

Samoan subject sharing: In search of the second subject

TripleA 10, University of Potsdam, 07.06.2023

Maximilian Wiesner

`maximilian-wiesner.github.io`

University of Potsdam

Subject sharing

Subject sharing:

- two clauses are conjoined
- only one subject in the surface structure
- one agent but two actions
- subject is interpreted in both conjuncts
 - ⇒ suggests subject taking scope over both conjuncts
 - ⇒ subject must c-command both conjuncts

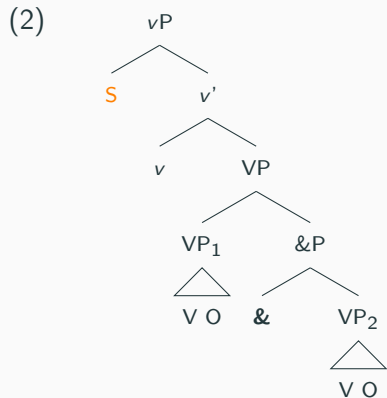
- (1) The man saw the woman and ran away.
= The man saw the woman and the man ran away.
≠ The man saw the woman and the woman ran away.

⇒ SVO&VO word order

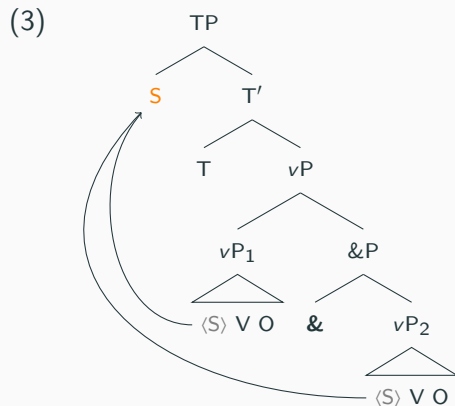
Subject sharing

Straightforward analyses for English:

1. VP-coordination \rightarrow &P-external subject
e.g. Keine (2013) for a similar approach for subject sharing
in same subject switch reference contexts



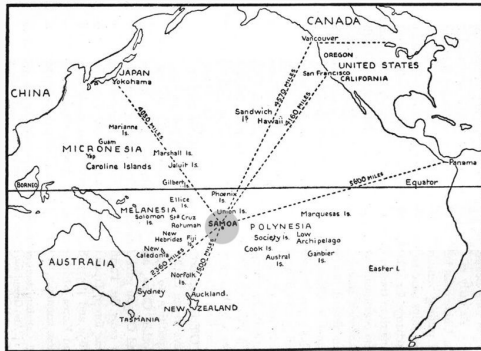
2. vP -coordination + ATB-movement
e.g. Flor & Zompi (2021)



Background on Samoan

Samoan:

- Austronesian language
- Ergative-Absolutive alignment
- leftwards head-orientation
- verb-initial (V1) language
- dominant word order in transitive clauses: **VSO** / **V piv O**



- (4) Lena sa tā e le teine le la'au.
PST hit ERG ART girl ART tree.ABS
'The girl hit a tree.'

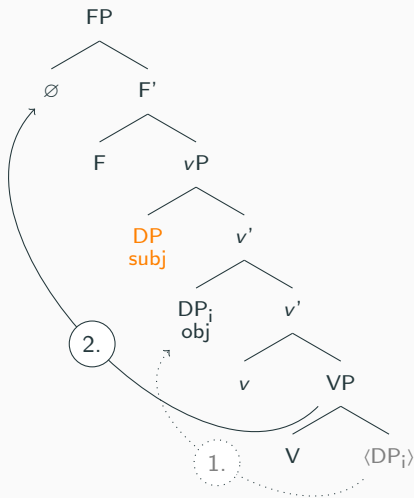
Background on Samoan

VP-fronting (Collins 2017, a.o.):

1. S in SpecvP
2. Object shift below subject
3. remnant VP-fronting

⇒ Derives VSO order

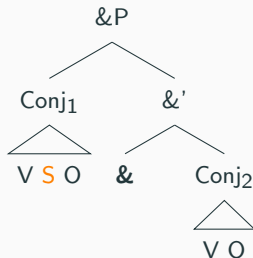
- (5) Lena sa tā e le teine le la'au.
PST hit ERG ART girl ART tree.ABS
'The girl hit a tree.'



Subject sharing in Samoan

- (6) Lena sa [[tā e le teine le la'au] **ma** [si'ia lugā le laulau]].
PAST hit ERG ART girl ART tree and lift up ART table
'The girl hit a tree and lifted a table.'

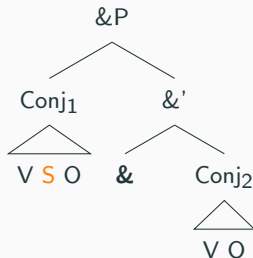
- only one S for two predicates
- S is embedded in first conjunct
 - ⇒ S cannot take scope over both conjuncts
 - ⇒ 'English' derivations do not work
- word order: TAM [V S O] & [V O]



Subject sharing in Samoan

- (6) Lena sa [[tā e le teine le la'au] **ma** [si'ia lugā le laulau]].
PAST hit ERG ART girl ART tree and lift up ART table
'The girl hit a tree and lifted a table.'

- only one S for two predicates
- S is embedded in first conjunct
 - ⇒ S cannot take scope over both conjuncts
 - ⇒ 'English' derivations do not work
- word order: TAM [V S O] & [V O]



Could it be *pro*-drop/Equi-NP-deletion?

Subject sharing in Samoan

A straightforward solution: subject *pro*-drop

- (7) Lena sa [[tā e le teine le la'au] **ma** [si'ia lugā *pro* le laulau]].
PAST hit ERG ART girl ART tree and lift up *pro* ART table
'The girl hit a tree and lifted a table.'

Subject sharing in Samoan

A straightforward solution: subject *pro*-drop

- (7) Lena sa [[tā e le teine le la'au] **ma** [si'ia lugā *pro* le laulau]].
PAST hit ERG ART girl ART tree and lift up *pro* ART table
'The girl hit a tree and lifted a table.'

- (8) a. Agagafi, lena sa fo'i mai **Melanie** i le fale.
yesterday PAST come to Melanie LD ART home
'Yesterday, Melanie came home.'
- b. Lena sa siva ***(gaia)**.
PAST dance 3.Sg
'She danced.'

⇒ subject *pro*-drop is not possible (contra Homer 2009, Koopman 2012, Muāgututi'a 2017)

⇒ Equi-NP-deletion (cf., Chung 1978:106) cannot apply due to the coordination

Subject sharing in Samoan

A straightforward solution: subject *pro*-drop

- (9) Lena sa [[tā e le teine le la'au] ma [si'ia lugā pro le laulau]].
PAST hit ERG ART girl ART tree and lift up *pro* ART table
'The girl hit a tree and lifted a table.'

- (10) a. Agagafi, lena sa fo'i mai Melanie i le fale.
yesterday PAST come to Melanie LD ART home
'Yesterday, Melanie came home.'
- b. Lena sa siva *(gaia).
PAST dance 3.Sg
'She danced.'

How can these constructions be derived? What is the underlying structure?

This phenomenon has been described beforehand (cf. Chung 1978; Mosel 1985, 1987) but **has not been further analysed**. Based on the data I **elicited with native speakers**, I claim the following.

1. Samoan subject sharing constructions are coordinative.
2. Their structure involves coordination below the clausal level.
3. They cannot be derived convincingly by the most prominent approaches.

Coordination vs. subordination

- Subject is absent in second conjunct
- Samoan does not allow for *pro*-drop
- Subject takes wide scope over both conjuncts

What if Samoan subject sharing constructions were subordinative?

Coordination vs. subordination

- Subject is absent in second conjunct
- Samoan does not allow for *pro*-drop
- Subject takes wide scope over both conjuncts

What if Samoan subject sharing constructions were subordinative?

⇒ Subject potentially c-commands/takes scope over the second conjunct

Coordination vs. subordination

Asymmetric extraction is not possible:

- (11) *O lea le mea sa [ta e Peter ____] ma [ai se apu]?
PRES what ART thing PAST hit ERG Peter and eat ART apple
What did Peter hit and ate an apple?

⇒ suggests coordinative structure

Coordination vs. subordination

Asymmetric extraction is not possible:

- (11) *O lea le mea sa [ta e Peter ____] ma [ai se apu]?
PRES what ART thing PAST hit ERG Peter and eat ART apple
What did Peter hit and ate an apple?

⇒ suggests coordinative structure

Object ATB movement is possible:

- (12) O lea le mea sa [maua e Peter ____] ma [gaoi ____]?
PRES what ART thing PAST find ERG Peter and steal
What did Peter find and steal?

⇒ suggests coordinative structure

Coordination vs. subordination

- Subject is absent in second conjunct
- Samoan does not allow for *pro*-drop
- Subject apparently takes wide scope
- Samoan subject sharing constructions are coordinative

Do subject sharing constructions have the same structure as clausal coordination?

Coordination structure

Clausal coordination

- (13) [Na maua e Petelo se ta'avale] ma [na gaoi e Malia le uila].
PAST find ERG Peter ART car and PAST steal ERG Mary ART bike
'Peter found a car and Mary stole a bike.'

- Conjunction of two transitive clauses
- VSO&VSO word order → 2 subjects
- 2 TAM markers
 - ⇒ one MoodP/AspectP/TP in each conjunct (with potentially differing values)
 - ⇒ both conjuncts must be at least the size of MoodP/AspectP/TP

Coordination structure

Can subject sharing constructions have 2 TAM markers as well?

- (14) Lena sa [fasi e le faiaoga le tama] ma [siva].
PAST beat ERG ART teacher ART boy and dance
The teacher hit the boy and danced.

- (15) [Sa tā e le faia'oga; le tama] ma [sa siva *(gaia_i)].
PAST hit ERG ART teacher ART boy and PAST dance 3.Sg
The teacher hit the boy and danced.

⇒ only one MoodP/AspectP/TP is present in subject sharing constructions

⇒ conjuncts must be smaller than MoodP/AspectP/TP

⇒ coordination must apply below MoodP/AspectP/TP

Coordination structure

- Subject is absent in second conjunct
- Samoan does not allow for *pro*-drop
- Subject apparently takes wide scope
- Samoan subject sharing constructions are coordinative
- Coordination must apply lower than MoodP/AspectP/TP
- Conjuncts must be smaller than MoodP/AspectP/TP

What is the minimum size of the conjuncts?

Conjunct size

- Adverb *vave* 'quickly' adjoins to the right of VP → O+Adv (Collins 2017)
- If the surface structure in the second conjunct is Adv+O → predicate fronting

(16) *Lena sa [fasi vave e le *fafine* le tama] ma [lafo se tusi **vave**].
PAST beat quickly ERG ART woman ART boy and send ART letter quickly
'The woman quickly hit the boy and quickly sent a letter.'

(17) Lena sa [fasi vave e le *fafine* le tama] ma [lafo **vave** se tusi].
PAST beat quickly ERG ART woman ART boy and send quickly ART letter
'The woman quickly hit the boy and quickly sent a letter.'

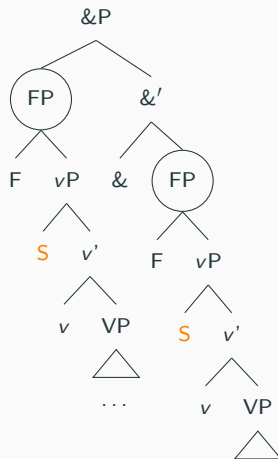
⇒ the adverb must precede the object

⇒ predicate fronts in the first and second conjunct

⇒ conjuncts must contain a landing site for VP-movement → FP conjuncts

Conjunct size

- Subject is absent in second conjunct
- Samoan does not allow for *pro*-drop
- Subject apparently takes wide scope
- Samoan subject sharing constructions are coordinative
- Coordination must apply lower than MoodP/AspectP/TP
- Conjuncts must be smaller than MoodP/AspectP/TP
- Conjuncts must be at least the size of FP



If there is FP-coordination, do we find evidence for two subjects in the structure?

One or two subjects?

- Possible distinction: Are there actually one or two subject positions?
- FP-coordination predicts two vP s and two subjects in the structure
- One vP = one subject position in Spec vP

One or two subjects?

- Possible distinction: Are there actually one or two subject positions?
- FP-coordination predicts two vP s and two subjects in the structure
- One vP = one subject position in Spec vP

Possible diagnostics include

1. Free agent cumulativity
2. Scope of 'nobody'

One or two subjects?

1. Free agent cumulativity (cf. Zimmermann & Amaechi 2022)

- Given a plurality of events which consists of two subevents ($SE_1 + SE_2$), a certain number of individual subparts of a plural agent can be 'assigned' to one subevent SE_1 . The remaining subparts of the plural agent are 'assigned' to the other subevent SE_2 .
 - free agent cumulativity is possible: only one vP is present
 - free agent cumulativity is not possible: more than one vP is present

(18) Plurality of agents ($A_1 + A_2$) & Multi-event VP ($SE_1 + SE_2$)

$A_1 \rightarrow SE_1 \ \& \ A_2 \rightarrow SE_2$
 \Rightarrow *free-agent-cumulativity* = one vP

$(A_1 + A_2) \rightarrow SE_1 \ \& \ (A_1 + A_2) \rightarrow SE_2$
 \Rightarrow more than one vP

One or two subjects?

- (19) *Context: Yesterday, Ana and Myriam, two kids, were at a children's birthday party. One of them played and the other one destroyed the game.*

#Sa kalepe Ana ma Myriam le taaloga ma ta'aalo.

PST destroy Ana and Myriam ART game and play

'Ana and Myriam destroyed the game and played.'

(meaning: Both of them destroyed the game and both of them played.)

- Free agent cumulativity is not available in Samoan subject sharing constructions (cf. Hopperdietzel 2022 for Samoan serial verb constructions).
- *free-agent-cumulativity* is not possible = two vPs in (19)
- Problem: context and combination of sub-events make it difficult to logically assign only one of the agents to one of the sub-events

One or two subjects?

2. Scope of 'nobody' (cf. Han, Lidz & Musolino 2007)

- *nobody* is assumed to reside in the specifier of vP
- (20): neither *somebody danced* nor *somebody sang* is possible
- (21): *somebody danced* or *somebody sang* is possible; *there is somebody who did both, dance and sing* is impossible

(20) Nobody danced and sang.

$\neg \exists x [\text{danced}(x) \wedge \text{sang}(x)]$

'there is no individual x such that x danced and x sang'

(21) Nobody danced and nobody sang.

$\neg (\exists x)[\text{danced}(x)] \wedge \neg (\exists y)[\text{sang}(y)]$

'there is no individual x such that x danced and there is no individual y such that y sang'

One or two subjects?

- (22): there is nobody who both, *hit the boy* and *danced* (\rightarrow one *nobody*/vP)
- (23): there is nobody who carried out any of the two actions (\rightarrow two *nobody*/vPs)

(22) *Context: Two boys, Benno and Jost, are arguing at a party. While everybody else is dancing, Jost hits Benno. Being angry, Jost is not dancing.*

a. #Leai se isi sa fasi le tama ma siva.
not.exist ART other PST hit ART boy and dance
'Nobody hit the boy and nobody danced.'

(23) *Context: Two boys, Benno and Jost, are arguing at a party. Jost is shouting at Benno, but he does not hit him. Due to the tense situation, no one is dancing.*

Leai se isi sa fasi le tama ma siva.
not.exist ART other PST hit ART boy and dance
'Nobody hit the boy and nobody danced.'

One or two subjects?

- (22): there is nobody who both, *hit the boy* and *danced* (→ one *nobody/vP*)
- (23): **there is nobody who carried out any of the two actions** (→ **two *nobody/vPs***)

(22) *Context: Two boys, Benno and Jost, are arguing at a party. While everybody else is dancing, Jost hits Benno. Being angry, Jost is not dancing.*

#[Leai se isi] sa fasi le tama ma siva.
not.exist ART other PST hit ART boy and dance
'Nobody hit the boy and nobody danced.'

(23) *Context: Two boys, Benno and Jost, are arguing at a party. Jost is shouting at Benno, but he does not hit him. Due to the tense situation, no one is dancing.*

[Leai se isi] sa fasi le tama ma siva.
not.exist ART other PST hit ART boy and dance
'Nobody hit the boy and nobody danced.'

One or two subjects?

- (22): there is nobody who both, *hit the boy* and *danced* (→ one *nobody/vP*)
- (23): there is nobody who carried out any of the two actions (→ **two nobody/vPs**)

(22) *Context: Two boys, Benno and Jost, are arguing at a party. While everybody else is dancing, Jost hits Benno. Being angry, Jost is not dancing.*

#[Leai se isi] sa fasi le tama ma siva.
not.exist ART other PST hit ART boy and dance
'Nobody hit the boy and nobody danced.'

(23) *Context: Two boys, Benno and Jost, are arguing at a party. Jost is shouting at Benno, but he does not hit him. Due to the tense situation, no one is dancing.*

[Leai se isi] sa fasi le tama ma siva.
not.exist ART other PST hit ART boy and dance
'Nobody hit the boy and nobody danced.'

⇒ **Issues:** (i) element does not appear in subject position; (ii) element precedes TAM → scopes over both conjuncts → interpretation in (22) cannot arise

One or two subjects?

- (24) a. Lena sa fasi **e** le faiaoga le tama.
PST beat ERG ART teacher ART boy
'The teacher hit the boy.'
- b. Lena sa siva (*e) le faiaoga.
PST dance ERG ART teacher
'The teacher danced.'
- c. Lena sa [fasi **e** le faiaoga le tama] **ma** [siva].
PST beat ERG ART teacher ART boy and dance
'The teacher hit the boy and danced.'

⇒ V_{tr} S DO & V_{unacc}

- (25) a. Lena sa taalo (*e) le fafine.
PST play ERG ART woman
'The woman played.'
- b. Lena sa lafo **e** le fafine se tusi.
PST send ERG ART woman ART letter
'The woman sent a letter.'
- c. Lena sa [taalo (*e) le fafine] **ma** [lafo se tusi].
PST play ERG ART woman and send ART letter.
'The woman played and sent a letter.'

⇒ V_{unacc} S & V_{tr} DO 30 / 48

One or two subjects?

(24-c) Lena sa [fasi **e** le faiaoga le tama] **ma** [siva].
PST beat ERG ART teacher ART boy and dance
'The teacher hit the boy and danced.'

⇒ V_{tr} S DO & V_{unacc}

(25-c) Lena sa [taalo (*e) le fafine] **ma** [lafo se tusi].
PST play ERG ART woman and send ART letter.
'The woman played and sent a letter.'

⇒ V_{unacc} S & V_{tr} DO

- Subjects of transitive verbs and subjects of intransitive verbs are base-generated in different positions above VP (Tollan 2018)

⇒ Coordinating a transitive and an intransitive verb with only one subject position is impossible

⇒ The grammaticality of (24-c) and (25-c) despite the case mismatch suggests two subject positions

Summary

- Subject sharing constructions display coordinative properties.
- However, they differ from clausal coordination.
- They include only one MoodP/AspectP/TP.
- The conjuncts must be smaller than MoodP/AspectP/TP but be at least the size of FP
- Coordination of trans+intrans verbs is grammatical
- Case mismatch in coordination is grammatical
 - There are (presumably) two subject positions in the structure.
- However, based on the data we cannot simply assume *pro*-drop or *deletion under identity*.

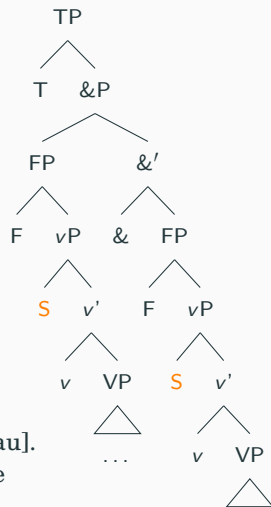
Summary

There are two options:

1. Believe in the evidence for two subject positions and come up with a particular (post-syntactic) deletion mechanism or empty/null element to explain the *Subject-Absence-Issue*.
2. 'Ignore' the evidence and try to find a structure which can derive the remaining facts without (post-syntactic) deletion or empty/null element.

FP-coordination

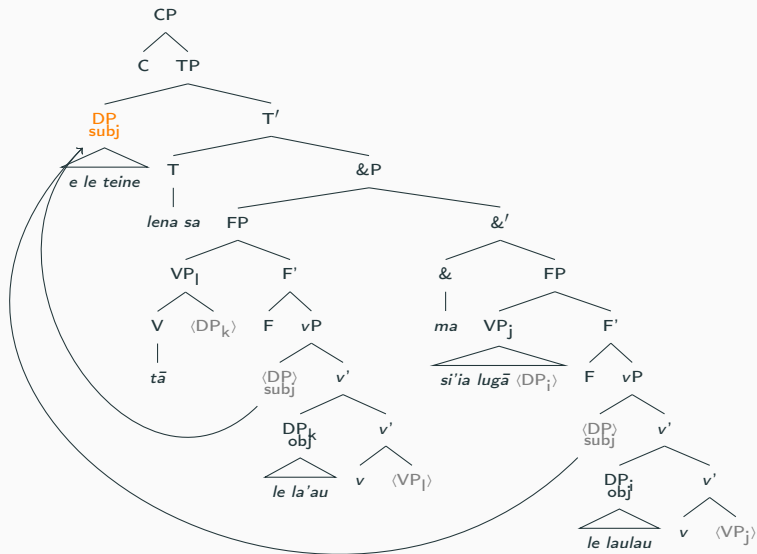
- coordination dominated by TP
- conjuncts are FPs (functional phrase) for predicate fronting
- each conjunct includes a subject



- (26) Lena sa [tā e le teine le la'au] ma [si'ia lugā le laulau].
 PAST hit ERG ART girl ART tree and lift up ART table
 The girl hit a tree and lifted a table.

FP-coordination

(27)



FP-coordination

Pro:

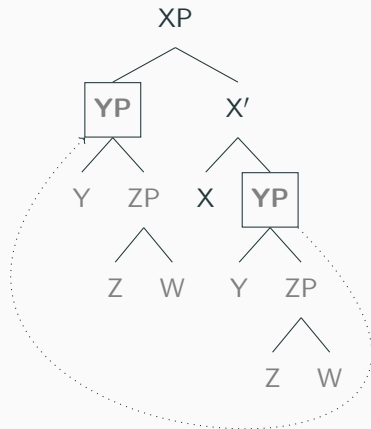
- solves *Subject-Absence-Issue* via ATB movement
- TAM-marker takes scope over both conjuncts
- evidence for two subject positions can be integrated if followed up by an ellipsis/deletion approach

Contra:

- derives incorrect word order → S TAM [V O] & [V O]

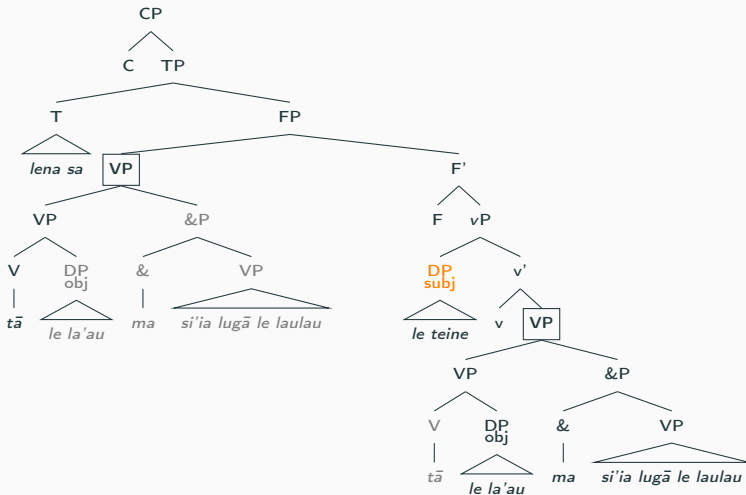
VP-coordination & distributed deletion

- movement = **copy** and **delete**
- two copies of an element can exist simultaneously
- subsequent deletion may apply to both copies, but only partially (Fanselow & Ćavar 2002)



VP-coordination & distributed deletion

(28)



VP-coordination & distributed deletion

Pro:

- solves *Subject-Absence-Issue* via VP-coordination
- no CSC violation because the entire coordination phrase is moved
- TAM-marker c-commands both conjuncts
- derives correct word order

Contra:

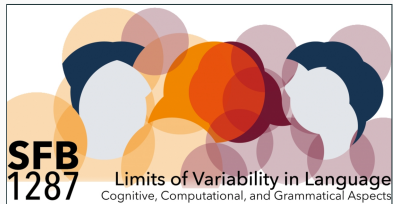
- difficult to motivate this approach in Samoan by using pragmatically conditioned features like *focus* and *topic* (as in Fanselow & Ćavar 2002; different features in van Urk 2022)
→ unlikely that Samoan subject sharing constructions involve pragmatic information which is fundamentally different from that of other coordination constructions
- Adv+O order, evidence for two subject positions and FP-conjuncts do not fall out

Conclusion

- Samoan subject sharing constructions involve coordinative structure.
- As the observations show, they differ from clausal coordination.
- The absence of the subject in the second conjunct cannot be (flawlessly) derived by a structural 'non-deletion' approach.
- Although FP-coordination cannot explain all the peculiarities, the evidence points towards this structure.
- A potential mechanism for a 'deletion/null' approach might be *argument ellipsis*.
- Future research: Investigations about the exact context and restrictions for deletion and co-reference in Samoan (previous work by i.e. Chung 1978; Mosel 1985, 1987)

Acknowledgements

This research is funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – Project ID 317633480 – SFB 1287 (C05: Georgi)



I thank Kenyon Branen for suggesting *distributed deletion*.

References

- Chung, S. (1978). *Case marking and grammatical relations in Polynesian*. University of Texas Press.
- Collins, J. N. (2017). Samoan predicate initial word order and object positions. *Natural Language & Linguistic Theory*, 35(1):1–59.
- Dixon, R.M.W. (1972). *The Dyirbal language of North Queensland*. Cambridge. Cambridge University Press.
- Fanselow, G. and Ćavar, D. (2002). Distributed deletion. In Alexiadou, A., editor, *Theoretical Approaches to Universals*. John Benjamins.
- Flor, E. and Zompì, S. (2021). *CSC-Violating Head Movement in English Conditional Inversion*. unpublished manuscript.
- Foley, W. A. and van Valin, R. D. (1985). Information packaging in the clause. In *Shopen 1985 I*, pp.282-364.
- Han, C., Lidz, J. and Musolino, J. (2007). V-Raising and Grammar Competition in Korean: Evidence from Negation and Quantifier Scope. *Linguistic Inquiry*, 1–47.
- Homer, V. (2009). Backward control in Samoan. In Chung, S., Finer, D., Paul, I., and Potsdam, E., editors, *Proceedings of the Sixteenth Meeting of the Austronesian Formal Linguistics Association (AFLA)*, pages 45–59, University of California, Santa Cruz.

References

- Höhle, T. (1990). Assumptions about Asymmetric Coordination. In: J. Mascaró and M. Nespor, eds., *Grammar in Progress. Glow Essays for Henk van Riemsdijk*. Dordrecht, Foris, pp. 221-235.
- Johnson, K. (2002). Restoring exotic coordinations to normalcy. *Linguistic Inquiry*, 33(1):97–156.
- Keine, S. (2013). Deconstructing switch-reference. *Natural Language & Linguistic Theory*, 31:767–826.
- Koopman, H. (2012). Samoan ergativity as double passivization. In Brugé, L., Cardinaletti, A., Giusti, G., Munaro, N., and Poletto, C., editors, *Functional Heads, Volume 7: The Cartography of Syntactic Structures*. Oxford University Press.
- Mosel, U. (1985). Ergativity in Samoan. Number 61 in *akup* (Arbeiten des Kölner Universalien-Projekts). Institut für Sprachwissenschaft Universität zu Köln, Köln.
- Mosel, U. (1987). Subject in Samoan. In Laycock, D. C. and Winter, W., editors, *A World of Language: Papers presented to Professor S.A. Wurm on his 65th Birthday*, number C-100 in *Pacific Linguistics*, pages 455–479. The Australian National University, Canberra.
- Muāgututia, G. (2017). The Acquisition of Ergativity in Samoan. University of Hawai'i at Mānoa: Working Papers in Linguistics, 48(5).
- Ross, J. R. (1967). *Constraints on variables in syntax*. PhD thesis, MIT.

References

- Tollan, R. (2018). Unergatives are different: Two types of transitivity in Samoan. *Glossa*, 3(1).
- van Urk, C. (2022). Constraining predicate fronting. *Linguistic Inquiry*, pages 1–47.
- Zimmermann, M. and Amaechi, M. (2022). One, but not the same: On complex event formation in Igbo Serial Verb Constructions. unpublished manuscript.

Clausal coordination

(29) [Na maua e Petelo se ta'avale] ma [na gaoi e Malia le uila].
PAST find ERG Peter ART car and PAST steal ERG Mary ART bike
'Peter found a car and Mary stole a bike.'

- Conjunction of two transitive clauses
- VSO&VSO word order

Clausal coordination

Can derive the following:

- the two conjuncts are at least the size of TP
- there are two TAM-markers in the structure
- there is an obligatory subject in the second conjunct
- predicate fronting takes place in both conjuncts
- only one CP is needed

(31) O ai na maua se ta'avale ma na gaoi le uila?
 PRES who PAST find ART car and PAST steal ART bike
 'Who found a car and stole a bike?'

Object sharing

In coordination constructions with a transitive verb in both conjuncts, the object in the second conjunct is not optional. The object has to occur in **both** conjuncts.

- (32) Lena sa [tā le teine ***(le laulau)**] ma [si'ia le faiaoga **le laulau**].
PST hit ART girl ART table and lift ART teacher ART table
'The girl hit the table and the teacher lifted the table.'
 $\Rightarrow V_{tr} S *(DO_i) \& V_{tr} S DO_i$

- (33) [Lena sa faatau e Malia **se tusi**] ma [lena sa leiloa e John ***(se tusi)**].
PST buy ERG Malia ART book and PST loose ERG John ART
book
'Malia bought a book and John lost a book.'
 $\Rightarrow V_{tr} S DO_i \& V_{tr} S *(DO_i)$