

Deriving object-initial constituent orders

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Outline

- 1 Distribution
- 2 Typological profiles
- 3 Evidence for o-initiality
- 4 A previous analysis
- 5 A unified analysis
- 6 Conclusion
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Unmarked object-initial constituent order

Hixkaryana: OVS

- (1) toto y-ono-ye kamara
man 3s.30-eat-DST.PST.CMPL jaguar
'The jaguar ate the man.'

(Derbyshire 1977: 593)

Warao: OSV

- (2) erike hube abun-ae
Enrique snake bite-PST
'A snake bit Henry.'

(Romero-Figueroa 1985: 120)

Object-initial languages: a typological rarity

- Six logically possible orders of subject, verb and object: SOV, SVO, VSO, VOS, OVS, OSV
 - Most languages are SOV or SVO
- **Unmarked** object-initial orders are extremely rare. In Dryer's (2013) sample ($n = 1,377$):
 - OVS: 11 languages
 - OSV: 4 languages
- Together object-initial languages account for ≈ 1 per cent

Geographical distribution

- Object-initial languages are geographically clustered in South America rather than being randomly distributed worldwide.
 - Especially evident for OVS languages.
- Many located in the Amazon Basin.

OVS languages

- One of the best-known examples is Hixkaryana, a Cariban language of Brazil, whose OVS word order attracted considerable attention following Desmond Derbyshire's influential descriptive work and subsequent discussion in typological literature.
- Other languages reported to display basic OVS order include Apalaí (Cariban), Panare (Cariban), Macushi (Cariban) Asuriní (Tupian) and Urarina (isolate).
- Most of the OVS languages belong to the Cariban family.

OSV languages

- Extremely rare cross-linguistically.
- But of those languages claimed to be OSV, evidence is limited since many reported cases remain poorly-described.
 - Therefore, difficult to determine whether OSV is truly unmarked rather than discourse-driven.
- Only four OSV languages identified in the WALS sample: two in South America; one in Australia; one in PNG.
- Best-known examples: Warao (isolate), Nadëb (Nadahup) and Xavante (Macro-Jê) (all Amazonian).
- No clear genealogical relationship, but since two of the four WALS OSV languages (plus Xavante) are South American, this supports the importance of the Amazon as a hot spot for object-initial constituent order.

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Hixkaryana (OVS): sociolinguistic situation

- One of the best-known object-initial languages - brought to prominence through the work of Desmond Derbyshire.
- Actively spoken in the northwestern Brazilian Amazon by approximately 600 indigenous speakers.
 - Most speakers live in multilingual indigenous communities where contact with Portuguese and neighbouring indigenous languages has become increasingly common (Instituto Socioambiental, n.d.).
 - Despite these external pressures, Hixkaryana remains actively spoken in many communities and retains considerable importance in local cultural identity.

Hixkaryana (OVS): morphology & clause structure

- Agglutinative morphology with rich agreement
 - Agreement: verbal portmanteau prefixes
- OVS in transitives; VS in intransitives; PredCopS in copula clauses.
- The verbal spine exhibits **head-final** syntax in the thematic and inflectional domains (VP, vP, TP (also in PPs)) but **head-initial** in the discourse domain (CP)
- Similarly in the nominal spine, the lower lexical domain (nP, NP) is head-final, while the higher functional domain (DP) is head-initial.
 - Therefore initial-over-final order language.
- Adjuncts/obliques are stacked following S: OVS(X^n)
- Focus/Wh-movement to a unique clause-initial position
- Particles follow the first XP, except *ha* (follows V)

Warao (OSV): sociolinguistic situation

- Warao is an isolate spoken primarily in the delta region of eastern Venezuela, with smaller communities in neighbouring Guyana and migrant populations elsewhere in South America.
- Actively spoken by approximately 30,000–40,000 people, making it one of the largest indigenous languages of Venezuela.
- Most speakers are bilingual in Spanish to varying degrees, and contact with Spanish has intensified through education, migration, and urbanisation.
- Despite increasing external pressures, Warao remains widely transmitted to children and continues to play a central role in ethnic identity and community life.

Warao (OSV): morphology & clause structure

- Agglutinative, predominantly suffixing morphology.
- Rich TAM and derivational verbal morphology.
- Basic OSV order in transitives.
- Focused and interrogative constituents commonly occur clause-initially, often resulting in SOV order when the subject is focused or in subject-questions.
- Indirect objects appear before the direct object: $O_i O_d SV$.
- Obliques are freer in their position and can appear clause-initially or clause-finally, and can be stacked in different orders: $(X^n)OSV(X^n)$
- Unlike Hixkaryana, intransitives are subject-initial: SV ; as are stative / copula sentences: $SComp(V)$, in which case the copula verb is often optional.

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Evidence for o-initiality – shared properties and constraints

- Derbyshire (1979) presents a strong case for analysing Hixkaryana as an object-initial language, proposing OVS as its basic, unmarked constituent order.

Basic constituent order

“the order most typically found in simple declarative clauses where no stylistic or discourse-conditioned permutation is in evidence.”
Derbyshire and Pullum (1981: 192)

- Derbyshire and Pullum (1981: 195) present several arguments for treating OVS as the basic constituent order in Hixkaryana while SOV is available as a marked alternative.

Interrogatives in Hixkaryana

- All interrogative constituents are obligatory raised to sentence-initial position / the left-periphery regardless of their grammatical function, indicating the existence of a general fronting mechanism:

- (3) a. onoki tho y-on-yetxkoni kamara?
 who DEVL 3S.3O-eat-DIST.PST.CONT jaguar
 'Whom did the jaguar used to eat?'
- b. onoki biryekomo komo y-on-yetxkoni?
 who child COLL 3S.3O-eat-DIST.PST.CONT
 'Who used to eat children?'
- c. isokentoko biryekomo komo y-on-yetxkoni?
 when child COLL 3S.3O-eat-DIST.PST.CONT
 'When did he use to eat the children?'

Subject focus in Hixkaryana

- Fronting is also observed with subjects, whose raising to the left periphery before the object is associated with discourse-pragmatic functions such as emphasis, focus, or the highlighting of a participant. (Examples from Derbyshire 1985: 74)

(4) [okumkurusu]_{FOC} biryekomo heni y-oske-ko
 Bushmaster child dead 3S.3O-bite-REC.PST.CPL
 'It was a bushmaster (snake) that bit the child.'

(5) [Waraka haxa]_{FOC} n-ehurka-no asama yawo
 Waraka cont 3S-fall-imm.pst trail on
 'It was Waraka (not someone else) who fell on the trail.'

- While information focus is indicated solely by position, contrastive focus is doubly marked: by position and by the contrastive particle *haxa*.

Object focus in Hixkaryana

- Fronting is not restricted to subjects: indirect objects and obliques, including adverbial and locative constituents, may also be moved to the left periphery:

(Examples from Derbyshire 1985: 75)

- (6) [ohetxe way]_{FOC} woto w-im-no enmahriro
 your.wife to meat 1S-give-IMM.PST early.in.the.day
 'I gave the meat to your wife early in the day.'
- (7) [owto hona]_{FOC} ti n-omok-ye ha
 village to HSY 3S-come-DST.PST.COMPL INTENS
 'It is to the village that he came (it is said).'

Discourse structure in Hixkaryana

- Another piece of evidence for OVS comes from discourse structure.
- Subject fronting is especially frequent in discourse-initial clauses, where it serves to introduce a participant that will play an important role in the subsequent discourse (Derbyshire & Pullum 1981: 95).

Fronting constraint in Hixkaryana

- Crucially, there is a constraint on constituent fronting: only a single constituent may be fronted in any given clause. Thus, if the subject is fronted, no other constituent can be fronted simultaneously, and vice versa (Derbyshire & Pullum 1981: 195).
- They argue that this restriction is strong evidence against SOV as the basic unmarked order, since one would then expect structures of the form XSOV to occur, but they do not.
- Together, these facts support the analysis of SOV as a derived order resulting from a discourse-motivated fronting operation applied to an underlying OVS structure.

Warao interrogatives

- Warao shares many structural characteristics with Hixkaryana.
- Fronting is observed with subject questions, and albeit covertly, with object questions:

(8) sina ma-yehe-bu-te-ra
who 1SG.O-call-ITER-NON.PST-INTERROG
'Who calls me repeatedly?'

(Romero-Figeroa 1997: 23)

(9) kasikaha yatu ribu-a-e-ra
what you say-SG-PUNC-PST-INTERROG
'What did you say?'

(Romero-Figeroa 1997: 24)

Warao focus

- Subject-initial order is observed with subject focus:

(10) a. atono saba yasi yakera tai nisa-te
 Antonio DAT hat good DEM buy-FUT
 'He will buy a good hat for Antonio.'

 b. tai atono saba yasi yakera nisa-te
 DEM Antonio DAT hat good buy-FUT
 'It is he who will buy a good hat for Antonio'

(Romero-Figeroa 1985: 124)

- Romero-Figeroa (1985) claims there is a fronting constraint disallowing more than one constituent (excluding obliques) to appear before the direct object (so only one of subject, (focused) direct object or indirect object), which he uses as evidence for basic OVS order.

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A previous analysis of OVS (Kalin, 2014)

- Kalin (2014) proposes a derivational account of OVS.
- She rejects Cline 1986 and Mahajan 2007 whose proposals centre around object cliticisation + verb movement analyses.
- This is based on the observation that the particle *hak(a)* can intervene between O and V (among other reasons).
- Concludes that O and V are a phrasal constituent, not a clitic-head complex.
- Instead, she proposes object and verb form a phrasal constituent and OVS derived through predicate movement and OVS is not derived by moving the object alone.

Kalin's 2014 derivation

- VP/vP yields an OV constituent.
- Subject generated in Spec-vP.
- Subject raises to Spec-TP.
- Underlying structure: [TP Subject [vP Object Verb]].
- Key proposal: functional projection headed by *ha* attracts vP to its specifier.
- Entire predicate moves above the subject.
- Surface: [OV] S

Strengths of Kalin's proposal

- Captures OV constituenthood.
- Explains second-position particle placement.
- Derives OVS using independently familiar operations: subject raising and predicate fronting.
- Avoids treating OVS as an 'exotic' base-generated order.

Limitations of Kalin's proposal

- Kalin's analysis is highly successful for Hixkaryana, but relies on language-internal observations.
- Requires a dedicated projection associated with *ha* but it has little clear semantic contribution.
- Difficult to extend cross-linguistically to other OVS languages.

Gaps in the literature

- Literature of other OVS languages and all OSV languages is primarily descriptive and typological; no serious attempts to derive other OVS languages or OSV languages in the same way Kalin does for OVS with Hixkaryana.
- Can a single derivational account explain both OVS and OSV languages? This is what I propose.

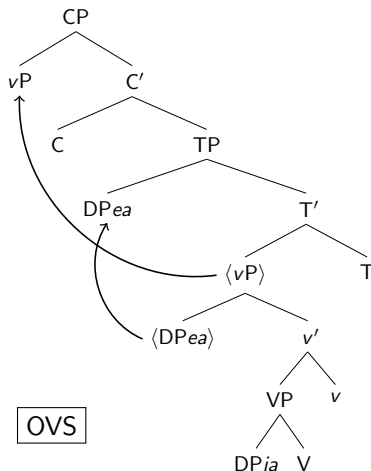
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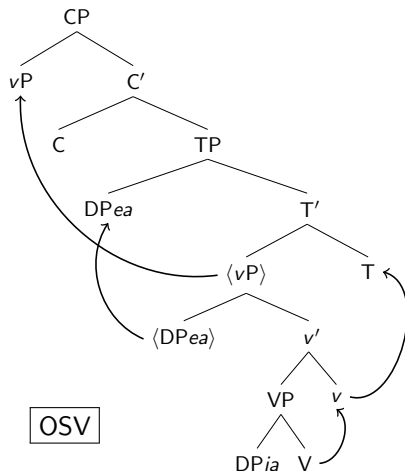
Proposal for a unified analysis of o-initial order

- My proposal aims to be as minimalist as possible.
- Crucially, it unifies the derivation of both OVS and OSV languages and reduces it to the difference of one microparameter: $\pm$ V-to-T head movement (via v).
- For OVS languages such as Hixkaryana, the parameter is set to **-V-to-T movement** whereas for OSV languages such as Warao, the parameter is set to **+V-to-T movement**.
- Thus, we arrive at the following schematic:

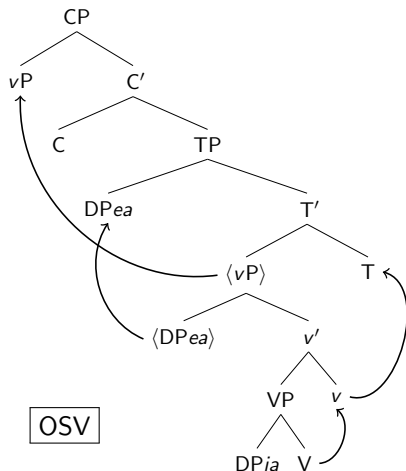
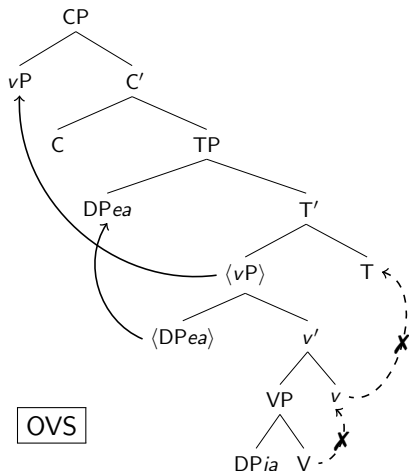
OVS derivation



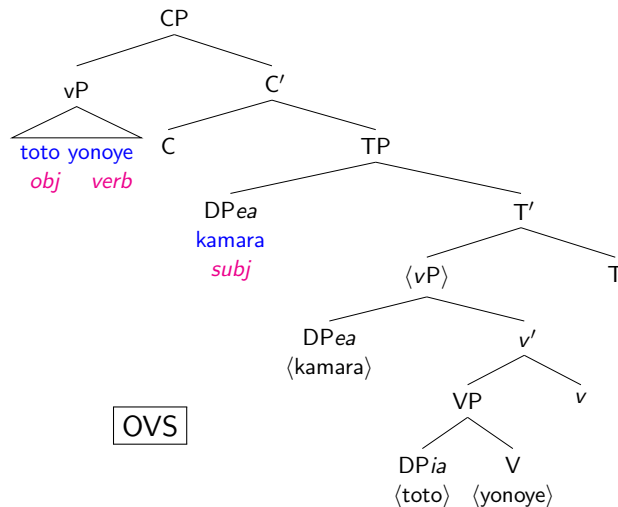
OSV derivation



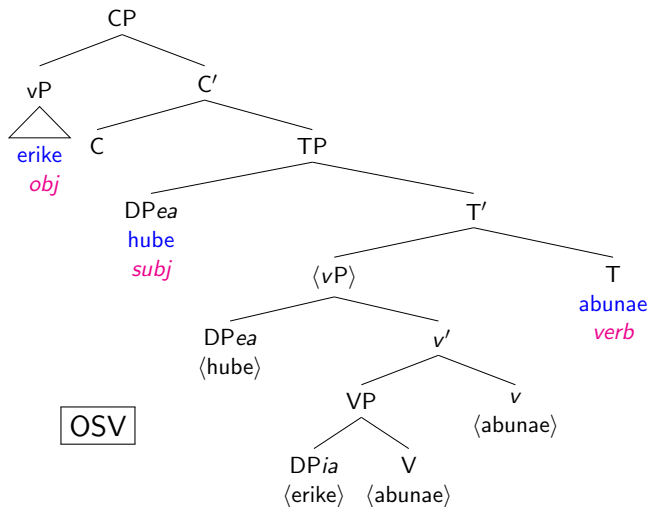
OVS vs OSV



Hixkaryana derivation



Warao derivation



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Conclusion

- Most accounts of languages with object-initial constituent order are mostly descriptive / typological.
- The literature is severely lacking in respect to attempts at deriving unmarked, non-discourse-driven OSV order.
- Kalin (2014) is the first serious attempt to derive object-initiality in an OVS language that is not discourse-driven.
- However, Kalin's work is language-specific, and involves proposing a projection that can only work for Hixkaryana.
- What I have proposed can apply to other OVS languages (pending testing) that do not have the particles following the first XP that Hixkaryana has.
- Additionally, with one parametric difference, i.e., the presence or absence of V-to-T movement, OSV languages can successfully be derived.
- This unifies the derivation of object-initial languages using a single parameter.

Next Steps

- Apply the analysis to other object-initial language data.
- Evaluate a high-absolutive analysis for ergative object-initial languages (Yuan & Ershova 2020).
- Consider the reasons for the existence and rarity of object-initial languages from a functionalist approach.

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