Syntax meets compositional semantics
Comments on Ramchand’s and Piñón’s papers

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1. Introduction

a) Ramchand’s proposal of a minimalist semantics.
b) Certain classes of verbs emerging as “natural classes”:
   ● Creation / consumption: there are additional variables modelling telicity in verbs with incremental themes as well as in degree achievements.
   ● Causative alternation verbs: the subclass expressing an extended path.
   ● Motion verbs are characterized in first phase syntax: the variable behaviour of verbs of directed motion and the typological differences among languages as to the way they encode direction and manner.
c) A possible implementation or application to the complex set of aspectual auxiliary verbs in Spanish will be very schematically analyzed in terms of their interactions with the eventuality descriptors in phase one.

2. Minimalist semantics and minimalist syntax

Ramchand’s (2009): Lexical items are not inserted under single terminal node but carry a set of “category features” and need to ‘multi-attach’ in structures such (1).

Syntactic representation of event decomposition:

(1)  
```
    initP (causing projection)
     /\                   /
    /  \                 /  \  
DP₁  initP  procP (process projection)
      /\             /  \   
DP₂  procP  resP (result projection)
        /\               /
       /  \             /  \  
      DP₃  resP  XP     
```

Minimalist: Two possible operations: the equivalent to external or regular merge and the equivalent to internal merge or move. This accounts for composite roles, which are generated making use of copy theory.

Not a locus for:
A) Relation between positions/roles and case marking (syntactic verb classes such as unaccusative or unergative and even transitive and intransitive) (2nd Phase).
B) The nature of Telicity.
3. Two natural classes of verbs. Homomorphism and certain differences among languages

3.1. The class of \([\text{initiator}_i, \text{undergoer}_i] + \text{a DP/PP rheme}\)

*Bake a cake, eat the mango, run to the store:*

\[(2)\]

- Why do some “creation” verbs (in contrast with consumption verbs) appear to have “multiple-class membership”?
- In the case of directed motion verbs, how does this system account for the fact that they have a variable behaviour depending on languages?

3.1.1. Two views of Incremental themes and change of state undergoers

(3) a. John baked a birthday cake.
   b. John baked the potato.

(4) a. Picasso painted *El Guernica*.
   b. John painted the wall.

(5)

\[(5)\]

(to be compared to (2))

Piñón (2008): “the basic gradable properties that underlie the semantics of verbs with an incremental theme are measure functions from ordinary individuals \(x\), descriptions \(O\), and events \(e\) to degrees” (2008: 203).

(6) \(\text{paint}_e(x)\) \((O), \(e)\) “the degree to which \(x\) qua type \(O\) is painted in \(e\)”

Gradual achievements have an additional “extent argument” (2008: 216):
(7) \[ VP \left[ \lambda \text{lengthen} \left( \lambda x \lambda O \lambda n \lambda d \lambda e \right) (x)(O)(n)(e) = d \right] \]

(8) a. Picasso pintó el Guernica en quince días / *durante 15 días.
   Picasso painted el Guernica in 15 days / for 15 days
b. Juan pintó la pared en una hora / durante una hora.
   Juan painted the wall in an hour / for an hour

3.1.2. Manner of motion verbs that have a directed-motion use.

A) Variable Behaviour. Dutch/ Italian

(9) a. dat Jan naar Groningen twee uur lang heeft gewandeld.
   that Jan to Groningen two hours long has walked
   ‘John walked in the direction to Groningen for two hours’
b. ?? dat Jan twee uur lang naar Groningen heeft gewandeld.
   that Jan two hours long to Groningen has walked
c. Maria a corso (fino a casa).
   ‘Maria has run (to the house)’

(10) a. dat Jan in twee uur naar Groningen is gewandeld.
    that Jan in two hours to Groningen is walked
    ‘John walked to Groningen in two hours’
b. Maria é corsa *(fino a casa)
   ‘Maria has run to the house’ [Ex. taken from Zubizarreta 2007: 2-3]

(11) A. Open PathP

\[
\text{pathP} \quad \text{pathP}
\]
\[
\text{path} \quad \text{DP} \quad \text{path} \quad \text{placeP} \quad \text{place} \quad \text{DP}
\]

(taken from Ramchand)

Question: why is there no unergative version of arrive without ResP.

B) Creation-directed activity verbs (Levin 2009: 6) carve, embroider, knit, sculpt, sew, spin, etc. Spanish grabar, bordar, tejer, esculpir, coser, hilar, etc.

(12) a. María bordó una rosa.
    Mary embroidered a rose.
b. Antonio esculpió una cabeza de Adonis.
    Antonio sculpted a head of Adonis
c. Jorge tejió una bufanda.
    Jorge knitted a scarf
(12') a. María bordó una rosa en el pañuelo / María bordó el pañuelo con una rosa.
   M. embroidered a rose on the handkerchief / M. embroidered the handkerchief
   with a rose
b. Antonio esculpió una cabeza de Adonis en la piedra / Antonio esculpió la
   piedra con una cabeza de Adonis.
   Antonio sculpted a head of Adonis on the stone / Antonio sculpted the stone
   with a head of Adonis

If we want to keep all creation verbs within the pattern \([\text{initiator}, \text{undergoer}] + \text{DP/PP}\)
rheme we can claim that the rheme can itself be a complex PP, similarly to ditransitive
constructions giving rise to DOC.

(13)
\[
\begin{array}{c}
\text{initP} \\
\text{Mary} \\
\text{init} \\
\text{sculpt} \\
\text{procP} \\
\text{a head} \\
\text{proc} \\
\langle\text{sculpt}\rangle \\
\text{resP} \\
\langle\text{a head}\rangle \\
\text{on} \\
\text{PP} \\
\langle\text{on}\rangle \\
\text{DP} \\
\langle\text{the stone}\rangle
\end{array}
\]

(14)
\[
\begin{array}{c}
\text{initP} \\
\text{Mary} \\
\text{init} \\
\text{sculpt} \\
\text{procP} \\
\text{[ ]} \\
\text{proc} \\
\langle\text{sculpt}\rangle \\
\text{resP} \\
\text{the stone} \\
\langle\text{sculpt}\rangle \\
\text{PP} \\
\text{P_{loc}} \\
\text{DP} \\
\langle\text{a head}\rangle
\end{array}
\]

3.2. The class of \([\text{initiator, undergoer}, \text{resultee}]\) and the causative alternation.

(15) \([\text{Voice [VP]}]\)

(16) \([\text{Voice [vCAUS [Root]]]}\),
(17) [x ACT <MANNER> ] CAUSE [BECOME [Y <STATE> ]] L&RH 1999

(18) a. The tree broke from the storm.
    b. The tree broke from the pressure.
    c. *The tree opened from Mary / from the saw.

3.2.1. The null initiator and the ‘throw’ class

(19) The class of melt: Init, Proc [([INITIATOR]i, UNDERGOERj]}

(20) The class of break: Init, Proc, Result [([INITIATOR]i, UNDERGOERj, RESULTEEj]

Transitive contact verbs:

(21) John threw the ball / *The ball threw.

(22) John broke the glasses in pieces.

(23) John threw the ball to the grass.

3.2.2. Resultative predicates in Romance

Resultative adjectival predicates, transitivization of manner of motion verbs, x-way constructions, etc. are not possible in Romance.

(24) Juan echó la ropa en la cesta.
    Juan threw the clothes to the basket.
    / lanzó la flecha a la azotea.
    threw the arrow to the roof.
    / arrojó a su amiga al precipicio.
    threw her friend to the precipice.

    b. Mary entered the house / *Mary entered into the house.

(26) a. Juan bailó /*a la pared.
    Juan danced to the wall.
    b. John danced into the room / away / his feet sore, etc.

Question: How can this typological difference be accounted for by the minimalist semantic approach?


Perífrasis verbales / Verbal Periphrases

A sentential complement is never possible.
(27)  a. Voy a trabajar / *a que trabaje  
      Lit. Go to work / to that I-work  
   b. I will work / *that Mary works,

Always admit clitic climbing.

(28)  Voy a hacerlo / Lo voy a hacer  
      Go to do CL / CL go to do

No lexical material can appear between these verbs and the non inflected form.

(29)  *Voy esta mañana a hablar de eventos  
      Go to this morning to talk about events

Types of aspectual verbs: inchoative, (iterative) durative and perfective.

(30)  **Infinitive**: take prep a “to” or prep de “of / from”.  
      (Soler, “use to” is the “iterative”, Venir a “come to” has an approximative value)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Infinitive</th>
<th>Prepositional use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ir</td>
<td>go</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Echar(se)</td>
<td>throw</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Ponerse</td>
<td>put to</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Romper</td>
<td>break</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Empezar</td>
<td>start</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Volver</td>
<td>come to</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Llegar</td>
<td>arrive to</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Acabar</td>
<td>finish of</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Dejar</td>
<td>stop/ quit of</td>
<td>“to” or “of / from”</td>
</tr>
</tbody>
</table>

**Gerund**

<table>
<thead>
<tr>
<th>Verb</th>
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<th>Prepositional use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ir</td>
<td>go</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Seguir</td>
<td>go on/ follow</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Andar</td>
<td>walk</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Llevar/Tener</td>
<td>take/have</td>
<td>“to” or “of / from”</td>
</tr>
</tbody>
</table>

**Participle**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Infinitive</th>
<th>Prepositional use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dejar</td>
<td>leave</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Tener</td>
<td>have</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Traer / Llevar</td>
<td>Bring/take</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Qedar</td>
<td>stay</td>
<td>“to” or “of / from”</td>
</tr>
<tr>
<td>Ir</td>
<td>go</td>
<td>“to” or “of / from”</td>
</tr>
</tbody>
</table>

Cases in which the same verb can realize different subparts of the event, depending on the inflected form:
(31)  

a. Los chicos van a leer el libro.

The boys go to read the book

‘The boys are going to read the book’

b. Los chicos van leyendo el libro.

The boys go to reading the book

‘The boys are progressively reading the book’

c. Van leídos tres libros.

Go read three books

‘Three books are already read’

HYPOTHESIS: Auxiliary movement verbs can be inserted in the heads Init, Proc or Res. As a consequence, they will be predicated of the initiator, the undergoer and/or the resultee.

This explains, for example, the contrast between gerundive forms with *ir* and *venir*. As we will see later *ir* plus gerund is used to modify the process expressed by the verb, in the sense that it is interpreted as taking place gradually or the causing subevent which is taken to have different instantiations. “Come”, on the other hand, is only used in iterative constructions affecting the process and thus, as expected, does not accept stative verbs:

(32)  

a. Voy diciendo la verdad.

I-go telling the truth

‘I tell the truth little by little / on stages’

b. Vengo diciendo la verdad (desde hace tres días).

I-come telling the truth

‘I keep on telling the truth’

c. *Viene temiendo a las tormentas.

He-comes fearing storms

d. *Le vienen gustando las espinacas. (vs. Le van gustando)

CL come liking spinach

4.1. A first set of data

The first group of auxiliaries (the ones which usually have been classified as inchoative): Inserted in Init.

Usually take the preposition a “to”:

(33)  

Empezamos a correr / trabajar / comer / crecer.

We-started to run / work / eat / grow

In the case of verbs that take a null initiator, they seem to combine with gradual achievements but not with verbs that take a result Phrase:

(34)  

a. *Juan empezó a nacer / morir.

Juan started to be born / dye

b. Los niños empezaron a engordar / adelgazar.

The children started to get fatter / get thinner
In general, this type of initiation oriented auxiliary verbs cannot affect predicates with a ResP (unless in the iterative interpretation). In other words, the “lead to” relation between ProcP and ResP is blocked:

(35)  a. ?*Empezamos a llegar a la fiesta.
       We started to arrive at the party
   b. ?*Empezamos a dejar en coche en el garaje
       We started to leave the car in the garage
   c. *Empezamos a encontrar las llaves
       We started to find the keys
   d. ??Empecé a entrar en la habitación
       I started to enter the room

Interestingly enough, this seems to be a question of taking a ResP, not to be telic, in view of:

(36)  a. Empezó a comerse la manzana.
       He started to eat the apple
   b. Empezó a escribir la novela.
       He started to write the novel

*Ir a* constitutes a special case, since it seems to be able to rise to the second phase and behave as a modal, so it combines with most classes of verbs:

(37)   Eso va a ser la gripe / Eso va a costar una fortuna
       This goes to be the flu / That goes to cost a fortune

Other initiation auxiliaries pose further lexical restrictions on the verbs they take. But they are also incompatible with ResP:

(38)   Echar a : Lit. “throw to” “abruptly start”
   a. Echó a volar /correr / andar.
      Lit. Threw to fly / run / walk
   b. *Echó a correr a/hasta la casa (vs. hacia).
      He threw to run to / until the house (vs. towards)

Cases such as *dejar de, parar de* (with the source preposition de) affect the process subevent. This can be seen by the fact that they do not appear with stative verbs, especially *parar*:

(39)   a. *Dejó de saber inglés.
       He stopped to know English
   b. *Paró de temer a las tormentas.
       He stopped fearing storms

Nevertheless these verbs can also adjoin to InitP, in which case we obtain readings similar to sentential negation:
(40)  a. Juan dejó de cantar.
    “Juan stopped (the action of) singing”
    “Juan is not a singer anymore”
  b. Ni creo ni dejo de creer.
    Not I relieve nor I stop believing
    ‘I do not believe and I do not fail to believe it’.

Since these verbs imply the interruption of the process subevent, there cannot be a “lead to” relation with respect to a realized resP either:

(41)  a. *Dejó de llegar a la fiesta.
    He- stopped of arrive at the party
  b. *Dejó de colgar en cuadro en la pared.
    He- stopped of hang the picture on the wall
  c. *Dejó de desaparecer.
    He- stopped of disappear
  d. *Dejó de tirar la pelota al agua / Encontrar el tesoro.
    He- stopped of throw the ball into the water / find the treasure

Again, this is not related to telicity:

(42)  Dejó de comerse la manzana / escribir la novela.
    He- stopped of eat the apple / write the novel

In contrast with this verb, acabar de is precisely oriented to the completion of the process. It has two meanings: to finish doing something and to have just done something. It is in this (real periphrastic) meaning that it is compatible with ResP:

(43)  Acabo de cantar (I just sang / I finish singing).
    Acabo de llegar a la fiesta (= I have just arrived / *I have finished arriving).

Periphrastic forms that take gerunds are basically generated in ProcP and are, as expected, incompatible with stative verbs:

(44)  a. Anda temiendo a las tormentas.
    He walks fearing storms
  b. Anda teniendo fiebre.
    He walks having a temperature

Again they are incompatible with ResP:

(45)  a. *Anda llegando a la fiesta.
    He walks arriving at the party
  b. *Sigue llegando a al fiesta.
    He keeps arriving at the party
  c. *Sigue tirando el palo al agua. (non iterative)
    He keeps throwing the stick into the water
  d. *Sigue encontrando el tesoro. (non iterative)
    He keeps finding the treasure
4.2. Ordering restrictions and adjunction

(46) a. Acabo de empezar / *Empiezo a acabar
   b. Acabo de ponerse a escribir / *Se ha puesto a acabar de escribir
   c. Volvió a echarse a llorar / *Se echó a volver a llorar
   d. Va a echar a correr / *Echa a ir a correr
   e. Dejó de empezar escribir / *empezó a dejar de escribir

(47) a. *Va yendo a escribirlo (vs. Va a ir escribiéndolo)
   b. *Sigue llegando a mentir / Llega a seguir mintiendo
   c. Empieza a seguir corriendo / *Sigue empezando a correr

(48) a. Empieza a quedar dicho / *queda empezado a decir
   b. Empieza a ir/ venir diciendo / *va/viene a empezando a decir

4.3. Some “scope” phenomena: The case of volver a “turn to”

It can affect the three subevents and thus the three participants:

(49) María volvió a plantar flores en el jardín.
    Maria turned to plant the flowers in the garden
    “María planted flowers the first time”
    “Someone else planted flowers the first time”
    “The flowers were in the garden”

(50) María volvió a dar el dinero a Juan.
    “María gave Juan the money before”
    “Someone else gave Juan the money before”
    “Juan already had the money”.

It is important that in the case of composite roles, the ambiguity is lost, as expected:

(51) a. María volvió a pintar la pared.
    María turned to paint the wall
   b. ??Juan volvió a pintar el Guernica.
    Juan turned to paint el Guernica

5. Basic references