

## Free relatives free from silent operators: evidence from Old Avestan

Free relatives (FRs) present two challenges for syntax-semantics interface theories due to their nominal, definite semantics but clausal syntax. The source of the definiteness is also controversial. I build on recent works by Caponigro (2019, 2023) that show in English and Romanian, FRs can be headed by a *wh*-phrase rather than a bare *wh*-word, e.g. the English *I gave you [FR<sub>wh</sub> what money I have]*. I discuss Old Avestan (OAv.) FRs for the first time, which are headed by a relative pronoun (RelPro) and an optional nominal. While in English such FRs are marked (the nominal must be plural or mass), in OAv. the use of such nominals is unconstrained. I argue that such nominals in FRs are the internal head of the FR. I show how OAv. provides motivation for a new analysis of FRs at the syntax-semantics interface with minimal resort to stipulation of empty categories and silent operators. I also demonstrate that as the RelPro in OAv. FRs is not interrogative-based, theories such as Jacobson (1995) that attribute the source of definite semantics to interrogativeness cannot explain these data.

OAv. is an ancient Indo-Iranian language with a marginal FR relativization strategy. FRs appear both in argument position, and as part of a correlative construction. While some OAv. FRs do not have an overt head (as in 1), there might be an internal nominal inside the RC, agreeing in case with the RelPro (as in 2).

I show that in OAv. FRs with an overt internal head, the head is always a bare non-specific noun, unlike the head noun in postnominal externally-headed RCs. Because of this property of the internal head, I propose that in OAv., RelPro occupies the determiner position. I propose that the definite semantics originates from the RelPro in that modifier position, related to the origins of this morpheme as a demonstrative. I also provide evidence from Georgian headless relatives which, due to the lack of a RelPro, are not obligatorily definite, contrasting the cross-linguistic tendency of definiteness in FRs which always have a RelPro (Bhatt and Nash, 2023).

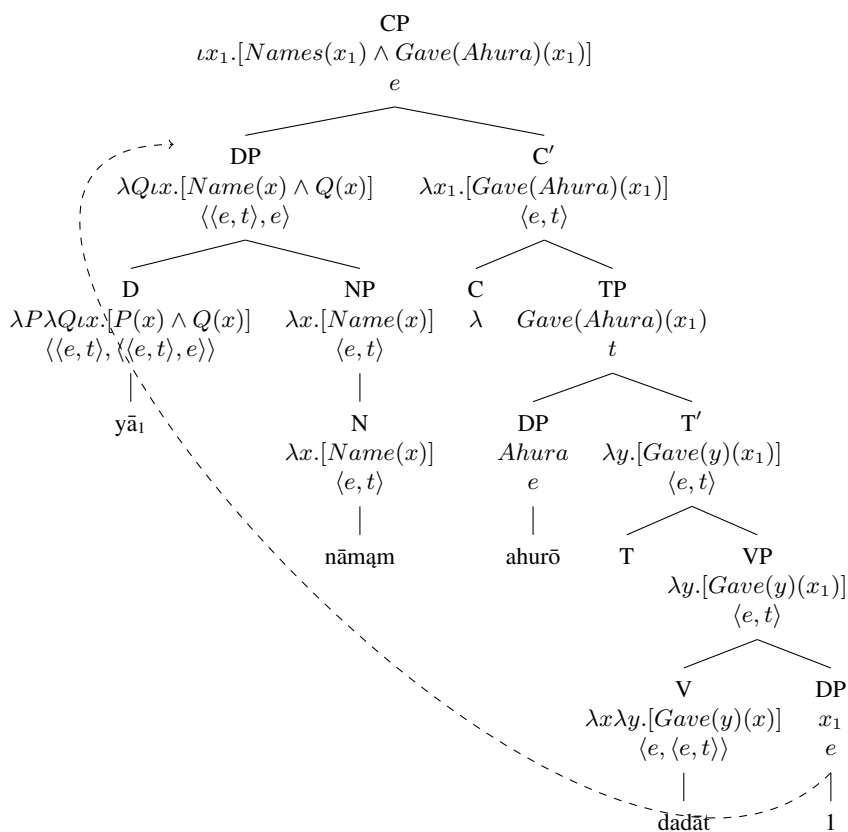
I assume a non-vacuous semantics for RelPro. I propose that in FRs, type mismatch causes the DP that consists of the RelPro and head noun to move to the [SPEC CP] position. As FRs occur in argument position only with a definite semantics, the mechanism that shifts their type to an argument type should differ from the mechanism of nominals in argument position (that can be definite or indefinite). I propose that the RelPro closes the open formula by binding the lambda-bounded variable via an  $\iota$ -operator, since **1.** it is at the left of the head noun (canonical position for determiners), and **2.** it was originally a demonstrative. Therefore, the RelPro would have the semantics in (3). Hence the structure in (4) is proposed for (2), where the FR gets an *e* type and definite semantics by virtue of having an internal head and a definiteness-triggering semantics for the RelPro.

- (1) varatā ... aṣəm mainiiuš spəništō, ...  
 choose.AOR.3SG ... truth.ACC spirit.NOM most prosperous.NOM ...  
**yaē=cā** xšnaošən ahurəm  
 REL.NOM=CONJ satisfy.AOR.3PL Ahura.ACC  
 “The most prosperous spirit chooses truth... also those who satisfy the Ahura  
 [choose the truth].”

- (2) yazamaidē [**yā nāmaṃ** ... ahurō mazdā  
 praise.PRES.1PL REL.ACC name.ACC ... Ahura.NOM wise.NOM  
 dadāt]  
 give.PST.3SG  
 “We praise you with which names the wise Ahura gave”

- (3)  $[[\text{ya-}]_{FR}: \lambda P \lambda Q \iota x. [P(x) \wedge Q(x)]$

- (4)



**REFERENCES:** • BHATT, RAJESH and LÉA NASH (2023). ‘The common core of relativization in Georgian’. *NLLT* 41, pp. 501–546. • CAPONIGRO, IVANO (2019). ‘In Defense of What(ever) Free Relative Clauses They Dismiss’. *Linguistic Inquiry* 50(2), pp. 356–371. • CAPONIGRO, IVANO (2023). ‘Still Free to Have a Wh-Phrase’. *Linguistic Inquiry*, pp. 1–27. • JACOBSON, PAULINE (1995). ‘On the quantificational force of English free relatives’. In *Quantification in natural languages*, Springer, pp. 451–486.