Did Vedic have anaphors? A closer look at svá-

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1 Introduction

Two issues¹:

- i. Sanskrit-internal problem: What are the locality conditions of possessive svá-? Is it
 - Topic oriented: Watkins (1976), Pinault (2001)
 - Rheme oriented: Vine (1997)
 - Agent oriented: Hock (2006)

Kiparsky (2011): No structural antecedent necessary

- ii. Different approaches to accounting for the properties of anaphora:
 - 'DP-based': Anaphors need to be locally anteceded by a DP binder in their governing category: Chomsky (1981), Huang (1982) etc.
 - Predicate-based: Reinhart and Reuland (1993), Reuland (2011) etc.
 - (Referential) hierarchy-based: DP antecedence still plays a role, but in addition referentially dependent nominals 'compete' for different domains, e.g. Burzio (1998), Kiparsky (2002), Safir (2004), Kiparsky (2011)

Concerning i., I will argue in this paper that $sv\acute{a}$ - is a possessive anaphor that needs to be locally bound and that ii. its distribution can be predicted using the referential hierarchy of Sanskrit possessive pronominals.

1.1 Outline of this talk

- 1. Introduction
- 2. Background: Marking possession in the RV
- 3. Distribution of svá-: local antecedents
 - Subject orientation
 - Genitive possessors

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- 4. Dependency hierarchy for possessive pronominals in Sanskrit
 - LDA uses of svá-
- 5. Conclusion

NB all examples are taken from the Rigveda (unless otherwise indicated), collection of hymns composed ca. 1,400-1,200 BCE.

2 Strategies for marking possession in the Rigveda

2.1 Personal pronouns

- No designated 3rd person forms
- (1) Genitive paradigm of the personal pronoun

1.sg.	máma	' my'	1.du.	[āváyos]	'of us two'	1.pl.	$asm ilde{a} kam$	'our'
2.sg.	táva	'your'	2.du.	$yuv \acute{o}s$	'of you two'	2.pl.	yuṣmākam	'your'

- These can only be used when the antecedent is outside the clause in GB terms, these must not be locally bound (Principle B)².
 - a. yádi stómam máma śrávad (8.1.15a) when song-ACC my hear-SUBJ.3SG 'When he hears my song'
 b. asmákam śátrūn ... darṣīṣṭa (1.132.6) our enemies-ACC scatter-PREC.3SG 'May he scatter our enemies!'

2.2 The demonstrative pronoun

In 'obviative' contexts (* He_i saw him_i), the genitive of the demonstrative pronoun stem is used for the third person: $asy\acute{a}$ (m.sg.), $asy\acute{a}s$ (f.sg.), $ay\acute{a}s$ (dual), $es\acute{a}m$ (m.pl.), $\bar{a}s\acute{a}m$ (f.pl.).

(3) na+átārīd asya sámṛtim vadhánām ... (1.32.6c) NEG+overcome-AOR.3SG DEM-3SGm onslaught-ACC weapons-GEN 'He $_i$ has not withstood the onslaught of his $_{*i/j}$ weapons'

Again, Principle B.

2.3 svá- 'SELF's', 'own'

- Inflects like an adjective ('svá-' is the stem/citation form)
- Agrees in gender, number and case with the possessum
- \bullet Takes $1^{\rm st},\,2^{\rm nd}$ and $3^{\rm rd}$ person antecedents:

²This also seems to hold for the corresponding clitics me, te, nah, vah.

- (4) a. svéna bhámena tavisó babhūván (1.165.8) 'svá-'-INSTR anger-INSTR powerful-NOM having.become-NOM.PF.PTCP 'Having become powerful through my (own) anger, (I have killed Vṛtra) ...'
 - b. svám vavrím kúha dhitsatham (1.46.9) 'svá-'-ACC hull-ACC where place-2DU.SUBJ
 - 'Where do you want to place your (own) (bodily) hulls?'
 - c. svéneva dhíro mánasā yad ágrabhīt (1.145.2) 'svá-'-INSTR+CL wise-NOM mind-INSTR REL-ACC seize-3SG.AOR '... which he understood through his (own) mind like a wise (one).'
 - The traditional view is that $sv\acute{a}$ suppletes the paradigm of the possessive pronoun for the third person, but this would not explain the cases in (4).
 - Co-occurrence with a personal pronoun is furthermore possible:
- (5) yájasva tanvàm táva svám (6.11.2d) sacrifice-MID.IPV.2SG body-ACC your-2SG.GEN svá-ACC

tanvàm táva svắm = 'your own body'? 'yourself'? Grammaticalization 'body' \rightarrow 'self' \rightarrow (-)SELF - the right analysis here is probably 'sacrifice to your own self'

3 Distribution of svá-: Locality & antecedence

Kiparsky (2011): svá- doesn't need a structural antecedent.

3.1 Subject orientation

 \rightarrow No.

(6) mahé pitré $_i$ dadātha svám $_i$ nápātam (6,20,11) great-DAT father-DAT give-2SG.PF $sv\acute{a}$ -ACC grandson-ACC 'You have given the grandfather $_i$ his $_i$ grandson.'

Contrast this with cases that are traditionally considered subject-oriented:

- (7) a. $\operatorname{ra:m}_i$ -ne $\operatorname{mohən}_j$ -ko $\operatorname{us-ki}_{*i/j/k}$ kita:b di: (Hindi, Reuland 2011, 168) Ram-ERG Mohan-ACC 3GEN.FEM book give-PAST.FEM 'Ram_i gave $\operatorname{his}_{*i/j/k}$ book to Mohan_j
 - b. $\operatorname{ra:m_i-ne}$ mohən $_j$ -ko əpn- $\operatorname{i}_{i/*j/*k}$ kita:b di: Ram-ERG Mohan-ACC 3GEN.FEM book give-PAST.FEM 'Ram $_i$ gave $\operatorname{his}_{i/*j/*k}$ book to Mohan $_i$ '
- (8) Wo_i gaosu Lisi_j ziji_{i/*j} de fenshu (Chinese, Huang and Tang 1991, 265) I tell Lisi self 's grade 'I told Lisi my own grade'
- (9) otec_i synovi_j dal sve_{i/?j} auto (Czech) father-NOM son-DAT gave SELF-POSS car 'The father_i gave the son_j his_{i/?j} car'

3.1.1 Genitive constructions

... provide further arguments against subject orientation.

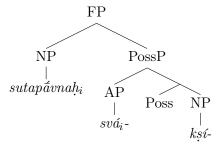
Hock (1991), Vine (1997): svá- often appears locally bound by a genitive antecedent:

(10) ... sómāḥ sutásaḥ santu devasya své $_i$ kṣáye Soma-NOM pressed-NOM be-IPV.3PL god-GEN $sv\acute{a}\text{-LOC}$ home-LOC sutapávnaḥ $_i$ (8,2,7) soma.drinker-GEN

'Let the Somas of the god be pressed in the soma-drinkers $_i$ own $_i$ house.'

... a possible structure for (10):

(11) a. [[sutapávnaḥ] [své kṣáye]] b.



- Reuland (2011): Complementary distribution of POSS anaphors (Russian *svoj*, Icelandic *sinn* etc.) and non-clitic definite markers (definite articles etc.) languages either have one or the other.
- Bošković (2008), (2009): Articleless languages lack DP.

 \rightarrow Sanskrit: No article, POSS anaphor ($sv\acute{a}$ -), allows Left Branch Extraction & extraction from NP adjuncts.

.... could explain the contrast between languages in which structures like Engl. He_i saw his_i book are grammatical and those in which they aren't (i.e. Sanskrit, Russian), Burzio (to appear).

- (12) a. On_i uže rasskazal mne o [svoej_i/ *ego_i žizni] (Russian, Timberlake 1979) he already tell-PAST me about self's/ *his life 'He_i had already told me about his_i life'
 - b. Ty_i uže rasskazal mne o [svoej_i/?tvoej_i žizni] you already tell me about self's/ your life 'You have already told me about your life'

3.2 Participial constructions

Vine (1997): Relative clauses with a covert head - which antecedes $sv\acute{a}$ -:

(13) a. 1,1,7/8: emasi rājantam $_i$... [REL $_i$ vardhamānaṃ své $_i$ approach-PRES.1PL ruler-ACC growing.up-PTCP.ACC $sv\acute{a}$ -LOC dáme] house-LOC 'We are approaching the ruler_i (...) $[REL_i \text{ growing up [in his own}_i \text{ house}]]$ '

So once again the antecedence relation is local.

3.3 Summary

(14) Distribution of $sv\acute{a}$ - in the Rigveda:

'emphatic/intensifier'	13
substantivized	4
local antecedent	86
LDA	12
Unclear	12
Total	127

With respect to binding domain D (see below):

- •Pronouns (2.1.) must not have a coindexed antecedent in D
- $\bullet sv\acute{a}$ must have a coindexed antecedent in D anaphor
- •In obviative contexts, the demonstrative pronoun is used for the 3rd person

4 Dependency hierarchies

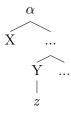
What are the binding domains for different referentially dependent items? Kiparsky (2002):

'hierarchy of constraints which impose successively more restrictive requirements on the locality relation between the anaphor and its antecedent. The domains form a strict hierarchy of inclusion ...'

(15) locally bound » finite-bound » reflexive » ref. dependent » ref.independent

Similarly Safir (2004): Languages have different hierarchies of referential dependence. E.g. Germanic languages:

- (16) SIG-SELF »pronoun-SELF »SIG »pronoun »R-expression
- (17) Form-to-Interpretation-Principle (FTIP) (Safir 2004, 74):



If there is a form w that is more dependent than z and we find z in (17), then Y cannot be interpreted as identity dependent on X. \rightarrow This principle gives us obviation

(18) Local Antecedent Licensing (LAL):

what's left of principle A - 'an anaphor must be c-anteceded in Domain D' **Domain D**:

'The domain for X is the minimal maximal extended projection containing X'

Compare the traditional notion of governing category (Huang 1982 version):

(19) Governing category

 α is the governing category for β if and only if α is the minimal category containing β , a governor of β and a SUBJECT which, if β is an anaphor, is accessible to β .

4.1 A dependency hierarchy for Sanskrit possessive pronouns

(20) svá- »personal pronoun »demonstrative pronoun »R-expression

If the possessum is *inalienably possessed* and the possessor is in the domain of LAL, no special possessive form is used.

(21) kadá sūnúh pitáram ... ichāc (10,95,12a) When son-NOM father-ACC search-SUBJ.3SG

'When will the son look for the/his father?'

NB: This does NOT exclude kadá sūnúh svám pitáram ... ichāc - 'emphatic' use has special properties not directly governed by LAL! Compare

- (22) Czech:
 - a. zvedla jsem rukuraise-PCTP.FEM am hand-ACC'I raised mv hand'
 - b. zvedla jsem svoji ruku raise-PCTP.FEM am POSS-ACC hand-ACC 'I raised MY hand'
 - c. *? zvedla jsem moji ruku raise-PCTP.FEM am my-ACC hand-ACC
- (23) Kutchi Gujarati:

- a. John e-no (potha-no) hath-ne uparyo (Patel-Grosz (2011)) John 3.sg-gen self-gen arm-acc raised.pfv.m.sg
 - 'John raised his (own) arm' (inalienable possession potha optional)
- b. John e-no *(potha-no) kutro joyo John 3.sg-gen self-gen dog.m.sg see.pfv.m.sg 'John saw his own dog' (alienable possession - potha obligatory)
- \rightarrow Patel-Grosz (2011): Possessive reflexives are sensitive to semantic conditions on binding ((in)alienability, animacy etc.)

4.1.1 $sv\acute{a}$ -

If the possessum is not inalienably possessed and the possessor is in the domain of LAL, $sv\acute{a}$ - is the most dependent form available:

- (24) a. té $_i$ jānata svám $_i$ okyàm ... (8.72.14a) DEM-NOM.PL know-3PL $sv\acute{a}$ -ACC home-ACC 'They $_i$ know their $_i$ home'
 - b. dúraś ca víśvā avṛṇod ápa svấḥ (3.31.21d) doors-ACC and all-ACC close-IPF.3SG away $sv\acute{a}$ -'... and he unlocked all his doors.'

4.1.2 personal pronouns/3.sg. demonstrative

... since $sv\acute{a}$ - is higher on the dependency scale than the personal pronoun, using it within the domain of LAL implies a dependent interpretation. Hence personal pronouns kick in for non-coreference:

(25) yádi stómam máma (*svám) śrávad (8.1.15a) when song-ACC my-ACC (*svá-ACC) hear-SUBJ.3SG 'When he hears my song'

There are no designated 3^person forms in the pronominal paradigm - hence we get the demonstrative in obviative contexts with two 3rd persons.

4.1.3 LDA/Discourse-anaphoric uses of svá-

Safir (2004): Anaphors can be promoted to UD ('Unbounded Dependency') forms under certain syntactic conditions - in which case they do not have to obey LAL.

- (26) English '-self' forms (from Safir 2004, 178):
 - a. Selena insisted that Charlie would trust no one except herself.
 - b. People such as myself have never been admitted.

Problem: Under what conditions can anaphors become exempt?

(27) **táva** tvisó jániman rejata dyaúr éjad bhúmir your splendor-GEN birth-LOC shake-IPF.3SG sky-NOM move-IPF.3SG earth-NOM bhiyásā **svásya** manyóḥ (4.17.2) fear-INSTR svá-GEN anger-GEN

'The sky was shaking [with fear] of your splendor at your birth, the earth moved out of fear of your anger.'

The second case also involves the phrase $bhiy \dot{a}s\bar{a} sv \dot{a}sya many \dot{o}\dot{h}$ - but with this reading $t\dot{a}va many \dot{o}\dot{h}$ is expected!

No syntactic antecedent:

(28) nahí svám áyus cikité jánesu (7.32.2) NEG svá-NOM lifespan-NOM know-PF.MID.3SG people-LOC 'For one's own lifespan is not known among the humans'

Discourse antecedent:

- (29) yó $_i$ no abhí hváro dadhé svá $_i$ tám $_i$ marmartu REL us PRVB trap set-3SG.PRES $sv\acute{a}$ -NOM DEM.PRON crush-3SG.IPV duchúnā (2.23.6) mischief-NOM 'Whoever sets a trap for us, may his $_i$ own mischief crush him!'
- \rightarrow So in cases where the anaphor does not have a coreferential structural antecedent, LAL does not apply if the anaphor 'does not participate in a complete thematic complex' (p. 179)
 - \rightarrow This still cannot account for (29) and (28).

5 Conclusion

- i. In the majority of cases in the Rigveda, $sv\acute{a}$ has a local coreferent antecedent (in a domain that \cong Safir's LAL)
- ii. Assuming a dependency hierarchy like (20) predicts the outcomes of competition between $sv\acute{a}$ and the personal pronouns (for 1st & 2nd person) on the one hand and $sv\acute{a}$ and the demonstrative pronoun on the other $pragmatic\ obviation$
- iii. The possessive anaphor of Vedic patterns with POSS anaphors in other languages especially interesting w.r.t. modern Indo-Aryan languages (Davison 2000)
- iv. No special domain for pronouns needs to be stipulated (no 'Principle B') no [+/-PRON], [+/-ANAPHOR] features FTIP + pragmatic obviation
- v. Anaphors can become 'exempt' from LAL but the conditions need yet to be determined

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