# VSO ORDER IN ROMANCE: A LABELING THEORY APPROACH 

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1. GOAL: This paper explores the distribution of subjects in VSO languages under Chomsky's $(2013,2015)$ Labeling Theory (LT). We argue that languages licensing the VSO order (Spanish, Romanian, but not Catalan, Italian) introduce subject by pair-Merge, thus giving rise to a <EA, vP> structure, with subject adjoined to vP (which labels the resulting structure). We also account for the connection between VSO order and the possibility of subjects ('causee'-CAUs) to precede the infinitive verb in causative structures (cf. Ordóñez 2008). This approach assumes that the application of both set-Merge and pair-Merge is free (Epstein, Kitahara \& Seely 2016) and accounts for the facts without resorting to extra specifiers/positions/features.
2. BACKGROUND DATA:As reported in the literature (cf. Belletti 2004, Gallego 2007, 2013; Ordóñez 1998, 2005) VOS order is found in most Romance languages, but VSO order displays a more restrictive distribution being only possible in European Portuguese, Spanish, Romanian and Galician (see (1) and (2)).
(1) a. Todos los días compra Juan el diario.

VSO (Spanish)
all the days buy-3-SG Juan the newspaper
'Every day Juan buys the newspaper.'
b. O invita cam de Ion pe fata acesta. VSO (Romanian) CL-her invite-3.SG quite often Ion PE girl the-that 'Ion invites that girl quite often.'
(2) a. *Fullejava en Joan el diari.
*VSO (Catalan) browsed-3.sg the Joan the newspaper 'Joan browsed the newspaper.'
b. *Hanno salutato i propri genitori Gianni. *VSO (Italian) have-3.PLgreeted the own parents Gianni 'His own parents have greeted Gianni.'
In the literature contrastes like those in (1) and (2) are accounted for by postulating an additional projection/feature/specifier that licenses the extra subject position in VSO languages. Positions that have been proposed to license the subject are diverse: FocusP (cf. Belletti 2004), SubjectP (cf. Ordóñez 2005) vP (cf. Gallego 2013). As Ordóñez (2008) notes, there is a correlation between the VSO order and the position of the embedded subject in causative structures. Only languages that allow VSO order permit the embedded subject preceding the infinitive verb (cf. (3) and (4)).
(3) a. Hicimos [a los chicos cantar una canción]
(European Spanish) made-3.PL ACC the boys sing a song 'We made the boys sing a song.'
b. L-au făcut [pe copil cânte un cântec vese ] (Romanian) CL-ACC made ACC boy sing a song merry 'They made the child sing a merry song.'
(4) a. *Luigi fece [Gianni aprire la porta ]
(Italian) Luigi made Gianni open the door 'Luigi made Gianni open the door.'
b. *Vam fer [ als nois comprar llibres ]

As mentioned, the parameter proposed in all analysis to explain the asymmetry between (1)(3) and (2)-(4) consists in extending the repertoire of projections. This paper offers an alternative that only resorts to LT.
3. A LABELING THEORY ACCOUNT: Assuming Epstein, Kitahara, Seely’s (2016), Chomsky's $(2013,2015) \&$ Cable's $(2010)$ framework, we argue that all languages have two operations to combine syntactic objects: set-Merge ( sM ) and pair-Merge ( pM ).
(5) OPTION 1: $\{\mathrm{XP}, \mathrm{YP}\}$ (set-Merge) (6) OPTION 2: <XP, YP> (pair-Merge)

The relevant point here is that only (6) is LT-compatible, as the labeling algorithm (LA) does not meet a conflict (the adjunct is out of any 'minimal search' metrics). More precisely, since XP is adjoined to YP, XP is not visible to the LA, which searches the YP and finds Y as its head. In the case of (5), LA cannot determine the label because both objects have the same status (XP and YP) and they do not share any feature (Chomsky 2013, 2015). We defend that the licensing of $\{\mathrm{EA}, \mathrm{vP}\}$ follows from the possibility to apply either pM or sM (freely):
(7) OPTION $1\{\mathrm{EA}, \mathrm{vP}\}$ (Catalan, Italian) (8) OPTION $2\langle\mathrm{EA}, \mathrm{vP}\rangle$ (Spanish, Romanian)

Languages that select sM to combine EA and vP do not license the outcome, since it would be LA-incompatible (in Italian and Catalan). On the contrary, languages that resort to pM allow the VSO order, since EA is adjoined, so vP provides the label of the whole structure (in Spanish and Romanian). We propose the same mechanism for the possibility to obtain \{CAU,INF\} order: if CAU is adjoined to vP the result is LA-compatible, whereas the setmerged structure $\{\mathrm{CAU}, \mathrm{INF}\}$ is out.
4. CONSEQUENCES AND PREDICTIONS: This proposal has different consequences. On the empirical side,the analysis predicts that CAUs in pM resorting languages are islands and solves the long-standing puzzles as to why subjects in VSO are more insular than those in VOS (Gallego 2010, Uriagereka 1988). Another prediction concerns Case assignment. If CAUs are adjoined, we expect that their Case cannot be structural: as the data in (9)-(10) show, CAUs are harder to passivize in Spanish than in Italian.
(9) a. Hice a María cantar. (Spanish) (10) a. Mario a fato piangere molti bambini.(Italian) made ACC María sing Mario has made cry a lot of children
'I made María sings.'
b. *María fue hecha cantar. (Spanish) María was made sing
'Maria was made sing.'
'Mario has made a lot of children cry.'
b. Molti bambini sono stati fatti piangere.(Italian) Many children have been made cry 'Many children have been made cry.'

This approach to structural / inherent Case predicts that 'unstable' dependents (e.g., subjects in VSO sentences, which display a highly restricted distribution in Romance; cf. Ordóñez 1998, Picallo 1998, a.o.) should not bear structural Case. That option seems realistic, as postverbal subjects have been argued to be licensed by a non Probe-Goal strategy: "focus" in Belletti (2001), "extra specifiers" in Cardinaletti (2004) and Ordóñez (2007), etc.
On the theoretical side, (7)-(8) raise a deeper question: Why do languages resort to sM or pM to introduce dependents (external/internal arguments)? With EKS (2016), we argue that this is not a parameter stricto sensu; instead, all languages can introduce syntactic objects by sM or pM (from a different perspective, this is also argued for by Nunes \& Uriagereka 2000 when they claim that both external and internal arguments can undergo Multiple Spell-Out). In fairness, though, this does not solve the parametric asymmetry. The plot thickens if we take into account the fact that even pM languages can introduce subjects by sM . This takes us to a scenario where certain options are context/construction-dependent, which is a familiar observation (e.g., non-European varieties of Spanish are not "leista", but they become so under se; Ordóñez \& Kato 2016).
5. CONCLUSION: This paper has put forward a proposal that accounts for parametric variation regarding subject positions under Chomsky's (2013, 2015) Labeling Theory. In particular, we have argued that languages licensing the VSO order select pM , giving rise to a <EA, vP> structure, whish is LA-compatible. On the contrary, languages that select sM create a, LA-non-compatible, $\{\mathrm{EA}, \mathrm{vP}\}$ structure. As expected, both options ( sM and pM ) have significant empirical and theoretical consequences in relation to Case assignment, island conditions, and parameter setting.
6. REFERENCES (SELECTED):. Chomsky, N. 2013. Problems of Projection. Lingua 130: 33-49. Chomsky, N. 2015. Problems of Projection, Extensions. In Structures, Strategies and Beyond, 1-16. Amsterdam: John Benjamins. Epstein, S. D., Kitahara, H., \& Seely, D. 2016. Phase cancellation by external pair-merge of heads. The Linguistic Review, 33(1), 87102. Ordóñez, F. 2007. "Cartography of Postverbal Subjects in Spanish and Catalan". In S. Baauw et al. (eds.), Romance Languages and Linguistic Theory 2005, 259-280. Amsterdam: John Benjamins.

