** t$_j$] [el libro]?
'In how many parts did you find the book broken?'

This proposal, although in the same spirit, is relatively different from Gallar (2017)'s analysis (based on Truswell 2007) according to whom:

*Extraction from Adjunct Secondary Predicates***:**

> "Extraction of a complement from a secondary predicate is permitted only if the event denoted by the secondary predicate is identified with an event position in the matrix predicate." (Truswell 2007: 117)

Authors supporting this view assert that extraction in these cases is only possible when the predicate and the verb make a single complex event. For instance, Gallar says you can extract from an OOP when the main predicate is an achievement (see also the contrasts in our examples (14) and (15) where we consider a verb like *retratar* as an accomplishment, which involves a process):

(28) a. La artista retrató al camaleón bañado en purpurina.
'The artist portrayed the chameleon bathed in glitter.
b. ¿En qué *retrató bañado* __ la artista al camaleón? (Gallar 2017: 156)

My analysis in (26) captures the same idea through the notion that there is a link at the edge of the constituent to which the participial secondary predicate is conjoined, which triggers a feature sharing operation. My analysis eschews the problematic question of event identification within syntax and makes recourse of established syntactic operations. Yet, these features may well be related to eventive properties.

4. The agreeing feature as a linker. The case of Tagalog[6]

Tagalog is, at least at the surface, a VSO language. In this language secondary predicates surface either at the beginning of the sentence, followed by the verb, as in(29a) and (30a), or, if the sentence starts with the verb, the secondary predicate appears following the name they predicate on, as in (29b) and (30b):

(29) The ambassador arrived nude (SOP)

a. *Hubad*	***na***	*dumating*	*ang*	*embahador.*
nude	LNK	arrived	NOM	ambassador
b. *Dumating*	*ang*	*embahador*	***na***	*hubad.*
arrived	NOM	ambassador	LNK	nude

(30) John sold the car (very much) used.

a. *Baldado* ***na***	*ibinenta*	*ni*	*John*	*ang*	*kotse.*	
(very)-used	LNK	sold	GEN	John	NOM	car
b. *Ibinenta*	*ni*	*John*	*ang*	*kotse*	***na***	*baldado.*
sold	GNK	John	NOM	car	LNK	(very-used

As seen in (29) and (30) Tagalog has a linking particle that appears in the context of modification (adjectival attributive modification, secondary predicates, adverbial modifiers, Noun-Noun modification). It surfaces as enclitic ***–ng*** on words ending in a vowel and as ***na*** elsewhere. When the adjectives are attributive predicates, i.e., they assign a property to a noun,

[6] The data in this section have been provided by Jennifer Tan Almazán, a linguist and a native speaker of Tagalog, to whom I am very grateful.

na (or -ng) is ungrammatical, as in (31b), as noted in the thorough study of Tagalog linkers developed by Scontras & Nicolae (2014):

(31) a. bahay *(na) maganda
house LK beautiful 'beautiful house'
b. Maganda (*-ng) ang bahay.
beautiful-LK S house 'The house is beautiful.'
(From Scontras & Nicolae 2014: 21)

As to (29)-(30), In a formal semantic analysis, Scontras & Nicolae (2014), following Rubin (1994), propose that the grammar supplies a functional head of type <et, <et, et >> that composes with two predicates and returns a single predicate denoting the intersection of both; this is a head that does the work of modification. For these authors this head in Tagalog is realized overtly as a linker. This is the basis for their assumption that this modification relation, which maps onto a specific syntactic structure: the phrase structure with the linker as a head, is what gives the required (compositional) semantic interpretation. Thus, it is not necessary to postulate a new compositional mechanism, as in other analyses, in addition to functional application.

At the moment, in a purely analogical window, I would like to suggest that these linkers are the overt expression of the relation between the secondary predicate and the verb which may impulse movement of YP to the edge of the phase where the linker is merged. Scontras and Nicolae (2014) suggest that these linkers may or may not have semantic content on their own. In some languages linkers may be affixes which incorporate to the verbal root (see (12) above), in Tagalog they surface overtly as independent particles, in other languages, maybe Spanish, they express through agreement features in the predicates which maintain a predication relation with a given N in the sentence. Chomsky's (2019) idea that adjunction generates a sequence which begins with some conjunction and contains elements, among them a unique Link L_1 (see (20) above), each of which is predicated of something, appears to make sense and be overt in the case of Tagalog.

5. Conclusions

In this short note I have developed a new analysis of secondary predication structures. Following Chomsky (2019) and Bošković (2020), among others, I have proposed, first, that adjunct secondary predicates start as members of a pair merged conjunction/ adjunction structure which is unlabeled. There are as many members of these pair merged phrases as modifiers in a sentence, and they are unbounded and unstructured. Pair merged structures are in principle opaque and non-sensible to syntactic operation. However, since they are semantically and syntactically conjoined phrases they have each a Link element. This Link merges at the edge of the phase at which the modifier is conjoined thus allowing extraction out of the opaque domain. I have illustrated all these properties and operations through a detailed analysis of Spanish secondary predicates. I have suggested that perhaps Tagalog expresses overtly these links.

REFERENCES

Borgonovo, C. & Neeleman, Ad. 2000. Transparent Adjuncts. *Canadian Journal of Linguistics* 45: 199-224.

Bošković, Ž. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45(1): 27–89.

Bošković, Ž. 2018. On movement out of moved elements, labels, and phases. *Linguistic Inquiry* 49(2): 247–282.

Bošković, Ž. 2020. On the coordinate structure constraint and the adjunct condition. In: A. Bárány, T. Biberauer, J. Douglas & S. Vikner (eds.) *Syntactic architecture and its consequences II. Between syntax and morphology*. Berlin: Language Science Press, 227-258.

Bowers, J. 1993. The syntax of predication. *Linguistic Inquiry* 24: 591–656.

Bruce, Les. 1984. *The Alamblak language of Papua New Guinea (East Sepik)*. Canberra: Pacific Linguistics.

Chomsky, N. 2004. Beyond explanatory adequacy. In: A. Belleti (ed.): *Structures and Beyond*. Oxford – New York: Oxford University Press, 104-131.

Chomsky, N. 2013. Problems of Projection. *Lingua* 130: 33-49.

Chomsky, N. 2019. The UCLA Lectures. Unpublished manuscript. University of Arizona / MIT.

Collins, C. 2017. Merge (X, Y) = {X, Y}. In: L. S. Bauke & A. Blümel (eds.), *Labels and roots*. Berlin: De Gruyter: 47–68.

Demonte, V. 1988. Remarks on secondary predicates: C-command, extraction and reanalysis. *The Linguistic Review*. 6: 1–39.

Demonte, V. 1991. Temporal and aspectual constraints on predicative APs. In: H. Campos & F. Martínez-Gil (eds.). *Current Studies in Spanish Linguistics*. Georgetown: Georgetown University Press, 165-200.

Gallar, C. 2017. Adjuntos: Ampliación del Dominio Local y Formación de Cadenas. Una propuesta basada en el movimiento lateral. Tesis doctoral. Universidad Complutense de Madrid / CSIC.

Hornstein, N. 2009. *A theory of syntax: Minimal operations and universal grammar*. Cambridge: Cambridge University Press.

Huang, C.T-J.1982. Logical relations in Chinese and the theory of grammar. Doctoral dissertation, Cambridge, Ma.: MIT

Irimia, M.-A. 2012. Secondary predicates. Doctoral dissertation. University of Toronto.

Mallén, E.1991. A syntactic analysis of secondary predication in Spanish. *Journal of Linguistics* 27: 375–403.

Maruta, T. 1995. The semantics of depictives. *English Linguistic Society of Japan: English Linguistics* 12: 125-146.

McNulty, E. M. 1988. The syntax of adjunct predicates. Doctoral Dissertation. University of Connecticut.

Napoli, Donna Jo. 1989. *Predication theory*. Cambridge: Cambridge University Press.

Nunes, J., & Uriagereka, J. 2000. Cyclicity and Extraction Domains. *Syntax* 3: 20–43.

Oseki, Y. 2015. Eliminating Pair-Merge. In: U. Steindl, T. Borer, H. Fang, A. García Pardo, P. Guekguezian, B. Hsu, Ch. O'Hara & I. Chuoying Ouyang (eds.), Proceedings of the 32nd West Coast Conference on Formal Linguistics. Somerville, MA: Cascadilla Proceedings Project, 303-312.

Rothstein, S. 1983. The syntactic forms of predication. Doctoral dissertation, MIT, Cambridge, MA.

Rothstein, S. 2001. *Predicates and their subjects*. Dordrecht: Kluwer.

Rubin, E.J., 1994. Modification: A Syntactic Analysis and its Consequences. Doctoral dissertation. Cornell University, Ithaca: NY.

Scontras, G. & Nicolae, A. C. 2014. Saturating syntax: Linkers and modification in Tagalog. Lingua 149: Special issue on *Modification at the interface*, ed. by E. Castroviejo & B. Gehrke: 17-33

Simpson, J. 1982. Secondary Predicates in English, Icelandic and Finnish, ma: MIT.

Song, C. 2020. Categorizing verb-internal modifiers. In: A. Bárány, T. Biberauer, J. Douglas & S. Vikner (eds.), *Syntactic architecture and its consequences I: Syntax inside the grammar*. Berlin: Language Science Press, 357–384.

Truswell, R. 2007. Extraction from adjuncts and the structure of events. *Lingua 117*: 1355-1377.

Truswell, R. 2011. *Events, phrases, and questions*. Oxford: Oxford University Press.

van der Auwera, Johan, & Andrej Malchucov. 2005. A semantic map for depictive adjectivals. In: N. Himmelmann & E. Schultze Berndt (eds.), *Secondary predication and adverbial modification,* Oxford: Oxford University Press, 393-421.

Williams, E. 1980. Predication. *Linguistic Inquiry* 11: 203-238.

Winkler, S. 1997. *Focus and secondary predication*. Berlin: Mouton de Gruyter.

You, E. 2016. Parallel derivation of Spanish depictive secondary predicates. *Linguistic Inquiry* 47 (4): 723–739