The puzzle of inherently reflexive predicates: passives and auxiliaries

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THE PROBLEM. This talk discusses the nature of the compulsory *se* form of so-called inherently reflexive verbs in Spanish (1; Contreras and Rojas 1972, Masullo 1992, NGRAE 2009: §41.13), which semantically form a heterogeneous class whose common property is that in finite forms they cannot appear without a reflexive pronoun.

(1) *abalanzarse* 'rush toward', *apropiarse* 'appropriate', *adentrarse* 'go into', *afanarse* 'to toil', *arremolinarse* 'to gather around', *arrepentirse* 'to regret', *atreverse* 'to dare', *contonearse* 'to swagger', *desvivirse* 'to go out of one's way', *dignarse* 'to deign', *empecinarse* 'to insist', *fugarse* 'to escape', *jactarse* 'to boast', *mofarse* 'to mock', *repantigarse* 'to lean back', *ufanarse* 'to boast'

One previously unnoticed property of these verbs is that most of them allow *estar*-passives in Spanish, where the subject is the same one as in the finite version (2a); there are a few, however, that do not allow this periphrastic form (2b). Note that the *se*-form disappears in this passive in the acceptable passives (2a).

(2) a. X está {arrepentido / condolido / empecinado / adueñado / fugado / repantigado}
X is^{estar} regretted / pitied / poised / appropriated / escaped / leaned back}
b. *X está {abalanzado / contoneado / dignado / jactado / esforzado / pitorreado}
X is^{estar} rushed-toward / swagged / deigned / boasted / tried / mocked}

The existence of these contrasts poses two problems: (i) how can one capture the fact that *se*-pronouns are compulsory in finite forms, but not in (2a)?; (ii) how come the verbs in (2a) allow passives even though the subject there is identical to the subject in the finite form? Through the discussion of these two questions we hope to advance in our understanding of what *se*-forms are.

ANALYSIS 1. INHERENTLY-REFLEXIVE VERBS AS DEFECTIVE VERBS. The fact that a verb like *arrepentirse* 'regret' must have a *se*-form in finite forms, but no se-form in a participial construction makes it impossible to make a purely formal generalisation where the root *arrepent-* is only licensed in the context of the reflexive (along the lines of Harley 2014, Arregi & Nevins 2014), because then the root would not be licensed in (2a), where it is perfectly grammatical without a reflexive. Thus, here we explore a semantically based alternative, following the generalisation in (3).

(3) In inherently reflexive predicates, the verbal layer is defective and the reflexive is necessary in order to license the external argument of the verb.

That is: even though conceptually the root defines a theta role for the external argument, the verb lacks the formal features to license that argument, in contrast to a 'normal' non reflexive verb (4a). The reflexive form is introduced as a syntactic device to license the presence of the argument, explaining that it must agree in number and person with the external argument (4b).

(4) a. [vP **Juan** [v cantar$_i$ [VP t$_i$]]]
b. [seP **Juan**$_j$ [**se**$_j$ [vP v arrepentir$_i$ [VP t$_i$]]]

ANALYSIS 2. THE AUXILIARY IN PERIPHRASTIC FORMS. When the participle is used, note that an auxiliary is necessary. Our claim is that *se* is impossible in this context because here the auxiliary itself licenses the argument. We follow Camacho (2012) in the claim that *estar* is placed in AspP in Spanish.

(5) [AspP *Juan* [Asp estar [VP arrepentido]]]

Naturally, the present of this aspectual layer adds an additional meaning to the structure, as in the other cases where an auxiliary is used. This same licensing of the argument through aspect explains the existence of absolute participle structures like (6), on the assumption that they involve aspectual information additional to the participle.

(6) [CP arrepentido$_i$ [AspP Juan [Asp ø [VP t_i]]]

This proposal explains (i) why the *se*-form is banned in participles: the aspectual layer licenses the argument, making the *se*-form unnecessary; (ii) why the passive in (2a) does not change the subject, as the same argument is introduced in both cases, just changing the formal licensor; (iii) why the aspectual interpretation in the forms in (2a) is the one expected from *estar*-passives in Spanish –result state or ongoing state, cf. Fábregas & Marín (2017)–.

ANALYSIS 3. INHERENTLY-REFLEXIVE VERBS AS A HETEROGENEOUS CLASS. So what about the forms in (2b), why are they impossible in *estar*-passives. The core of the analysis is that the verbs in (2b) allow the licensing in (7a), but the licensing in (7b) is impossible given the semantic entailments associated to these roots, which are incompatible with the information added by the passive auxiliary.

(7) a. [seP **Juan$_j$** [**se$_j$** [vP v dignar$_i$ [VP t_i]]]
b. *[AspP *Juan* [Asp estar [VP dignado]]]

The inherently reflexive predicates that reject (7b) satisfy (at least) one of the following two conditions: they involve manner control from the part of the external argument (*dignarse* 'to deign', *abalanzarse* 'to rush toward'...) or they are atelic activity predicates (*pavonearse* 'to swagger', *portarse* 'to behave', *mofarse* 'to make fun of'...). These two properties make the entailments associated to the external argument incompatible with those of a passive (8a) and / or the interpretation of the verbal Aktionsart incompatible with the interpretation of the *estar*-passive (8b) in the general case.

(8) a. *Juan está nadado.
Juan is swum
b. #El carro está arrastrado.
the cart is dragged

CONSEQUENCES. Our analysis suggests that reflexive forms are default (=semantically minimal) devices to license arguments in situations where the verbal structure does not have the formal means to do it autonomously. This is in line with Kayne's (2010) view of *se*-forms as high functional projection associated to the Midfield, as items that interact with the argument structure of verbs.

Selected references. Contreras, H. & Rojas, J. N. (1972). Some remarks on Spanish clitics. *LI* // Arregi, K. & Nevins, A. 2014. A monoradical approach to some cases of disuppletion.

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Unergativity: New Insights from Ditransitives

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In this paper we propose that the unaccusative/unergative divide, which characterizes intransitive predicates, extends to (Russian) ditransitives. It has been argued that Russian ditransitives are a heterogeneous class, subdividing into three distinct groups based on their scope ambiguity/scope freezing distribution patterns in the sense of Larson 1990 (exemplified in (1-3)) (Antonyuk 2015). Groups 1 and 2 are shown to be a mirror image of each other in terms of scope behavior, with Group 1 being scopally ambiguous on ACC >> OBL order of internal arguments and scopally frozen on OBL >> ACC order (1); Group 2 shows the reverse pattern, with scope freezing resulting on ACC >> OBL order (2). Group 3 is different from Groups 1 and 2 in showing scope ambiguity on both possible orders of internal arguments (3).

It is further argued that differences in QP scope distribution are tracked by differences in VP-internal structure of the predicates and, importantly, that unlike with Groups 1/3, "direct objects" of Group 2 predicates are not true direct objects but low obliques generated inside a PP, with a silent P head marking the apparent "direct" object with lexical Accusative case. Group 2 ditransitives are thus effectively double oblique structures. Unaccusativity tests show that differences in QP scope are tracked almost perfectly by differences in direct object behavior: Groups 1 and 2, which are the mirror image of each other with respect to QP scope also show opposite behavior with respect to classic unaccusativity tests in Russian (Pesetsky 1982): thus Group 1 predicates take distributive *po-* (4) and Genitive of Negation (5) while Group 2 predicates categorically disallow both (6)-(7), suggesting that Group 1 verbs take true direct objects whereas Group 2 verbs do not.

We propose that Group 2 predicates' inability to take direct objects is not a quirky fact of Russian morphosyntax but instead reflects the relevance of unergativity to verbal domains more generally. This conclusion is supported by the stark contrasts between Group 1/3 ditransitives on the one hand and Group 2 verbs on the other, which consistently suggest that Group 2 apparent direct (Accusative-marked) objects have none of the properties true direct objects are expected to have. Consider, for instance, the distribution of resultative constructions, which are known to be a deep unaccusativity test in English in (8-10) (Levin and Rappaport Hovav 1995). Thus, while Group 1 predicates can participate in the formation of resultatives (8), Group 2 predicates predictably cannot (9). Group 3 predicates, which consistently pattern with Group 1 on all objecthood tests, also pattern with Group 1 with respect to the resultative formation test (10), suggesting their direct objects are indeed marked with structural Accusative case. The crucial role of the direct object in this construction is underscored by the fact that omitting the object in (8-10) yields the exact opposite grammaticality results: thus, **Maša dotrebovalas'* (Group 1) and **Maša dopisalas'* (Group 3) are not grammatical expressions without the direct object, while *Maša doobzivalas'* (Group 2), which is ungrammatical in (9) with the "direct object", is a perfectly coherent statement when used alone, meaning that Masha got herself in some sort of trouble for being a name-caller. The same conclusion is reached on the basis of *pere-* prefixation, middle formation and nominalization tests (not shown here), which are all allowed with most Group 1/3 and disallowed with most Group 2 verbs. However, the inability of purported 'unergative ditransitives' to take a direct object is only suggestive of unergativity if they also differ consistently from argued 'ditransitive unaccusatives' with respect to their external arguments, such that alternations *John passed the plate to Mary/**The plate** passed __ to Mary* with object-to-subject raising would be possible for the latter but not for the former. This prediction is correct (cf. (11) and (12)-(13)). The contrast between (12) and (13) is telling: it shows that the objects of these 'unergatives', if grammatical when raised, cannot be interpreted as derived subjects, only as "deep" ones. If the proposal is correct, it raises a number of interesting

questions, i.e., the semantic properties of roots resulting in the formation of 'unergative' ditransitives, etc. It also provides strong evidence against transitive analyses of unergatives.

(1) a. Maša našla [kakuju-to knigu] (každomu studentu) **Group 1**
Masha found [some book]$_{ACC}$ [every student]$_{DAT}$
'Masha found some book for every student' (∃ > ∀), (∀ > ∃)

b. Maša našla (kakomu-to studentu) [každuju knigu]
Masha found [some student]$_{DAT}$ [every book]$_{ACC}$
'Masha found some student every book' (∃ > ∀), *(∀ > ∃)

(2) a. Maša obeskuražila (kakim-to postupkom)[každogo opponenta] **Group 2**
Masha discouraged [some act]$_{INSTR}$ [every opponent]$_{ACC}$
'Masha discouraged with some act every opponent' (∃ > ∀), (∀ > ∃)

b. Maša obeskuražila [kakogo-to opponenta] (každym postupkom)
Masha discouraged [some opponent]$_{ACC}$ [every act]$_{INSTR}$
'Masha discouraged some opponent with every act' (∃ > ∀), *(∀ > ∃)

(3) a. Maša napisala [kakoj-to slogan] [na [každoj stene]] **Group 3**
Masha wrote [some slogan]$_{ACC}$ [PP on [every wall]$_{PREP}$]
'Masha wrote some slogan on every wall' (∃ > ∀), (∀ > ∃)

b. Maša napisala [na [kakoj-to stene]] [každyj slogan]
Masha wrote [PP on [some wall]$_{PREP}$] [every slogan]$_{ACC}$
'Masha wrote on some wall every slogan' (∃ > ∀), (∀ > ∃)

(4) √ Maša našla [**po** knige] [každomu studentu] **Group 1**
Masha found [**po** document]$_{DAT}$ [each student]$_{DAT}$ **Distributive *po***
'Masha found one book (each) for every student' **Distributive *po***

(5) √ Maša ne našla fotografii/služanki
Masha not find photograph$_{\mathbf{GEN}}$/maid$_{\mathbf{GEN}}$ **Genitive of Negation**
'Masha did not find a photograph/a maid'

(6) *Maša obeskuražila [**po** opponentu] [každym postupkom] **Group 2:**
Masha discouraged [**po** opponent]$_{DAT}$ [every act]$_{INSTR}$ **Distributive *po***
'Masha called each boy by a nickname'

(7) *Maša ne obeskuražila služanki/opponenta **Genitive of Negation**
Masha not discourage$_{PST}$ maid$_{\mathbf{GEN}}$/opponent$_{\mathbf{GEN}}$
'Masha did not discourage a maid/an opponent'

(8) Maša dotrebovalas' povyšenija (do togo, čto ee uvolili s raboty) **Group 1**
Masha DO-demand-REFL promotion$_{\mathbf{GEN}}$ (until that her fired from work)
'Masha demanded a promotion to the point of getting herself fired'

(9) *Maša doobzivalas' mal'chikov (do togo, čto proslyla zljukoj) **Group 2**
Masha DO-call.nicknames-REFL boys$_{\mathbf{GEN}}$ (until that became.known [shrew]$_{\mathbf{INSTR}}$)
'Masha kept calling boys nicknames to the point of becoming known as a shrew'

(10) Maša dopisalas' sloganov (do togo, čto ee stil' načali uznavat') **Group 3**
Masha DO-write-REFL slogans$_{\mathbf{GEN}}$ (until that her style became recognizable)
'Masha wrote so many slogans that her style became recognizable'

(11) √Kakaja-to kniga našlas' každomu studentu (cf. (1)) **Group 1**

(12) *Kakoj-to opponent obeskuražilsja každym postupkom (cf. (2)) **Group 2**

(13) a. Maša pobryzgala [kakuju-to klientku] [každymi duxami] **Group 2**
Masha$_{NOM}$ sprayed [some client]$_{ACC}$ [every perfume]$_{INSTR}$
'Masha sprayed some client with every perfume' (∃ > ∀), *(∀ > ∃)

b. [Kakaja-to klientka] pobryzgalas' duxami.
[Some client]$_{NOM}$ sprayed$_{REFL}$ perfume. 'Some client sprayed herself with perfume'

Unergative *v*P, transitive VoiceP: two types of external argument

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1. Background. The Split-VP hypothesis (Chomsky, 1995; Kratzer, 1996; Marantz, 1997, i.a.) posits that both transitive and unergative subjects are base-generated outside of VP, in the specifier of *v*P, and are both assigned their theta-role (e.g., agent) by v^0. Much recent work, however, has drawn a distinction between the verbalizing *v* head, and a higher Voice head, which is responsible for introducing the agent argument (e.g., Pylkkänen 2002, Alexiadou et al. 2006, Harley 2013, Legate 2014). Building upon this approach, this paper argues in favour of a non-unified treatment of unergative and transitive subjects (cf. Massam, 2009), whereby subjects of unergative verbs are merged in the specifier of *v*P, while subjects of transitive verbs are merged in the specifier of a higher VoiceP. I present evidence from two unrelated language (families) – Algonquian, and Samoan (Polynesian) - which strongly indicates that unergatives in these languages lack the full phrasal structure associated with transitives.

2. Unergatives in Algonquian. Algonquian verb stems minimally consist of a root + a verbalizing FINAL, which carries light verb meaning and determines transitivity of the stem (1a-c). Finals are commonly analysed in Algonquian literature as *v* heads (Bruening 2001, Brittain 2003, among many others). Transitive verbs also comprise an additional suffix known as a THEME SIGN (2a). This suffix is the locus of passive marking and object agreement, and is consistently absent from unaccusatives (2b). Given these properties, the theme sign is treated as an instantiation of Voice^0 (Bruening 2005, Oxford 2014). Crucially however, unergatives lack a theme sign (3a), even when a cognate object is present (3b; notice the obviation marker, which indicates that the object is indeed fully integrated in the clausal morphosyntax). This indicates that VoiceP is absent from unergatives *even when the structure is overtly transitive*.

3. Unergatives in Samoan. Samoan is a VSO dependent-marking ergative-absolutive language, in which transitive subjects are marked ergative (4a), and unergative subjects (like unaccusative subjects) are absolutive (4b). Samoan ergative case is argued to be assigned inherently by Voice^0 to the external argument in its specifier (Collins 2013, Tollan to appear). If unergatives pattern with transitives (the sole structural difference between (4a) and (4b) being the absence of an object in (4b)), transitivization of an unergative via addition of an object should restore ergative case marking on the subject. However, it does not (4c): the subject retains absolutive case, and the object is marked with *i* (argued in Tollan (to appear) to be accusative case, based on several diagnostics). This contrast parallels the Algonquian UNERGATIVE + OBJECT construction in (3b): just as a theme sign is absent from a transitivized Algonquian unergative, ergative case is also absent in a transitivized Samoan unergative. It follows that neither theme signs not ergative case can be solely attributed to the presence of an object; rather, they are both reflexes of VoiceP, which unergatives lack.

4. Distinguishing unergative and transitive subjects. Following Massam (2009), I argue that external arguments are introduced in one of two VP-external projections: unergative subjects constitute *low agents*, or semi-agentive 'doer' arguments, while transitive subjects are *high agents*, encompassing additional semantic properties associated with more potent agentivity, such as effect upon another entity, triggering a change in state, and conclusion of an event. These additional event properties correspond to additional VoiceP structure, which is absent from unergative constructions.

5. The typological space. The conclusion that Algonquian and Samoan unergatives lack VoiceP raises questions regarding the typological possibilities. A strong claim (which I do not make) is that unergatives are structurally distinct from transitives in *all* languages. However, there are at least two conceivable alternatives. One possibility is for a language to exhibit a split *v*/Voice structure in which both unergative low agents and transitive high agents are merged in VoiceP (cf. Legate 2014, a.o.). Finally, *v* and Voice may in some languages be

bundled as a single thematic head, which introduces all external arguments (e.g., western dialects of Basque, in which unergative subjects bear ergative case).

Examples

(1) a. *miyosi-*
miyw **-isi**
good **-be**INTRANS
'To be good'

b. *miyopayi-*
miyw **-payi**
good **-go**INTRANS
'To go well'

c. *miyon-*
miyw **-in**
good **-hold**TRANS
'To hold X well'
(Wolfart, 1973)

(2) a. *miyonamw*
miyo-n **-am** -w
good-hold **-IN.OBJ** -3SG
'She holds it well'

b. *miyosi(*am)w*
miyo-si **(*-am)** -w
good-be **(-IN.OBJ)** -3SG
'She is good' (Wolfart, 1973)

(3) a. *niimi(*am)w*
niim-i **(*-am)** -w
dance-do **(-IN.OBJ)** -3SG
'She's dancing'

b. *niimi(*am)w niimiwinini*
niim-i **(*-am)** -w niimiwin-ini
dance-do **(-IN.OBJ)** -3sg dance.N-OBV
'She's dancing a dance'
(Tollan & Oxford to appear)

(4) a. Sā kiki **[e le teine] [le polo]**
PAST kick **ERG DET girl DET ball.ABS**
'The girl kicked the ball'

b. Sā siva **[le teine]**
PAST dance **DET girl.ABS**
'The girl danced'

c. Sā siva **[le teine] [i le siva]**
PAST dance **DET girl.ABS ACC DET dance**
'The girl danced a dance' (author's notes)

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An unergative Voice morpheme: Yucatec Maya *-n*

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Many Mayan languages have a verbal morpheme, *–(V)n*, that has evolved from Proto-Mayan agent focus morphology (Smith-Stark 1978) and appears synchronically in distinct intransitive environments across the language family, notably agent focus and antipassive constructions (Coon et. al. 2014, a.o.). In Yucatec Maya (YM), *-n* appears obligatorily in perfective aspect and irrealis/imperative mood on the following sets of intransitive verb stems (Vapnarsky & Lois 2003; Bohnemeyer 2004, a.o).

(1) a. Agentive activities: *meyaj* (work), *óok'ot* (dance), *síit'* (jump), *ts'íib* (write)
b. Antipassives: *jaats'* (hit), *koonol* (sell), *ilaj* (see)
c. Non-agentive processes: *júuy* (shake/stir), *balak'* (roll), *tsíirin* (buzz)
d. Stems formed with *-bal*: *úumbal* (rock), *léembal* (flash/glitter)
e. Stems formed with *-áankil*: *looláankil* (flower/bloom), *itsláankil* (ooze)
f. Compounds: *ch'ak-che'* (chop-wood), *níich'-koj* (bare-teeth), *xok-chuy* (cross-stitch)
g. Spanish loans: *probar* (try), *visitar* (visit), *ganar* (win)

The set of verbs in (1) contrasts with other intransitive stems marked with different morphemes in the same environments. Since there are no known syntactic differences exhibited by intransitive subjects of the distinct morphological classes (i.e. extraction asymmetries), the question raised by the YM data is if the morphology that formally divides intransitive verbs into groups is representative of distinct argument/event structure configurations. In this paper, I answer this question affirmatively, proposing that *-n* is an unergative Voice morpheme. I formalize the proposal using Alexiadou, Anagnostopoulou & Schäfer (2015) and Wood (2015) as my point of departure. In these works, it is proposed that Voice heads have three properties: (i) C-selection, (ii) S-selection and (iii) Case. These properties are often correlated but they may vary independently of one another. I propose that *-n* is the exponent of an unergative Voice head that C-selects a specifier (= a D feature), has thematic content (= it is marked as θ) but lacks Case-assigning properties (= no ϕ features), as in (2).

(2) a. $[_{TP}\ T\ [_{VoiceP}\ [_{DP}\ ARG]\ \mathbf{Voice}_{\{\mathbf{D},\ \boldsymbol{\theta}\}}\ [_{VP}\ V\ \ldots\ ]]]$
b. *-n* ↔ $\text{Voice}_{\{D,\ \theta\}}$

Evidence from thematic interpretation: If the proposal in (2) is on the right track, we should be able to motivate the existence of a unified thematic interpretation for the argument DP that appears in this particular configuration. An apparent problem arises in that the verbs (1a,b,f,g) have agents while those in (1c,d,e) may not have them. This can be most easily observed in transitivity alternations: transitive uses of the roots in (1a,b,f,g) involve the addition of a theme (3a) while some transitive uses of the roots in (1c,d,e) involve the addition of an external causer (3b – Bohnemeyer 2004).

(3)

Intransitive (*-n*-marked)	Transitive
a. (J) ts'íib-n-aj-ech	T-a ts'íib-t-aj-Ø
PRFV write-INTR-ASP-ABS2	PRFV-ERG2 write-TR-ASP-ABS3
'You wrote'	'You wrote it'
b. Le boola-o' (j) balak'-n-aj-ij	T-in balak'-t-aj-Ø le boola-o'
DEF ball-DIST PRFV roll-INTR-ASP-ABS3	PRFV-ERG1 roll-TR-ASP-ABS3 DEF ball-DIST
'The ball rolled'	'I rolled the ball'

Bohnemeyer (2004) claims that the contrasting patterns in (3) are a death knell both for applications of configurational approaches to argument structure and any type of analysis that associates *-n* with

unergativity. However, there are both language-internal and cross-linguistic reasons for reconsidering this conclusion: **(i)** the vast majority of verb stems marked with *-n* have transitivity alternations of the type in (3a) while the pattern in (3b) is relatively rare, limited to a handful of verbs that cluster around similar meanings (non-agentive manner of motion, sound and substance emission), **(ii)** the lexical semantic classes associated with the verbs in group (1c,d,e), which lack change of state/location entailments (Bohnemeyer 2004), show variable behavior cross-linguistically with respect unaccusativity diagnostics (see Sorace 2000) and **(iii)** a similar class of verb roots in English (i.e. *buzz, ring, rattle, shake*) has been argued to present mixed properties in that they pattern as unergative (internally-caused) verbs when used intransitively and that they pattern like transitivized unaccusatives (externally-caused) verbs when used transitively (Levin & Rappaport Hovav 1995: 110-119). Taking these observations into consideration, I propose that the lack of agentivity across the entire class of verbs in (1) is accounted for by implementing the proposal that the thematic content of Voice in (2a) is calculated at LF based on what the conceptual content of its complement is (Marantz 1984 and subsequent work). In the case of unergative verbs in YM, an AGENT role is assigned in (1a,b,f,g) while a role more aptly named SOURCE/EMITTER is assigned in (1c,d,e). The latter role applies to entities that are the source of a repetitive motion or emission of sound/substance that do not undergo a change of state or location.

Case and the surface realization of unergativity in other Mayan languages: An important consequence of the proposal in (2) is that it represents an additional formal strategy for the expression of unergativity within the Cholan and Yucatecan branches of the Mayan language family. Coon (2013) has argued that there are three basic configurations in which a verb stem in Chol may be integrated into a clause, and her proposal transfers nicely to the Yucatecan language Mopan (see Danzinger 1996). What is striking about (4) is that there are no unergative verbs in these languages. Predicates that correspond cross-linguistically to unergative verbs surface either as transitive expressions built with the light verb *do* as in (5a) (= configuration 4a) or as nominalizations as in (5b) (= configuration 4c).

(4)

(erg) (abs)

a. $[_{TP}\ T\ \ [_{VoiceP}\ [_{DP}\ ARG]\ \ Voice_{\{D,\ \theta\}\ [\phi]}\ [_{VP}\ V\ [_{DP}\ ARG\ ]\ ]\ ]$ (Transitive)

(abs)

b. $[_{TP}\ T_{[\phi]}\ \ [_{VoiceP}\ Voice_{\{\emptyset,\emptyset\}}\ [_{VP}\ V\ [_{DP}\ ARG\ ]\ ]\ ]$ (Intransitive – unaccusative)

(gen)

c. $[_{PossP}\ [_{DP}\ ARG\ ]\ Poss\ [_{nP}\ n\ [_{VP}\ V\ ]\ ]\ ]$ (Nominalization)

(5)

a. CHOL – Coon (2013: 68)
Tyi a-cha`l-e ts'ijb
PRFV ERG2-do-TR write
'You wrote' (Lit. You did writing')

b. MOPAN – Danzinger (1996: 395)
Uch-Ø-ij in-lox
occur-INTR.PRFV-ABS3 GEN1-fight
'I fought' (Lit. 'My fighting happened')

If on the right track, my proposal calls for a fourth type of configuration (= 2a), available in YM but not Chol or Mopan, in which an argument of Voice enters an AGREE relation with T and receives absolutive case.

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Impossible Accusatives

The loss of the Middle morphology in Late Latin and its consequences on case marking

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The issue. This work investigates the relationship between the morphosyntactic component and the categorization of the lexical-encyclopedic items. I analyze the consequences of the loss of the Middle morphology in Late and Medieval Latin on the categorization of the autocausative verbs with an Accusative argument (Pinkster 2015; e.g., *ordior* 'I put myself in order with respect to x' → 'I weave x'' (1)). All these verbs undergo a reanalysis as monoeventive verbs in Medieval Latin. None of them survives as an autocausative in the Romance languages. I propose to link this recategorization to a case-assignment issue: in absence of the Middle morphology, the structural position in which the Accusative argument acquires Accusative case in Classical Latin is not accessible anymore to Accusative marking. In order to save the Accusative marking of the argument, the structure is reanalyzed as monoeventive.

Preliminary concepts. Argument structure: sequential merge of syntactic heads, e.g., v-do°→controlled dynamicity (Cuervo 2014), Place°→stative predication (Acedo-Matellán & Mateu 2013, following the Localist hypothesis; Jackendoff 1983). Each head is related to the introduction of an argument by means of a +D selectional feature: v-do°→DOER, v-be°→HOLDER (for a complete proposal see Wood & Marantz 2017). The Middle morphology is the morphological output of a deactivated +D feature (Ø)→syntactic absence of an argument. Structural case (Nominative and Accusative in Latin) is assigned my means of a "default/dependent case" mechanism depending on the valuation of the uφ features of the phase head of the vP (Spathas et al. 2015), see (2).

Data. The verbs on issue have a consistent set of characteristics in Classical Latin: Middle morphology, a Nominative argument and an optional (but frequent) Accusative argument (1). In the Medieval period, all these verbs maintain both the Nominative and the Accusative argument but start appearing with the Active morphology (3).

Analysis. The Classical Latin structure is bieventive and is exemplified in (4). The Nominative DP is the subject of PlaceP, where it acquires the relevant characteristics related to the √. The optional Accusative DP is the complement of the state; it provides the state with boundaries (building on the concept of measurer, Marantz 2005). The Middle morphology signals that the subject of the v-doP, the DOER, is syntactically absent and semantically existential (5). This semantically existential DOER is contextually identified with the Nominative argument (see Spathas et al. 2015 for the same mechanism applied to Middle-marked reflexives in Modern Greek). Given (3) and the fact that there are only two syntactically projected DPs, the assignment of Nominative and Accusative case is predictable.

In the passage between Latin and Romance languages, the Middle morphology disappears. In the autocausative structures on issue, the Middle morphology allows for the assignment of two ROLES to a single referential argument. There are two syntactic mechanisms that substitute for this function of the Middle morphology in Medieval Latin and, subsequently, in the Romance languages: the merging of a referentially null pronoun (SE) and the movement of the DP argument from the low stative position to the higher dynamic one. The key point is that, both in the SE-marked structure and in the "movement" structure, all the argumental positions are filled, meaning that (6) and (7) have three syntactic arguments, while (4) had only one syntactic argument. Given (3), DP_3 cannot take Accusative case, which has already been absorbed by the SE pronoun in (6) and by the copy of DP_1 in (7). In order to maintain the Accusative marking, the structure is reanalyzed as monoeventive (8). This reanalysis

implies a general change in the lexical/encyclopedic meaning of the √: e.g., in Classical Latin *ordior aliquid* means 'I act so that I am ordered with respect to something', in Medieval Latin and subsequently *ordio aliquid* means 'I weave something', the √ loses the stative-related meaning.

(1) *Machinam ordiris novam* (Pacuv. *Trag*. 379)
machinery.ACC weave.2ND.SG.PRS.MID new.ACC.SG
'You come up with a new machinery.'

(2)
a) A DP is realized at PF with dependent Case (Accusative) if a different DP has valued the accessible phase head via AGREE.
b) A DP that is not realized with dependent Case appears with default Case (Nominative).
c) Inherent/lexical Case takes precedence over default and dependent Case.

(3) *Hanc telam ordisse perhibent* (Isid. *Etym*. 19, 20, 1)
this.ACC.SG web.ACC weave.INF.PRF.ACT tell.3RD.PL.PRS.ACT
'They tell that he weaved this web.'

(4) $[_{\text{v-doP}}$ v-do$^{\circ\varnothing}$ $[_{\text{PlaceP}}$ $[\text{DP}_{1 \rightarrow \text{Nom}}]$ Place$^{\circ+D}$ $[\text{DP}_{2 \rightarrow \text{Acc}}]]]$

(5) {[[λe∃x. DOER (x,e)]]; Ø}

(6) $[_{\text{v-doP}}$ $[\text{DP}_{1 \rightarrow \text{Nom}}]$ v-do$^{\circ+D}$ $[_{\text{PlaceP}}$ $[\text{DP}_{\text{SE} \rightarrow \text{Acc}}]$ Place$^{\circ+D}$ $[\text{DP}_{3 \rightarrow *\text{Acc}}]]]$

(7) $[_{\text{v-doP}}$ $[\text{DP}_{1 \rightarrow \text{Nom}}]$ v-do$^{\circ+D}$ $[_{\text{PlaceP}}$ $[\sout{\text{DP}}_{\sout{1} \rightarrow \text{Acc}}]$ Place$^{\circ+D}$ $[\text{DP}_{3 \rightarrow *\text{Acc}}]]]$

(8) $[_{\text{v-doP}}$ $[\text{DP}_{1 \rightarrow \text{Nom}}]$ v-do$^{\circ+D}$ $[\text{DP}_{2 \rightarrow \text{Acc}}]]$

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Bodies, motion, and the semantic content of unergative Roots

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Introduction On contemporary Root-based approaches to argument structure such as those associated with Borer (2005), Marantz (1997), *inter alia*, verbs lack the types of selectional or projectional properties which, in previous approaches, explained the distribution of verbs and their arguments. This new landscape makes relevant the question of what types of meanings Roots have inherently (if any), and, if Roots do have meaning, how that meaning interacts with interpreted structure (Embick 2009, Marantz 2013). Using a methodology similar in spirit to that of Beavers and Koontz-Garboden (2017), this paper shows that a core semantic distinction—the alienable/inalienable distinction—plays a role in constraining the interpretation of Roots in unergative sentences.

The puzzle: Root meanings in contexts. The Roots $\sqrt{\text{DANCE}}$ and $\sqrt{\text{SMILE}}$ pattern similarly in standard diagnostics for English unergative structures: both allow cognate objects (1), and both occur productively in the *way* construction (2)–(3). In the cognate object sentences with $\sqrt{\text{DANCE}}$ and $\sqrt{\text{SMILE}}$, something—either a "dance" or a "smile"—can be said to be produced by the activity. And both of the *way* sentences in (2)–(3) have an object that is interpreted as path that is metaphorically co-referential with the subject of each sentence, as shown in the paraphrases for these sentences (Marantz, 1992). Both (1) and (3) are typically analyzed as involving a small clause structure, and their interpretations are unsurprising. However, when $\sqrt{\text{DANCE}}$ and $\sqrt{\text{SMILE}}$ occur in a structure with just the simple directed motion PP *into the room* as in (4)–(5), there is a sharp asymmetry in how the sentences with each Root is interpreted: The sentence with $\sqrt{\text{DANCE}}$ conveys that John—the totality of his body—changes location from outside the room to inside the room (4). When the Root is $\sqrt{\text{SMILE}}$, on the other hand, the interpretation is that John remains outside the room (5)—his body does not enter the room—and the change of location is metaphorical such that the visual image of this smile appears to those in the room (or is directed toward the room). Why can't the sentence with $\sqrt{\text{DANCE}}$ in (4) mean that John remained outside the room while the visual image of his dancing event was directed toward the room—like the $\sqrt{\text{SMILE}}$ sentence does? And why can't the sentence with $\sqrt{\text{SMILE}}$ in (5) mean that the totality of John's body entered the room as he engaged in a smiling activity? Putting these roots in a structure without a small clause but with a directed motion PP provides a context which allows us to see the emergence of the Root meanings that constrain VP interpretations. In the case of $\sqrt{\text{DANCE}}$ and $\sqrt{\text{SMILE}}$, the aspect of Root meaning concerns the body parts that each Root implicates.

Analysis: Bodies, motion, and location. The first part of our analysis argues that a core element of $\sqrt{\text{SMILE}}$ in the English Encyclopedia is that smiling activities involve movement of an inalienable body part—the face/mouth. The only change of location that can be construed as happening in (5) therefore is one in which something is created by the relevant body part (and an image of it is seen). Dancing events, by contrast, implicate whole bodies so that a sentence like (4) must be construed as an event in which the initiator's whole body undergoes a change of location. In a sentence that implicates a specific body part in a dancing event, the meaning of the Root becomes metaphorical; (6) conveys not rhythmic movement of a body to music but an abstract, artful motion. We note that although (4) is ambiguous between an interpretation in which John's dancing propels his body into the room—as in a figure-reflexive pP with a silent Figure—and a somewhat far-fetched interpretation in which John is pulled into the room while he is dancing on a cart, in both cases his entire body enters the room. The second and more speculative part of our analysis

discusses *why* it is that Root meaning asserts itself in the simple directed motion cases like (4) and (5) but is neutralized in cases when the structure has a SC subject and predicate; we speculate that this asymmetry results from the locality of the Root with respect to the arguments that denote the participants in the event.

Examples

(1) John danced a silly dance/smiled a silly smile.

(2) John danced his way to Broadway.
⇝ John's dancing talent led him on a metaphorical path from being off-Broadway to being on Broadway.

(3) John smiled his way to a modeling contract.
⇝ John's smiling talent led him on a metaphorical path from not-having to having a modeling contract.

(4) John danced into the room. ⇝ *John's body entered the room*
⇝ *#John remained outside the room*

(5) John smiled into the room. ⇝ *#John's body entered the room*
⇝ *John remained outside the room*

(6) The stylist's hands danced through the lady's hair.

(7) John danced [HIMSELF into the room]

(8) # John smiled [HIMSELF into the room]

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Talking about the Weather: Two Construals of Precipitation Events in English

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Weather expressions such as *It is raining* have proven challenging; languages show considerable variation in how they encode such events (Eriksen et al., 2012). In Romance languages in particular, there has been controversy over whether verbs denoting weather events are unergative or unaccusative (Benincà & Cinque, 1992; Bleotu, 2013; Meulleman & Stockman, 2013; Ruwet, 1991). We show that verbs denoting precipitation events in English (*rain, snow, hail*) pose the same challenge, and we offer an analysis that explains their apparent hybrid nature. We argue that the unergative/unaccusative behaviors of these English verbs arise from the availability of two distinct event structures, which in turn reflect the availability of two different construals (in the sense of Levin & Rappaport Hovav (2005)) of precipitation happenings. English precipitation events may be construed as **substance emission events** (1) or **directed motion events** (2), leading to their variable unergative/unaccusative behaviors.

Substance Emission: As a preliminary, we argue that the *it* in (1b) is not a true expletive but a (quasi-)argument (Chomsky, 1981; cf. Pesetsky, 1995); weather-*it* has different syntactic and semantic properties from true expletive *it* (of raising verbs). If we take *it* to be the source of the precipitation, then similarities emerge between precipitation verbs and substance emission verbs (*gush, ooze, drip*). Substance emission verbs take two arguments, a source (or emitter) and a substance (the emitted element). Both substance emission and precipitation verbs can appear with the source as the subject (3) or with the substance as the subject (4). When substance emission verbs take a source subject (3a), they are understood as internally caused activity verbs, and they correspondingly behave as unergatives (Levin & Rappaport Hovav, 1995): they appear optionally with objects (not necessarily cognate objects) (1a), may take a fake reflexive or non-selected object in resultatives (5a), do not show the causative alternation (6a), lack adjectival passive participles predicated of the source (7a), and do not allow *there*-insertion (8a). In parallel, when *it* is the subject of a precipitation verb, the verb behaves as an unergative with respect to the same diagnostics (1b, 5b, 6b, 7b, 8b). The analogous behavior of these verbs supports the idea that precipitation events may be construed as emission events.

Directed Motion: Next, we argue that the substance as subject uses (9), which occur with an obligatory directional prepositional phrase, instantiate directed motion events. Such events involve a participant moving in a particular direction. With a substance emission verb (9a), the force of emission causes directed motion of the emitted substance; with a precipitation verb (9b), the precipitation moves from the sky to the ground. Directed motion verbs, as the purest expression of directed motion events, are unaccusative (Levin & Rappaport Hovav, 1995). Analogously, when emission verbs and precipitation verbs take the substance as subject, they also behave as unaccusatives according to the diagnostics used above—disallowing resultatives (11), allowing adjectival passive participles predicated of the substance (12), and allowing *there*-insertion (13). Unlike many unaccusative verbs, directed motion verbs stand out in disallowing causativization; emission and precipitation verbs share this exceptionality (14). The unaccusative behavior of the substance as subject uses is part of a larger phenomenon: manner of motion verbs and sound verbs, which are known to instantiate directed motion events in the presence of a directional PP, as in (10), also then behave as unaccusative. (This contrasts with unergative behavior in their activity uses.)

Crosslinguistic Applicability: Our analysis of English precipitation events helps resolve the controversy over the status of weather verbs in Romance languages: when precipitation verbs show unaccusative behavior, they show the hallmarks of a directed motion event structure, and when they show unergative behavior, they pattern as activities (Benincà & Cinque, 1992). More broadly, precipitation verbs further support the association of activities with unergative behavior and of directed motion (or scalar change in general) with unaccusative behavior.

(1) SUBSTANCE EMISSION EVENT
   a. The well gushed (oil).
   b. It rained (a light rain/sulfuric acid).

(2) DIRECTED MOTION EVENT
   a. An apple fell on the ground.
   b. A light rain rained on my head.

(3) SOURCE AS SUBJECT
   a. The well gushed (oil).
   b. It rained (a light rain/sulfuric acid).

(4) SUBSTANCE AS SUBJECT
   a. Oil gushed from the well.
   b. A light rain rained from the sky.

(5) RESULTATIVE CONSTRUCTION
   a. ?The well gushed ?(itself) dry.
   b. It rained *(itself) clear. (rare but attested)

(6) CAUSATIVE ALTERNATION
   a. *The workers gushed the fountain.
   b. *God rained it/the sky.

(7) ADJECTIVAL PASSIVE PARTICIPLE
   a. *the violently gushed well
   b. *the recently rained sky/it

(8) *There*-INSERTION
   a. *There gushed a magnificent well.
   b. *There rained it/a magnificent sky.

(9) SUBSTANCE AS SUBJECT
   a. Oil gushed *(from the well).
   b. A light rain rained *(from the sky).

(10) MANNER OF MOTION/SOUND VERBS
   a. Birds flew *(into the hall).$_{intended\ interp.}$
   b. Bullets whistled *(through the window).

(11) RESULTATIVE CONSTRUCTION
   a. *Oil gushed the well dry.
   b. *Heavy drops rained the sky clear.

(12) ADJECTIVAL PASSIVE PARTICIPLE
   a. the gushed-out oil
   b. the rained down water

(13) *There*-INSERTION (rare but attested)
   a. There spewed forth a puff of blue haze.
   b. There rained a ghastly dew.

(14) CAUSATIVE ALTERNATION
   a. ??The boy gushed water from the squirt gun.
   b. God rained water from the heavens. (rare but attested)

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TRANSITIVE UNERGATIVES IN PAZAR LAZ

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This study argues that in Pazar Laz (PL) – an endangered Caucasian language spoken in Turkey, unergative predicates always involve an overtly filled object position and behave simply on a par with regular transitive verbs. As such, they are incompatible with the conflation model proposed for unergatives by Hale and Keyser (2002) (H&K 2002). We will argue that this pattern emerges from the peculiar nature of vP which always bears a nominative feature to be checked by an overt object in syntax (cf. Coon and Preminger 2010).

In PL, transitives with agentive/causer subjects require ergative case on the subject and nominative on the object. The verb is marked with the thematic suffix (TS) *–am* and takes agreement markers from the *s*-paradigm as in (1). Unaccusatives, on the other hand, have nominative subjects and take TS *–u(r)* followed by agreement markers from the *n*-paradigm which is based on the copula *on* 'be' as in (2). Agentive unergatives pattern similarly to transitives in term of subject case, the TS choice and agreement markers as in (3). The sole argument of the verb in agentive unergatives require ergative case. On a closer look, we observe that all agentive unergatives in PL obligatorily bear the valency marker *i-* on the verbal complex. The marker *i-* also surfaces in reflexive constructions and stands for the suppressed undergoer. There are two patterns of reflexivization in PL, either with the overt reflexive pronoun *çendi* 'self' (4a) or with *i-* (4b), which cannot co-occur. In (4b), the subject bears ergative case implying that the suppressed argument is the undergoer. We take the presence of *i-* in agentive unergatives to perform a similar function as the one in reflexive constructions, implying that the event is acted upon one's self. For example, (3) can be taken to mean *Ali is making/causing himself work*, where Ali is the initiator of this internally instigated event. This then would imply that *i-* in such constructions is acting like an undergoer co-indexed with the initiator. Hence, the structure is transitive. There is supporting evidence for the status of the valency marker *i-* as a reflexive undergoer from Georgian, a close relative of Laz. In Georgian this marker surfaces only when the unergative is used in perfective contexts (Cyrino 2012) as in (5). As well known, such use of reflexives with agentive unergatives is also available in English, but only in telic contexts (6). Therefore, the use of the reflexive marker *i-* in unergative verbs in PL is not unexpected. What is surprising is that its use is not restricted to perfective or telic contexts but is always obligatory with agentive unergatives. Argumental cognate objects (COs) have been argued to be a diagnostics for unergatives cross-linguistically (Levin and Rappaport Hovav 1995, Massam 1990, Macfarland 1995, Kuno and Takami 2004, Nakajima 2006). If *i-* stands for the undergoer in agentive unergatives in PL, then COs should be disallowed. This prediction is borne out in PL as in (7). Thus, we argue that *i-* in all agentive unergative verbs stands for a syntactic undergoer, implying a transitive syntax.

VoE constitute the other unergative pattern in PL. Cross-linguistically VoE have been argued to have a causal implication, where the subject is taken as the causer of the event (Rappaport Hovav and Levin 2000, Potashnik 2012). VoE in PL which pattern with transitives in terms of subject case, the TS choice and agreement also present evidence for this account. The ergative case on the subject as in (8a) implies that the sole argument of VoE is a causer, but not a theme which requires nominative in PL. It is possible to paraphrase (8a) as (8b) with the overt light verb 'make/do', having the nominal form of the VoE as the object, which again points to the causer nature of the sole argument of VoE in PL. However, the nominal form cannot be used as a cognate object as in (8c). This implies that even if H&K (2002)'s conflation model is assumed where the object conflates into a light verb to form VoE, the object is still visible as an object in syntax, blocking the use of the cognate object. Thus, we also take VoE as having a transitive syntax involving an active object position.

To conclude, there are no true unergatives in PL. This follows from the peculiar nature of vP which always requires to check nominative case with an object (Coon and Preminger 2010), due to this requirement all unergatives surface simply on a par with transitives.

Examples:

(1) Amedi-**k** toyç'i zd-**am**-**s**.
Ahmet-erg rope.nom pull-TS-pres.3ps
'Ahmet is pulling/pulls the rope.'

(2) a. Mjora c-ul-**u**-**n**. b. Ham metali ndrukh-**u**-**n**.
sun.nom pv-go.down-TS-pres.3ps this metal.nom bend-TS-pres.3ps
'The sun is setting/sets.' 'The metal is bending/bends.'

(3) Bere-**k** **i**-çaliş-**am**-**s**.
child-erg val-work-TS-pres.3ps
The child is working

(4) a. Ahmedi-k yali-s çendi dzir-u.
Ahmet-erg mirror-dat self see-past.3ps
'Ahmet saw himself in the mirror.'
b. Ahmedi-k yali-s (*çendi) **i**-dzir-u.
Ahmet-erg mirror-dat self refl-see-past.3ps
'Ahmet saw himself in the mirror.'

(5) a. Bavshv-i tamash-ob-s balax-ze.
child-nom play-ts-3ps grass-on.dat
'The child plays on the grass.'
b. Bavshv-**ma** **i**-tamash-a balax-ze.
child-erg refl-play-3ps.aor grass-on.dat
'The child played on the grass.' (Cyrino 2012)

(6) a. *John is walking himself.
b. John walked himself out.

(7) *Ali-k mskva ar nciri i-ncir-u.
Ali-erg good one sleep refl-sleep-past.3ps
Int: Ali slept a good sleep.

(8) a. Ntsa-**k** gurgul-**am**-**s**. b. Ntsa-k gurgula ik'-um-s.
sky-erg clap-TS-pres.3ps sky-erg thunder.nom make-TS-pres.3ps
'The sky is thundering.' 'The sky is making thunder claps.'
c. *Ntsa-k ar didi gurgula gurgul-u.
sky-erg a big thunder.nom clap-past.3ps
'The sky thundered a big thunder.'

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Cognate Objects as a diagnostics for unergatives: A Case Study of Sason Arabic

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In the literature, cognate objects (CO), have been used as a diagnostics to differentiate between unergatives and unaccusatives. It has been argued that intransitives which can take a cognate object are typically unergatives as in (1), but not unaccusatives (Levin and Rappaport Hovav 1995, Massam 1990, Larson 1988, Keyser and Roeper 1984, Macfarland 1995). However, it has also been shown that some unaccusatives can also take COs subject to certain semantic restrictions as in (2) (Kuno and Takami 2004, Nakajima 2006). The aim of this study is to investigate the patterns of COs in Sason Arabic (SA) – a severely endangered dialect of Arabic spoken in Turkey - which can be used not only with unergatives, but also very productively with all types of unaccusatives without any semantic restrictions. We will propose that COs of both unergatives and unaccusatives in SA are not true arguments, but constitute rhematic complements in line with Ramchand (2008), therefore cannot be used as a diagnostics for unergative-unaccusative distinction in the language.

Unaccusatives and unergatives exhibit certain differences in SA. As seen in (3), resultatives which modify DPs originating from the object position are only compatible with unaccusatives, but not with unergatives. Furthermore, only unaccusatives are compatible with non-active morphology as in (4). However, both sets of predicates pattern identically in terms of compatibility with COs, as not only all types of unergatives (i.e. both agentive unergatives and verbs of emission) as in (5), but also unaccusatives in (6) can very productively take COs.

Kuno and Takami (2004) argue that COs are acceptable in a language if they denote a resultant object that the verb denotes. If the verb denotes only the result without involving a process, (e.g. *break, appear*), COs are not possible. However in SA there is no such restriction, as not only the verbs denoting processes, but also the ones denoting only results as in (7) or manner as in (8) are compatible with COs. Nakajima (2006), furthermore, makes a distinction between argumental and adverbial COs. He argues that argumental COs are only possible with unergatives, whereas the COs certain unaccusatives take are adverbial, thus, they are adjuncts, as only the COs of unergatives in (9a), but not those of unaccusatives as in (9b) can be passivized.

In SA, however, both COs of unergatives and unaccusatives behave as non-argumentals. First, unlike English, no COs in SA can be the target for passiviziation as in (10). Second, while true non-specific objects can occur postverbally in neutral word order as in (11), COs of both unergatives and unaccusatives cannot occur in the postverbal position as in (12), thus, they behave differently than true object arguments. Furthermore, COs of unergatives can co-occur with delimiting object arguments, which exhibit clitic left dislocation, as in (13). Finally, COs in SA can only be questioned with the wh-word *ıştaba* 'how', rather than *şıne* 'what', which can be used to question true objects as in (14).

Given the above patterns we argue that COs in SA are adverbials. Thus, the COs in SA are not argumental, but behave more like adjuncts. We argue that they constitute rhematic materials in the sense of Ramchand (2008), that is, they are complements which modify the subevent they attach to. COs that unergatives take are the rhemes of ProcessP as in (15a), while the ones in unaccusatives are the complements of ResultP as in (15b).

To conclude, we argue that the highly productive and unrestricted use of COs in SA is due to their non-argument status. Given the lack of argumental COs in SA, COs, which are only of the adjunct type cannot be a testing ground for differentiating between unergative and unaccusative verbs in the language.

Examples:

(1) The baby slept a sound sleep. (Nakajima 2006: 677)

(2) The tree grew a century's growth within only ten years. (Nakajima 2006: 674)

(3) a. mayn cımed has (unaccusative) b. Kemal faqaz raxu (unergative)
water froze solid kemal ran.3m sick
'The water froze solid' Intended: '*Kemal ran himself sick.'

(4) Fıstox ın-faş. **(5)** a. Zake-ma kotti zak. b. zil zar zarab
Roof Nact-destroy laugh-a bad laughed.3m bell ringing ring.past.3m
'The roof collapsed.' 'He laughed a bad laugh.' 'The bell rang a ringing.'

(6) a. Badılcanad pat-ma gıze kotti patto. b. Çiçak ubs-ma boş kotti ubes.
tomatoes rottening-a such bad rottened.3pl flower fading-a very bad faded.3m
'The tomatoes rottened such a bad rottening.' 'Flower faded a bad fading.'

(7) a. şuşa qarf ınqaraf b. nahar talu-ma koys tala ala sari
glass breaking broke.3m sun appearing-a beautiful appeared.3m this morning
'The glass broke a breaking.' 'The sun appeared a beautiful appearance this morning.'

(8) a. babe fadu-ma hedi ınfada b. şelç zabu-ma hedi zab
door opening-a slow opened.3m snow melting-a slow melt
'The door opened a slow opening.' 'The snow melted a slow melting.'

(9) a. A sound sleep was slept by the baby.
b. *A century's expansion was grown in only ten years by the tree trunk.

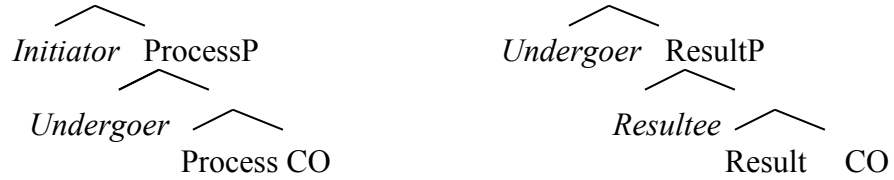
(10) a. * nom ın-nam b. * pat ın-pat
sleep pass-slept rottening pass-rottened
'Sleep was slept.' 'A rottening was rottened.'

(11) zıxar ayalo dondurma **(12)** a. * faqaztu faqız b. *şuşa ınqaraf qarf
kids ate.3pl ice cream ran.1sg running glass broke.3m breaking
'The kids ate ice cream.' 'I ran a running.' 'The glass broke a breaking.'

(13) a. kemal faqız-ma ıştaba faqaz. b. badılcanad pat-ma ıştaba patto.
Kemal running-a how ran.3m tomatoes rottening-a how rottened.3pl
'How a running did Kemal run?' 'How a rottening did the tomatoes rottened?'

(14) Ali tırex faqz faqaz-a (fi 3 saattad)
Ali road run ran.3m-3f (in 3 hours)
'The road, Ali ran it a running (in 3 hours).'

(15) a. InitP b. ProcessP



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Selection and the Unergative-Unaccusative Contrast

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Unlike other kinds of verb, both unaccusative and unergative verbs c-select a nominal exclusively. However, based on my observations of Mandarin Chinese, I make two claims: first, unaccusative verbs s-select a nominal of type <e,t> (i.e., predicate nominals, PNs), whereas unergative verbs do not have this constraint; second, although c-selection violation is fatal, s-selection violation can be avoided by syntactic operations.

Predicate nominals PNs, as in (1), do not undergo topicalization, are not pronominalized, have a narrow scope, and not in a strong quantificational form, as shown in (2) (Poole 2017).

(1) a. There is [a potato]$_{\langle e,t\rangle}$ in the pantry. Existential constructions
b. Megan painted the house [magenta]$_{\langle e,t\rangle}$. Change-of-color verbs
c. Irene called the cat [Snowflake]$_{\langle e,t\rangle}$. Naming verbs
d. Erika became [a teacher]$_{\langle e,t\rangle}$. Predicate nominals

(2) a. * [A potato]$_1$, there is $\__1$ in the pantry.
b. *There is it in the pantry.
c. There aren't two tractors in the barn. ✓not ≫ two; *two ≫ not
d. *There is/are {each/every/most/both} potato(es) in the pantry.

PN-selecting verbs In Chinese, change-of-status verbs (*dang* 'become', *cheng-wei* 'become', *biancheng* 'become') c-select a nominal, rejecting elements of other categories such as AP, as seen in (3). The selected nominals do not undergo topicalization (4), are not pronouns (including *pro* object, which refers to a topic; Huang 1989) (5), have a narrow scope (6), and are not in a strong quantificational form (7). Such verbs s-select PNs.

A correlation In Chinese, an unaccusative verb (UNA) is either followed by a nonspecific theme or preceded by a theme of another semantic type (8). The nominal following an UNA exhibits the properties of a PN, as seen in (9). I thus claim that an UNA also s-selects a PN. When a PN follows such a verb, it satisfies both the c- and s-selection of the verb. However, if a nominal precedes an UNA, it does not have the PN properties, as shown in (10). Similarly, the unique argument of an unergative verb does not have the PN properties (11).

Analysis When a non-PN precedes an UNA, it is able to satisfy the c-selection of the verb, but it does not meet the s-selection of the verb. The initial merger of such a nominal with an UNA causes a semantic problem. To avoid the problem, the nominal must move. This move-to-avoid-trouble strategy is similar to Chomsky's (2013) movement strategy to solve a syntactic labelling problem between two phrasal sisters. The initial landing site of the movement of a non-PN is Spec,vP, cf. the low position of *there* in one type of English UNA constructions (Deal 2009; Sobin 2014). Since an UNA has no external argument, a syntactic position is available for the landing. One argument for this short movement is that if the external argument position is taken by a locative nominal (e.g., *jia-li* 'home-in'), no theme nominal may precede an UNA (12). Similarly, for a change-of-status verb, since its external argument position is taken, if it is merged with a non-PN object, the latter has nowhere to move to. Consequently, the semantic incompatibility between the verb and the object leads to unacceptability, as seen in (5) and (7). As for the launching site, a non-PN, like a PN, is base-generated in a low position. This assumption is supported by the fact that no non-canonical object may follow an UNA. In contrast, for an unergative, since the internal argument position is not taken, a non-canonical object may occur (13) (Zhang, to appear).

Broader impact This study explores s-selection in the unergative-unaccusative contrast in Chinese, separating c-selection from s-selection in syntax, and identifies one more instance of obligatory movement that avoids computation problems.

(3) Li Na dang-le {laoshi/*youyong}. [NP/*AP]
Li Na become-PRF teacher/*useful
'Li Na becomes a teacher.'

(4) *Laoshi$_i$, wo zhidao Li Na dang-le _$_i$. [*Topicalization]
teacher 1SG know Li Na become-PRF

(5) *Li Na dang-le ta. [*Pron]
Li Na become-PRF 3SG

(6) Li Na meiyou biancheng yi-ge laoshi.
Li Na not become one teacher
'Li Na dis not become a teacher.' Neg≫*yi-ge laoshi*; **yi-ge laoshi*≫Neg [Scope]

(7) *Li Na dang-le meige laoshi. [*Strong Q-indef]
Li Na become-PRF every teacher

(8) a. Jia-li lai-le {yi-ge ren /*Li Na}.
home-in come-PRF one person / Li Na
'A person has come to the home.'

b. {Li Na / *Yi-ge ren} lai-le.
Li Na / one person come-PRF
'Li Na has come.'

(9) a. *Yi-ge xiaohai$_i$, wo zhidao lai-le _$_i$. [*Topicalization]
one kid 1SG know come-PRF

b. *Lai-le ta. [*Pron]
come-PRF 3SG

c. Jia-li mei lai-guo yi-ge ren.
home-in not come-EXP one person
'No one has come to the home.' Neg≫*yi-ge ren*; **yi-ge ren*≫Neg [Scope]

d. *Lai-le meige ren. [*Strong Q-indef]
come-PRF every person

(10) a. Nage ren$_i$, wo zhidao _$_i$ lai-le. [Topicalization]
that person 1SG know come-PRF
'That person, I know he has come.'

b. Ta lai-le. [Pron]
3SG come-PRF '{It/He/She} has come.'

c. Meige ren dou lai-le. [Strong Q-indef]
every person all come-PRF
'Everyone has come.'

(11) {Ta/meige ren dou} xiao-le. [Pron/Strong Q-indef]
3SG/every person all laugh-PRF
'{He/She/Everyone} laughed.'

(12) a. *Jia-li Li Na lai-le. b. *Li Na jia-li lai-le. (cf. (8b))
home-in Li Na come-PRF Li Na home-in come-PRF

(13) a. *Li Na lai huoche. b. Li Na shui huoche.
Li Na come train Li Na sleep train
Intended: 'Li Na comes by train.' 'Li Na sleeps in a train.'

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The electrophysiology of unergative and unaccusative sentence processing in Basque

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The present study seeks to explore the electrophysiological patterns generated by unergative and unaccusative predicates in Basque. We seek to determine whether the electrophysiological pattern reported for agreement violations in transitive predicates is modulated by predicate type and / or by the number of arguments the verb agrees with.

Subject-verb agreement is one of the most studied phenomena in the field of psycholinguistics both from the theoretical and experimental perspective (Hagoort and Brown 2000; Münte et al. 1997; Münte and Heinze 1994; Osterhout and Mobley 1995; Hinojosa et al. 2003; Silva-Pereyra and Carreiras 2007). However, languages with complex agreement systems where the verb agrees with more than one argument (such as Basque) have received little attention in the literature (Zawiszewski and Friederici 2009; Diaz, Sebastián-Gallés, Erdocia, Mueller and Laka 2011; Zawiszewski, Santesteban and Laka 2016).

So far, verbal agreement in Basque has only been studied in transitive sentences (Zawiszewski and Friederici 2009; Diaz, Sebastián-Gallés, Erdocia, Mueller and Laka 2011; Zawiszewski, Santesteban and Laka 2016), but unergative and unaccusative predicates have not yet been investigated using the Event-Related Potentials (ERP) technique. We aim to examine how subject-verb agreement is processed in unnacusative and unergative predicates. A consensus has not been reached yet on whether unergatives are monadic or dyadic predicates in Basque and this experiment may help clarify the matter.

Most ERP studies carried out cross-linguistically so far have found similar electrophysiological patterns for subject agreement violations, namely (LAN)-P600 (Diaz, Sebastián-Gallés, Erdocia, Mueller and Laka 2011; Hagoort and Brown 2000; Hinojosa et al. 2003; Münte et al. 1997; Münte and Heinze 1994; Osterhout and Mobley 1995; Silva-Pereyra and Carreiras 2007). A few studies (Zawiszewski and Friederici 2009; Mancini, Molinaro, Rizzi, Carreiras 2011; Zawiszewski, Santesteban and Laka 2016) have found and N400-P600 pattern. Our working hypothesis, originally put forth in Zawiszewski and Friederici (2009) is that the N400 component found in these latter works is due to the number of arguments to agree with.

The following experiment has been designed. Unaccusative predicate sentences (see example 1) and unergative sentences (see example 2) will be analyzed using person and number agreement violations. If the ERP pattern ellicited by unaccusatives lacks the N400 component, this would support our working hypothesis. In the case of unergatives, the presence or absence of the N400 could be suggestive of their monadic/dyadic nature.

1. a. Zu gaur goizean bueltatu zara Bilbotik. (person, gramm.)
   b. Zu gaur goizean bueltatu naiz Bilbotik. (person, ungramm.)
   c. Hura gaur goizean bueltatu da Bilbotik. (number, gramm.)
   d. Hura gaur goizean bueltatu dira Bilbotik. (number, ungramm.)
2. a. Zuk goizean biziki sufritu duzu aurkezpenean. (person, gramm.)
   b. Zuk goizean biziki sufritu dut aurkezpenean. (person, ungramm.)
   c. Hark goizean biziki sufritu du aurkezpenean. (number, gramm.)
   d. Hark goizean biziki sufritu dute aurkezpenean. (number, ungramm.)

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UNACCUSATIVES BEYOND UNACCUSATIVES: SPLIT AUXILIARY SELECTION WITH AFFECTED SUBJECTS IN OLD MAJORCAN CATALAN

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We aim to shed light on the split auxiliary selection found in Old Majorcan Catalan —also in Northern and North-Eastern Central Catalan varieties (MASSANELL in press; RIGAU 1998)— in constructions where, instead of *haver* 'have', the auxiliary verb *esser* 'be' is used for compound tenses with transitive and unergative verbs, although just with persons 1 & 2.

Elder people from some villages in Majorca (Llucmajor, Montuïri, Santanyí, Felanitx...) can use *esser* 'be' in unaccusative, passive and reflexive constructions, with some peculiarities: (*i*) *esser* is more frequent with 1st and 2nd persons (especially of the singular, and mainly in indicative present perfect). (*ii*) 3rd person (and 1st and 2nd in other tenses/moods) tends to select *haver* with unaccusatives, but *esser* can still be chosen with reflexive and passive constructions (probably because they possess an explicit morphological mark: either the clitic *se* or the passive auxiliary verb *esser* + a passive past participle) (1).

Furthermore, unexpectedly, elder Majorcan speakers sometimes use the auxiliary verb *esser* in transitive (2*a-f*) and unergative sentences (2*g*). Prescriptively, this use of *esser* has been considered «very curious» and «weird» and, hence, «abusive» and «absolutely inadmissible» by traditional grammars. Descriptively, very few authors note that this use is limited to a reduced number of verbs (*e. g.*, *veure* 'see') (BADIA 1994). By contrast, other linguists point out that it seems that these dialects possess *generalised person-driven auxiliary selection*, «with all kind of verbs» and independently of the event/argument structure.

This conclusion does not seem to be accurate for Majorcan Catalan. If we look more carefully at the sentences in (2), a common pattern can be established: their grammatical subject is *affected* (it is an experiencer, a possessor or an interested argument). A technical way of analysing this is appealing to RAMCHAND's (2008) event structure, with a head Process (between Initiation and Result) that introduces the neo-Davidsonian event argument and whose specifier is interpreted as an *undergoer* (as it undergoes or suffers the process of the event). Furthermore, in (2), an *unintentional* or *non-volitional* reading is often available, but the distinction between *agentive/non-agentive causes* would not be syntactically codified —we do not assume PYLKKÄNEN's (2008) agentive Voice head (above InitP).

Take, for instance, (2*a*): According to JAQUE (2014), *veure* 'see' is a level-2 (or high) pure (or Kimian) stative verb, with the configuration of an InitP (and that is all). However, in some contexts (as present perfect), it can unfold a whole event structure (that is: also ProcP and ResP), as it behaves as an achievement. In this case, the subject argument is, at the same time, a resultee, an undergoer and an initiator; the same stands for (2*b*) and (2*c*), as represented in (3*a*). In (2*d*), it is not so obvious that the subject be affected, but indeed it is, as it maintains an inalienable possession relationship with the dative *li* ('your grandmother') (3*b*). A more clear case would be the one in (2*e*), with a part of the body.

The most problematic case is (2*f*): Following CUERVO (2008), here we already have an *affected* or *middle Appl* over ResP: [$_{\text{MidApplP}}$ *a s'arbre* ('DAT.MARK the tree') [$_{\text{MidAppl'}}$ *li* [$_{\text{ResP}}$ *sa soca* [$_{\text{Res'}}$ *danyada*]]]]. But this is not an obstacle for the subject (in [Spec, ProcP] and in [Spec, InitP]) be also considered affected. Therefore, instead of using high (ethic dative) applicatives (between ProcP and InitP), Old Majorcan Catalan allows to *Merge* any affected or interested argument directly in [Spec, ProcP], especially if it maintains a possession relationship with another argument: (2*d*), (2*e*), (2*f*).

To sum up, in (2) we have «unaccusative» constructions in a broad sense, with *affected subjects* derived from a lower position. In the Old Majorcan system, in order for *esser* to

appear, [Spec, InitP] must form a chain with (at least) [Spec, ProcP]. As a fulfilled prediction, *esser* is expected to be possible in (4*a*), but not in (4*b*). Neither would we expect to find *esser* with verbs like *donar* 'give', *tirar* 'throw', *rompre* 'break', *omplir* 'fill'.

We can conclude that the Old Majorcan system for auxiliary selection is mixed: both *person-driven* and *event-driven* (*cf.* MANZINI & SAVOIA 2011).

(1)

trans./unerg. verbs (*empènyer* 'push')	**unaccusative verbs** (*arribar* 'arrive')	**reflexive constructions** (*pentinar-se* 'comb one's hair')
He empès	**Som** {arribat/arribada}	Me **som** {pentinat/pentinada}
Has empès	**Ets** {arribat/arribada}	T'**ets** {pentinat/pentinada}
Ha empès	Ha {arribat/arribada}	S'**és** {pentinat/pentinada}
Hem empès	Hem {arribat/arribats/arribades} (?**Som** {arribats/arribades/*arribat})	Mos **som** {pentinats/pentinades/*pentinat}
Heu empès	Heu {arribat/arribats/arribades} (?**Sou** {arribats/arribades/*arribat})	Vos **sou** {pentinats/pentinades/*pentinat}
Han empès	Han {arribat/arribats/arribades}	Se **són** {pentinats/pentinades/*pentinat}

(2) *a.* La **som** vista.
CL.AC.3FEM.SG am seen.FEM.SG
'I've seen her'

b. **Som** agafada una nirviada.
am taken.FEM.SG a nervousness.AUGM
'I've got so nervous'

c. Des que **som** comprat un ase…
since that am bought a donkey
'Since I've bought a donkey...' (or 'Since I possess a donkey that I've bought...')

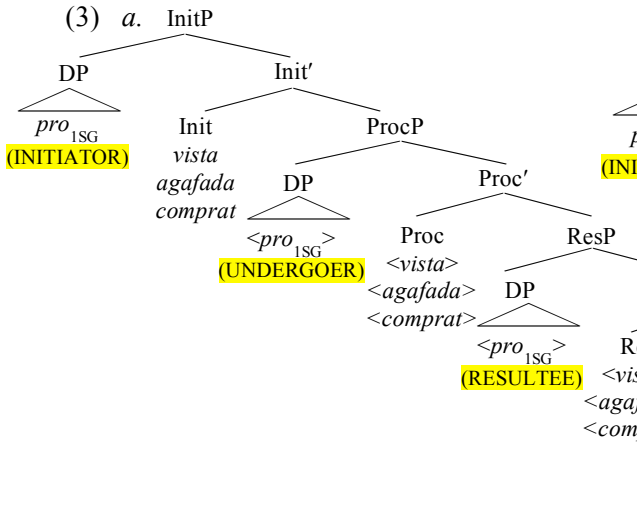
d. Li **som** fet mal de cap, (a sa padrina).
CL.DAT.3SG am done headache MARK.DAT the grandmother
'I'm given my grandmother a headache (unintentionally)'

e. **Fosses** remenats es dits!
be.PAST.OPT.2SG stirred.MAS.PL the fingers
[with *reproachative* or *counterfactual optative*]
'You should have stirred your fingers!'

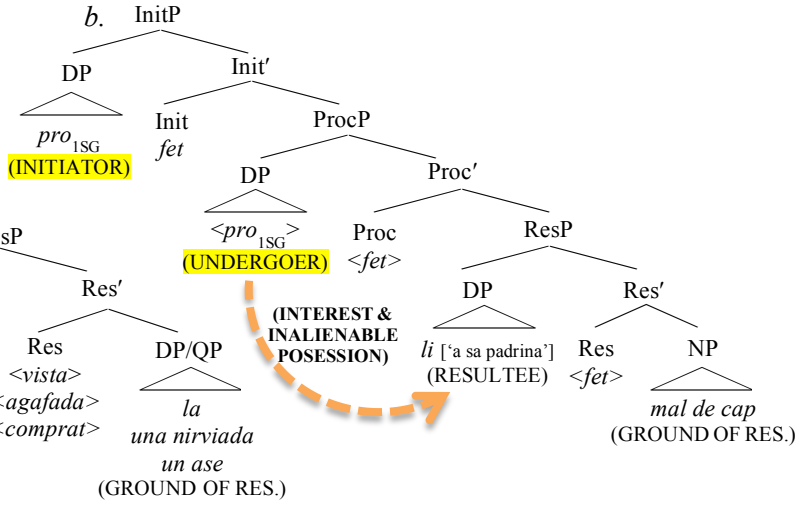
f. Sa soca li **ets** danyada.
the trunk CL.DAT are damaged
'You've damaged its trunk (the tree's trunk) (unintentionally)'

g. Davall aquella figuera hi **som** festejat molts pics.
under that fig-tree CL.LOC am courted many times
'Under that fig-tree, I've courted many times'

(3) *a.*



b.



(4) *a.* **Som** cantada una cançó.
am sung.FEM.SG a song.FEM.SG
'I've sung a song'

b. {He/*som} empès sa roca.
{have/*am} pushed the rock
'I've pushed the rock'

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Objects in unergative structures

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This paper compares the syntax and semantics of (1) with √WALTZ vs. (2) with √SING. While √WALTZ and √SING may appear in the same (agentive) vP structure in simple clauses, the evidence shows that with 'unselected objects' (UO) (i.e. (1)-(2)), these roots appear in different configurations, with distinct event interpretations. This paper offers a new account of the structure of (1) as (4), with the PP an event modifier; while (2) has the structure in (3), with the PP an entity modifier. The second part of the talk discusses the interpretation of the internal argument as an (apparent) Agent in (1), but not (2).

Previous work says that (1)-(2) have the same structure (Folli & Harley 2006): the idea is that a secondary XP introduces an eventuality independent of the main vP, and this XP 'licenses' a so-called UO. The UO holds thematic relation in relation to the secondary XP. Following this literature, the *sing* structure in (2) is as in (3), with a vP internal XP.

New data shows *waltz* clauses like (1) must have a different structure, though, proposed to be that in (4). (4) has (A) a PP adjunct, not a PP complement (*pace* Folli and Harley 2006, Ramchand 2008), (B) a DP complement (it has a transitive vP structure), and (C) a vP interpreted as an activity. The evidence:

(A) Constituency and distributional adjunction diagnostics. XP adjuncts license, and XP complements do not license, structures with: VP pro-form *do so*; *though*-movement; V-fronting; a topicalized XP; a clefted XP; binding of a PP internal pronominal by a subject of the same clause (tests from Roberts 1988, Rappaport Hovav and Levin 1995). The PP in the waltz clause (1) is an adjunct according to these tests, the XP in the *sing* clause (2) is not.

(B) The PP does not license the object of the *waltz* clause. The *waltz* object is fine with (often intensifying and repetition) adverbs and negation (5). The UO of *sing* clauses is not. Also, *waltz* objects appear in passive and nominalized structures (6-7); *sing* UOs do not (8). The *waltz* objects may be improved by (e.g.) a heavy clausal constituent, but the object is not 'licensed' by PP (Ramchand 2008: 117 has similar observations, to a different conclusion).

(C) The primary predicate in (1) is modifiable independent of PP (9a) and is atelic (Folli & Harley 2006), like transitive activities. The primary predicate in (2) is not independently modifiable (9b-c) (Rappaport Hovav & Levin 2001, Williams 2005) and is telic.

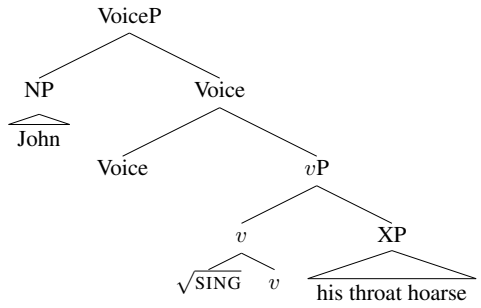
Semantically, the PP in the *sing* clause is an entity modifier, describing the trajectory of the UO (e.g. Folli & Harley 2004). The PP with *waltz*, on the other hand, is adjoined to vP (4). It is an eventuality modifier that describes the Path of the (vP) event, and not an NP, i.e. it describes '*waltz John'* and not just 'John'. It is semantically equivalent to Maienborn's (2001) 'external adverbial' PPs, illustrated by the locative PP structures in (10).

Turning to the interpretation of the object, it is often observed that the object in (1), but not (2) (apparently) holds an Agentive thematic role (Cruse 1973, Parsons 1990, F&H 2006), i.e. *John* is interpreted as *waltzing* in (1), but *his throat* does not *sing* in (2). The second part of this talk shows that the object does not hold an Agent relation in the sense usually meant in syntax/semantics. In particular, Agent modifiers are shown to be unable to target the *waltz* object, including instrument (not comitative) *with/ by means of* PP; agentive adverbs; and Reason/Rationale clause modification. (I generalize this observation to other agentive objects, such as those in *out*-prefixation (Marantz 2009)). Instead, these objects hold Theme roles.

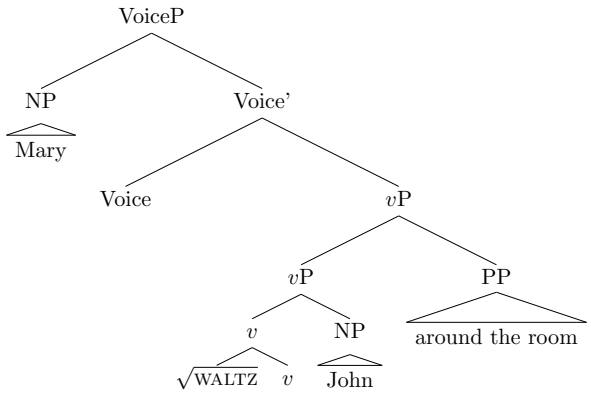
The intuitive difference between the objects of √WALTZ and √SING can be accounted for by introducing the Agent interpretation with the root (in the spirit of Folli & Harley 2006). However, the inaccessibility of the object in the *waltz* clause to agent-modification provides support for a view of the architecture in which roots supply (conceptual) semantic information (e.g. [+Agent]), but not information that interacts with the grammar proper.

(1) Mary waltzed John around the room. (1') The general marched the soldiers back.
(2) John sang his throat hoarse. (2') The critics laughed the actor off the stage.

(3) John sang his throat hoarse.



(4) Mary waltzed John around the room.



(5) a. The choreographer diligently pirouetted the ballerinas at the last rehearsal.
b. The trainer decided not to row the new novices until next week.

(6) a. The soldiers were marched back to their tents before nightfall by the general.
b. Mary was waltzed around the room by John.

(7) a. The marching of the soldiers (by the dictator) (was a demonstration of power).
b. The waltzing of the ballerinas (by the new choreographer) (was sublime).

(8) a. *His throat was sung hoarse by John.
b. *The singing of his throat hoarse (by John) in yesterday's performance…

(9) a. Mary waltzed John daintily around room.
⊨ Mary waltzed (daintily).
b. Mary sang a song rapidly.
⊨ Mary sang rapidly.
c. Mary sang her throat hoarse rapidly.
⊭ Mary sang rapidly. (The event of change must be rapid)

(10) Mary tickled John along his arm. = *along his arm* modifies vP, not the NP *John*.
(cp. Maienborn 2001, 2003)

How to Dance: On the Unergative and Unaccusative Nature of German Manner of Motion Verbs

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In Germanic, many manner of motion verbs can instantiate an unergative structure and an unaccusative structure (Hoekstra and Mulder 1990, McIntyre 2004, Zubizarreta and Oh 2007, Mateu 2012, a.o.). Consider, for instance, the German verb *tanzen* (dance) (Levin and Rappaport Hovav 1999, Harley 2005, Acedo-Matellán 2014, a.o.). It can serve as an unergative verb selecting HAVE as a perfect auxiliary and optionally taking a hyponymous direct object; cf. (1). In addition, *tanzen* can serve as an unaccusative verb selecting BE as a perfect auxiliary and obligatorily taking a path-denoting PP as a complement; cf. (2).

(1) Maria hat (einen Tango) getanzt.
Maria has a tango danced

(2) Maria ist *(in das Zimmer) getanzt.
Maria is into the room danced

We tackle the unergative/unaccusative alternation of manner of motion verbs by using a root-based, Distributed Morphology-type of approach (Halle and Marantz 1993, Harley 2012, Embick 2015). In particular, we propose that a root like $\sqrt{}$tanz can enter two types of structures: an unergative structure where the subject is a VP-external argument as in (3), and an unaccusative structure where the verb takes a path PPs as a complement and the subject as a VP-internal argument as in (4).

(3) [Maria [$_{VP}$ V $\sqrt{}$tanz]]

(4) [$_{VP}$ Maria [[V $\sqrt{}$tanz] PP]]

In both structures, the root $\sqrt{}$tanz is an adjunct of an abstract verbal head V (Alexiadou and Lohndal 2014). In the unergative structure in (3), *Maria* is an agentive external argument that is introduced by Voice (Kratzer 1996), which explains the perfect auxiliary HAVE. Optionally, the verb could take a hyponym of a cognate object as a complement (Haugen 2009). In the unaccusative structure in (4) in contrast, the verb takes two arguments: (i) a PP denoting a spatial path and (ii) a DP denoting a Figure – in Talmy's (2000) sense. *Maria* serves as an internal argument of the verb. Voice is not projected, which explains the perfect auxiliary BE. These patterns also account for the fact that the past particple *getanzt* can serve as a prenominal modifier of *Maria* only in combination with a path-denoting PP; cf. (5) and (6).

(5) *die getanzte Maria
the danced Maria

(6) die in das Zimmer getanzte Maria
the into the room danced Maria

We use Discourse Representation Theory (Kamp and Reyle 1993, Kamp et al. 2011) for modeling Logical Form. For the unergative structure, we propose the interpretation in (7). The individual Maria x is interpreted as the agent of a dancing event e. For the unaccusative structure, we propose the interpretation in (8). In particular, we propose that adding a path-denoting PP to a verb denoting a manner of motion event triggers the introduction of a directed motion event e' that is in a Figure/Path Relation (FPR) (Beavers 2012) with the individual Maria x, i.e. the Figure, and a spatial path w entering an IN-region r of the room z. Moreover, the dancing event e is interpreted as contemporaneously causing the directed motion event e'. We further argue that the individual Maria x is in a semantic configuration where she can be interpreted as the agent of the dancing event e even though Voice is not projected.

(7)

e x
dance(e) Maria(x)
AGENT(e, x)

(8)

e′ e r w x z
dance(e) Maria(x) AGENT(e, x) CAUSE(e, e')
FPR(x, w, e') in(r, z) ENTER(w, r, e') the-room(z)

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Structure of French *a-* prefixed deadjectival verbs

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Keywords: *French prefixation; Deadjectival predicates; Transitivity; Internal Word Structure and Roots*

French exhibits two groups of –IR deadjectival (change of state) verbs, those who can appear with the prefix *a-* and those who can't. All their bases are gradable monoradical adjectives (i.e. unconstructed).

(01)	i. who accept *a-*		ii. incompatible with *a-*	
	affaiblir / faiblir	*to make sb weak.er / to get weak.er*	***a**salir / salir	*to dirty, to get dirty*
	agrandir / grandir	*to make sth big.ger / to grow*	***a**blanchir / blanchir	*to whiten, to go white*
	assouplir / *souplir	*to make sth supple*	***a**blêmir / blêmir	*to go pale*
	alourdir / *lourdir	*to make sth heavy.ier*	***a**raidir / raidir	*to stiffen*

The presence of the prefix seems to force a transitive reading of the whole.
(02) a.i. Il maigrit à vue d'œil ! *(He visibly loses weight)*
ii. Le travail **l'**a beaucoup **a**maigri. *(Work made him a lot thinner)*

b.i. Eliott grandit beaucoup d'année en année. *(Eliott grows up a lot year after year)*
ii. Il faut **a**grandir **cette ouverture**. *(It is necessary to enlarge this opening)*

Without *a-* the -ir verbs are either transitive, intransitive, or both. This is mostly visible with the group of verbs that cannot appear *a-*prefixed.
(03) a. i. Il a encore sali **son pantalon**. *(He dirtied/soiled his pants again)*
ii. Le blanc salit facilement. *(White gets easily dirty)*

b. i. Paul blanchit **le linge**. *(Paul whitened the linen)*
ii. Le linge blanchit vite avec ce produit *(The linen whitens quickly with this product)*

But some of the verbs from the group in (01.i), even though they are preferably intransitive when not *a-* prefixed, can be admit of a transitive reading.

(04) Ces actes ne **le** grandissent pas ! *(Those actions do not "make him a better person")*

Since [Adj-ir] verbs (without prefix nor used in a pronominal *se* construction) can show different valencies, I assume that IR makes no contribution to argument selection. And since the transitivity of those derived verbs seems forced when "*a-* prefixed", I assume that this is due to the presence of *a-*.

My claim is that the difference in compatibility with this prefix lies in the nature of those bases and the structure of the –IR verbs built on them.

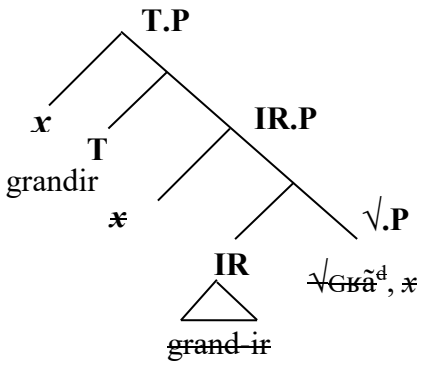
I propose that a) IR is light verb of sorts ('verbe support') with the semantics of "aller"/*to go*, b) it selects roots or categories. But, it cannot go to Tense on its own and is in need of a complement. If it selects a root, the whole can go to Tense; if it selects a categorized object -

an adjective in the case at hand, then *a-* (from preposition "à"/*to*, with which IR has of course a privileged relation, cf. "aller ***à***"/*go* ***to***) makes it possible for the whole to move up to T.
The presence of *a-*, which I assume to be located in spec,irP, blocks the movement of the internal argument (*x*) of the Adj-IR phrase, and prevents it from rising to spec,TP and therefore makes this position available to an external argument (*y*).

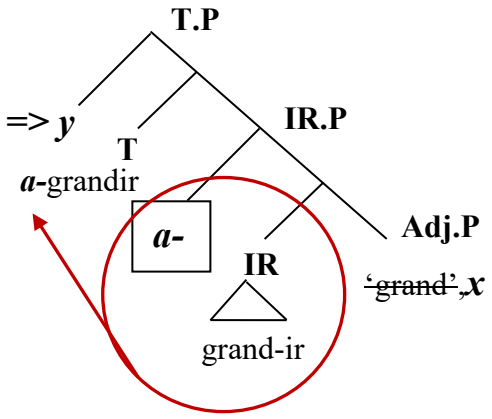
In this analysis of course, verbs like "grandir" and "agrandir" (*to make sth big.ger / to grow)* have two different derivations.

(05) Simplified trees for a: *grandir* and b: *agrandir*

a.



b.



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Unergative verbs in Mandarin Chinese

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Chinese offers an important window on the phenomenon of split intransitivity in general and on the issue of unergative verbs, in particular, given that it has less syntactically intransitive verbs than e.g. English. This is due to the more systematic nature of *cognate objects* (CO) (cf. Massam 1990 a.o.) where the verb is followed by a non-referential NP: *zǒu lù* 'walk street' = 'to walk'; *pǎo bù* 'run step' = 'to run' (cf. English *smile a smile*).

COs in Chinese are clearly not incorporated, but occupy the canonical postverbal object position in overt syntax, as witnessed by the position of aspectual verb suffixes, which must follow the verb, not the VP (cf. (1)). This is confirmed by other phenomena such as verb copying (cf. (2-3)) which likewise involves merging with the verbal head, not with the VP (cf. Huang 1982, 1988; Paul 2017 and references therein).

Against this backdrop, we propose to consider as unergative only those intransitive verbs with a unique external argument that systematically lack COs: *késou* 'cough', *kū* 'cry', *gōngzuò* 'work'. This is not only necessary for their comparison with unaccusative verbs in Chinese, which exclude COs, but also in order to guarantee the *tertium comparationis* indispensable for cross-linguistic studies. Hale & Keyser's (1993) assumption that unergative verbs are underlyingly transitive verbs involving an (incorporated) N in complement position does not seem plausible for Chinese and accordingly is not adopted.

From a semantic point of view, the Chinese facts conform to the generalization that unergative verbs are internally caused (cf. Levin & Rappaport Hovav 1995) and lack telicity (cf. Tenny 1987), hence are compatible with the progressive aspect head *zài* (cf. (4)). *Pá* 'crawl', *kū* 'cry', *xiào* 'laugh', *gōngzuò* 'work' illustrate agentive (hence internally caused) unergative verbs, whereas *késou* 'cough', *chàndòng* 'vibrate' are internally caused, but non-agentive. Note that the Chinese equivalents of other prototypically unergative (internally caused, but non-agentive verbs in English, e.g. *sneeze*, *hiccup*) involve VPs, not verbs (cf. the verb-adjacent postverbal position of the aspectual suffix in (5)); many involve the semantically "light" verb *dǎ*, literally 'strike', functioning here as a "pure" activity verb.

The feature [±telic] is shown to be the major divide among (syntactically) intransitive verbs: while all telic intransitive verbs are unaccusative in Chinese, unergative verbs are necessarily atelic. However, telic and atelic do not completely overlap with unaccusative and unergative verbs, respectively, given the existence of atelic unaccusative verbs (e.g. *gǔn* 'roll', *fāzhǎn* 'develop') characterized by the lack of specification of the causation mode.

Extending this approach to V-V compounds, we can now explain the observation that intransitive resultative V-V compounds can be unaccusative and be followed by their argument NP (cf. Gu 1992, Sybesma 1999, Huang 2006, Hua 2010). This is the case precisely for those that are telic, irrespective of the unergative or transitive nature of one of its components (such as *zǒu* 'walk' in (6)), thus correcting the wrong predictions made by previous accounts (cf. a.o. Cheng & Huang 1994, Li Yafei 1990).

The semantically-based definition of unergative vs unaccusative verbs is important for their acquisition. It is correct that only unaccusative verbs license their unique internal argument in postverbal position (cf. (7a)), whereas the external argument of unergative verbs is always encoded as the subject in SpecTP (cf. (4)). However, an initial analysis of adult input in the Beijing child language corpus shows unaccusative verbs to overwhelmingly occur in the 'NP V' structure (cf. Lu & Lee 2016, 2017). This might be due to the high number of definite NP arguments used in naturalistic discourse which, given the *Definiteness Effect* for unaccusative verbs (cf. (7a-b)), must be encoded VP-externally as subject (cf. Huang 1987). Notwithstanding the partly identical input structures for both unaccusative and unergative verbs, children around age 2 produced novel 'V NP' structures exclusively for unaccusative verbs, thus demonstrating their ability to discern the two verb classes.

(1) Tā měitiān [$_{vP}$ [pǎo-le] bù](*-le) yǐhòu jiù chī zǎofàn.
3SG every.day run-PERF step -PERF after then eat breakfast
'Every day, after he has run he eats his breakfast.'

(2a) Tā zǒu lù zǒu -le sān ge xiǎoshí.
3SG walk street walk-PERF 3 CL hour
'She walked for three hours.'

(2b) *Tā [$_{vP}$ zǒu lù]-le sān ge xiǎoshí.
3SG walk street-PERF 3 CL hour

(3a) Tā pǎo bù pǎo-de tèbié kuài.
3SG run step run-DE particularly fast
'She runs very fast.'

(3b) *Tā [$_{vP}$ pǎo bù]-de tèbié kuài.
3SG run step DE particularly fast

(4) Ta (yīzhí) zài kū / zài késou / zài gōngzuò.
3SG always PROGR cry/ PROGR cough / PROGR work
'He is (always) crying/coughing/working.'

(5a) Ta dǎ {pēntì /gé } dǎ -le yī fēnzhǒng.
3SG strike sneeze/hiccup strike-PERF 1 minute
'He sneezed for a minute.'/'He had the hiccup for a minute.'

(5b) *Ta [$_{vP}$ dǎ {pēntì /gé }]-le yī fēnzhǒng.
3SG strike sneeze/hiccup-PERF 1 minute

(6) Zǒu -lèi -le sān míng xuéshēng.
walk-tired-PERF 3 CL student
'Three students walked themselves tired.'

(7a) Lái -le sān wèi kèrén/{*Zhāngsan/*[wǒ de péngyou]}.
come-PERF 3 CL guest/ Zhangsan/ 1SG SUB friend
'There came three guests/{Zhangsan/my friends}.'

(7b) Sān wèi kèrén/Zhāngsan/[wǒ de péngyou] lái -le.
3 CL guest/Zhangsan/ 1SG SUB friend come-PERF
'The three guests/Zhangsan/my friends came.'

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The lexical semantics of unergative verbs:
primitive predicates, roots and ontological types

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Lexical semantic studies have assumed that unergatives are manner verbs, composed of a predicate ACT and a manner root (Rappaport Hovav and Levin 1998, 2010; Grimshaw 2005). In a syntactic perspective, however, many works have provided evidence that unergatives have a structure where a light verb *do* has the verb's root as its argument (Hale and Keyser 2002; Harley 2005). We propose that the semantics of unergative verbs reflects the syntactic argument structure and that they are represented by a primitive predicate DO, which takes a variable and the verb's root as arguments (Ross 1972) – in a predicate decomposition semantic argument structure. We provide semantic evidence for our proposal, taking Brazilian Portuguese (BP) as object language. The contribution we expect to offer is an analysis matching the semantics and the syntax of the argument structure of these verbs.

The first argument we provide in favor of our analysis comes from Harley (2005). She argues that unergatives have distinct aspectual properties, being classified as activities or as semelfactives. For instance, *dance* is an activity, a dynamic atelic durative event, while *cough* is a semelfactive, a dynamic atelic punctual event (a sequence of punctual movements). According to Wunderlich (2012), manner is a semantic component which does not allow a bounded reading. Thus, manner verbs will be activities. Harley (2005) proposes that the ontological category of the roots of unergatives is "event", and not "manner". Events can be bounded or unbounded, differently from manners. The same distinction among unergative verbs is found in BP: verbs such as *dançar* 'dance' are activities, verbs such as *tossir* 'cough' are semelfactives. Therefore, we propose that a primitive predicate which takes event roots as arguments is more appropriate for unergative verbs: [X DO <*EVENT*>].

Also, Jackendoff (1990) argues that cognate phrases specify components of the verbs' meaning. *Locatum* verbs, for instance, denominal verbs with "thing" roots, occur with cognate phrases which specify a thing: *Mary buttered the bread with* ***unsalted butter***. In the same way, we propose that, if cognate objects with unergatives specify an event, then, there must be an eventive semantic component in the meaning of these verbs. In fact, cognate objects in sentences such as *a Dani dançou a dança do ventre* 'Dani danced belly dance' denote events, and are specifications of the event denoted by the verb. Evidence that these objects denote events is the fact that they occur as subject of *durar* 'last' (Moens and Steedman 1988), and only events (not manners) can last in time: *a dança do ventre durou horas* 'the belly dance lasted for hours'. Besides, Levin and Rappaport Hovav (2013) propose that the ontological category of a verb's root can be associated with the denotation of its zero-related nominal. If *dança*, the zero-related nominal for *dançar*, denotes an event, the verb must have an event root.

At last, the possible paraphrase for unergative verbs favors a DO analysis. Lexical semanticists often use paraphrases in order to find out what meaning components are inside a given verb. Lakoff (1970) and Parsons (1990) show that change of state verbs can be paraphrased with the structure *become state* (*break/became broken*), which reflects the lexical semantic structure: [Y BECOME <*STATE/BROKEN*>]. Pinker (1989), Hale and Keyser (2002), and Harley (2005) propose that unergatives such as *dance* are more adequately paraphrased by structures such as *do a dance*. In BP, the same holds: *ela dançou* 'she

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danced'/*ela fez uma dança* 'she did a dance'. Interestingly, a paraphrase with the verb *act* and a manner modification is not possible: *ela dançou* 'she danced'/??*ela agiu dançando*/'she acted dancing'.

With these properties, we conclude that unergative verbs are not manner verbs, as assumed in many studies for English. We propose that, instead, unergatives have event roots, and this can be evidenced by the aspectual distinction between these verbs, the occurrence of cognate objects, the denotation of the zero-related nominals, and the paraphrases with *do*. All these properties indicate that these verbs lexical semantics is more accurately represented by a structure like [X DO <*EVENT*>], parallel with the syntactic argument structures which have been recently proposed for these verbs.

Additional data:

Nadar 'swim'	A Bárbara nadava.	A Bárbara nadava nado borboleta.
Chorar 'cry'	O bebezinho chorava.	O bebezinho chorou um choro triste.
Pular 'jump'	Os meninos pulavam.	Os meninos pularam pulos cada vez mais altos.
Dançar 'dance'	A Dani dançava.	A Dani dançou a dança do ventre.
Bocejar 'yawn'	O bebezinho bocejava.	O bebezinho bocejou um bocejo gracioso.
Roncar 'snore'	O homem roncava.	O homem roncou um ronco de urso.
Correr 'run'	O atleta corria.	O atleta correu uma corrida perfeita.
Rir 'laugh'	O menino ria.	O menino riu uma risada escandalosa.
Andar 'walk', caminhar 'walk', engatinhar 'crawl', espirrar 'sneeze', galopar 'galop', gargalhar 'laugh', gemer 'grunt', piscar 'blink', rebolar 'move one's hips', requebrar 'move one's hips', saltar 'jump', sambar 'dance samba', sapatear 'tap□dance, soluçar 'hiccup', soprar 'blow', sorrir 'smile', suspirar 'sigh', tossir 'cough', trotar 'trot', voar 'fly'.		

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Reversing the projection: Externally and internally caused change of state verbs in Salish

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Introduction: Intransitive, externally caused change of state verbs (ECOS) are unaccusative, while intransitive, internally caused change of state verbs (ICOS) are unergative (Levin and Rappaport Hovav 1995). The single NP of the ECOS verb should first merge within the VP, while that of the ICOS should first merge outside of VP. Based on data from Halkomelem Salish (Gerdts and Hukari 2005, 2006, Davis 1997, Davis and Matthews 2009), I argue for a reversal; the single argument of an ECOS verb appears outside of VP, introduced by a Trans head (Zeller 1996) that takes the VP as a complement, while that of the ICOS verb is introduced by the 'middle voice' suffix *–m* within the VP, with the suffix adjoined to the verbal root. Both the Trans head and *–m* suffix introduce an undergoer thematic role predicate $\lambda x \lambda e[und(e,x)]$(1).

Data: Transitive change of state verbs in Halkomelem appear in an ergative frame, with the verb suffixed with the transitive marker *–t*. (2a) ECOS intransitives (unaccusative verbs) appear with no special morphology (2b). ICOS intransitives appear with the middle voice suffix *–m* (3). In addition, semantically transitive change of state verbs can appear in an intransitive frame with the suffix *–m*; here we have an 'antipassive' structure (AP) (4).

Analysis: I take as a starting point that arguments can be introduced syntactically, even internal arguments (Ramchand 2008, Borer 2005, Bowers 2010, Lohndahl 2014, Alexiadou 2014). In a transitive, ergative structure, both the agent and the patient are introduced by separate heads outside the VP that contain thematic role predicates; thus, like the external argument in Kratzer's (1996) analysis, the internal argument has also been severed. I argue that there is a Trans head that contains an undergoer predicate. The anticausative has the same structure as the transitive but with a null D expletive in Voice (Schäfer 2008, Alexiadou, Anagnostopoulou and Schäfer 2015). The antipassive is semantically transitive but syntactically intransitive. The internal argument is projected inside the VP not outside in TransP. The middle morpheme is adjoined to V and introduces the undergoer thematic role predicate. The intransitive Voice morpheme merges with VP directly (1d). In the case of the ICOS, the noun phrase that undergoes the change, like the antipassive internal argument, is projected within the VP. However, unlike the antipassive, there is no agentive intransitive Voice projected.

Support: Here, I show that the *–m* suffix introduces both the (internal) argument of the antipassive and the (external) argument of the ICOS. First, the *–m* suffix derives inchoatives from some statives (5). I argue that the stative root modifies the event argument introduced by the *–m* suffix, with the single undergoer argument also introduced by *–m*. Second, in Halkomelem the *–m* antipassive can appear with the *–els* suffix (6a) (Gerdts and Hukari.2005), which adds an 'agentive' or 'actor' interpretation. If it is the *–m* suffix introduces the internal argument and the *–els* is a special agent Voice, we can explain the cooccurence of these two affixes. Note that the *–m* affix appears closer to the root than the *–els* affix, which is what we expect given the above (6b). Finally, some roots--noncore transitive verbs (NCTV) (Levin 1999) such as 'eat'--do not occur with an *–m* morpheme in the antipassive (7), while core transitive verbs (CTV) such as 'break' do. If we consider that the roots of NCTVs can introduce their IA (as in Levin 1999), while those of CTVs do not, we explain this difference: NCTVs do not need the *–m* suffix to introduce the undergoer within VP.

Further Implications: This work explains the morphological syncretism of the middle morpheme in the inchoative and antipassive because in both the *–m* introduces the undergoer. It argues that unaccusatives are structurally more complex than unergatives, which are simple VPs.

(1)a. externally caused, transitive:
[$_{VoiceP}$ NP$_{ERG}$ Voice [$_{TransP}$ NP$_{ABS}$ Trans [$_{VP}$Verb]]]

(1)b. unaccusative (ECOS)
[$_{VoiceP}$ Voice [$_{TransP}$ NP$_{ABS}$ Trans [$_{VP}$ Verb]]]

(1)c. unergative (ICOS)
[$_{VP}$ V-**m** NP$_{ABS}$]
antipassive

(1d) [$_{VoiceP}$ NP$_{ABS}$ Voice [$_{VP}$ V-**m** NP$_{OBL}$]]

(2a)

niʔ	kʼʷɬ-t-əs	tʼ$^{\theta}$ə	qaʔ.	
AUX	spill-TR-3ERG	DET	water	

He poured the water.

(2b)

kʼʷɬ	tʼ$^{\theta}$ə	qaʔ.
spill	DET	water

The water spilled.

(3)

pʼeqʼ**əm**	‘bloom’
tʼ$^{\theta}$atʼ$^{\theta}$əqʼʷ**əm**	‘rotting’
ɬewʼs**əm**	‘glitter’
haqʷ**əm**	‘smell bad (e.g. rotten fish smell)
ƛʼewəqʼ**əm**	‘flicker (light)’

(4)

nemʼ	kʼʷɬ-**eʔəm**	ʔə	tʼ$^{\theta}$ə	qaʔ.
go	spill-AP	OBL	DET	water

Go pour some water (for the people).

(5)

stative	liqʷ	‘slack’	slack(s)
inchoative	liqʷəm	‘get calm’	$\lambda x \lambda e$[slack(e) & UND(e,x)]

(6a)

qʼʷəl-**əm**-*els*	cən	ceʔ	ʔə	kʼʷ	sce:ɬtən	ʔəwʼ	kʷeyəl-əs	
bake-MID-ACT	1sub	FUT	OBL	DET	salmon	comp	day	

I am going to barbeque fish tomorrow.

(6b) *qʼwəl-*els*-**əm**
bake-ACT-MID

(7)

ʔəɬtən	ʔə	č	ceʔ	ʔə	kʼʷ	sqəwʔ	
eat	Q	2.SUB	FUT	OBL	DET	native.bread	

Will you eat some First Nations style bread?