

1. Background

The problem: categorial feature(s) of participles and other “mixed categories”

- ▶ Generative approaches: participial morphology spells out **verbal functional heads** (e.g., Asp) if movement to or agreement with a higher position (T or Agr) is blocked (Embick 2000, Bjorkman 2011, Alexiadou et al. 2015) → no need for a categorial head “P_{te}”
- predicts that the syntax & semantics of participles depends on the amount & nature of the functional structure incorporated below the participle suffix (e.g., whether *v*, Voice ... are included, cf. Anagnostopoulou 2003, Alexiadou and Anagnostopoulou 2008).

The challenge: transitive agentive “nouns” in, e.g., Vedic Sanskrit (VS), Ancient Greek (AG)

- ▶ apparent variation w.r.t. category (noun vs. adjective)
- ▶ variation w.r.t. object case (genitive vs. accusative)
- ▶ apparently violate the generalization that agent nouns are incompatible with adverbial modification and structural case objects (Baker & Vinokurova 2009), cf. Lowe 2015, 2017.

(1) Example: VS *-tar-* + gen./acc. objects (NB accent varies):

- tvām **dā-tā** prathamó **rādhāsām** asi
you.NOM **giver-er.NOM** foremost.NOM **bounty.GEN.PL** are
“You are the foremost **giver of bounties**.” (RV 8.90.2a)
- índro astu ... **dā-tā** **vásu** stuvaté kīráye cit
Indra.NOM be.3SG.IPV **giver-er.NOM** **goods.ACC** praiser.DAT feeble.DAT even
“Let Indra be ... (the) **giver of goods** to his praiser, even a feeble one,” (RV 6.23.3a-d)

Claim: Syntactic diagnostics (object case, adverbial modification, preverb incorporation) in precisely these languages correlate with structural properties (verbal stem and voice morphology); suggesting that “participial” suffixes can attach at different “heights” → still no need for “P_{te}” (or “verbal adjective”) as a category

2. Data (i)

- ▶ **(i) a & (ii) a:** VS and AG adjectives which show verbal stem and aspectual morphology (IPFV., PFV., PERF.), Voice morphology (ACTIVE, MIDDLE), and are part of a verbal paradigm → traditionally classified as **participles**
- ▶ **(i) b & (ii) b:** Nouns/adjectives with “verbal” properties (e.g., ACC objects) which are not part of a particular paradigm → traditionally **(verbal) adjectives**
- ▶ **(i) c & (ii) c:** Verbal adjectives with a passive or patient-orient reading; resemble **(past) passive participles**, never take ACC objects.

Figure 1: VS and AG “participial” morphology

(i) VS Suffix	Designation	Examples
a. <i>-(m)āna-</i>	middle ptep.	<i>bruv-ānā-</i> ‘being called’, <i>cakr-ānā-</i> ‘having made’
<i>-(a)nt-</i>	active ptep.	<i>bhāra-nt-</i> ‘bringing’, <i>kr-ánt-</i> ‘making’, <i>y-ánt-</i> ‘going’
b. <i>-ín-</i> , <i>RED-i-</i>	(verbal) adj.	<i>van-ín-</i> ‘desiring’, <i>cá-kr-i-</i> ‘making’, <i>já-gm-i-</i> ‘going’
<i>-tár-</i> , <i>-tar-</i>	agent noun	<i>dā-tár-</i> , <i>dā-tár-</i> ‘giving; giver’, <i>kar-tár-</i> ‘doer’
c. <i>-tá-</i> , <i>-ná-</i>	verbal adj.	<i>kr-tá-</i> ‘made’, <i>hi-tá-</i> ‘placed’, <i>i-tá-</i> ‘gone’, <i>bhīm-ná-</i> ‘split’
(ii) AG Suffix	Designation	Examples
a. <i>-menos</i>	middle ptep.	<i>phéro-menos</i> ‘carrying’, <i>lelou-ménos</i> ‘having bathed’
<i>-ón-</i> , <i>-(a)s</i>	active ptep.	<i>phér-ón</i> ‘carrying’, <i>i-ón</i> ‘going’, <i>doús</i> ‘having given’
b. <i>-tēs-</i> , <i>-tōr</i>	agent noun	<i>klép-tēs</i> ‘stealing/thief’, <i>ep-amún-tōr</i> ‘helping’
c. <i>-tós</i>	verbal adj.	<i>do-tós</i> ‘given’, <i>kh-tós</i> ‘poured, spilled’

- ▶ The (a) suffixes have the same object case as the corresponding finite forms
- ▶ The (b) suffixes can be used as substantives (with GEN obj.) or “verbally” with ACC obj.
- ▶ Syntax does not depend on “categorial status”: the (a) and (b) suffixes pattern together w.r.t. diagnostics such as object case and adverbial modification, independent of whether they belong to a “verbal paradigm” or not.

(2) (a)-(b) take ACC objects

- dhán-āni** **dāya-māna** ójas-ā
prize-ACC.PL **distribute.IPFV-PTCP.MID.NOM.SG** might-INSTR
‘distributing the prizes with might/mightily’ (VS, RV 1.130.7)
- mah-ā **kárm-āni** **cákr-i-h**
great-ACC.PL **deed-ACC.PL** **do_{RED}-ADJ-NOM.SG**
‘doing great deeds’ (VS, RV 9.88.4)

(3) (a)-(b) can be modified by adverbs

- eū** **naió-menon** ptolíet^hron
well inhabit.IPFV-PTCP.MID.ACC citadel.ACC
‘a well-inhabited citadel’ (AG, Homer, *Il.* 1.163-4)
- ni-jaghn-í-r** **ójas-ā**
down-strike_{RED}-ADJ-NOM.SG **might-INSTR**
‘striking down mightily’ (VS, RV 9.53.2)

- ▶ The (a) and (b) suffixes differ in that only the (a) suffixes are compatible with all syntactic contexts in which the corresponding *finite* forms occur, including passive, (4). The (b) categories tend to be (ergative) “subject-oriented”.

(4) lēi-ou **empipra-mén-ou** **hupò tēs** **stratiēs**
crop-GEN **burn.IPFV-PTCP.MID-GEN** **by** **the.GEN** **army.GEN**
‘(when) the crop was being **burned by the army**’ (AG, Hdt., Hist. 1.19.1)

2. Data (ii)

(5) (e) is resultative/“theme-oriented”, no ACC

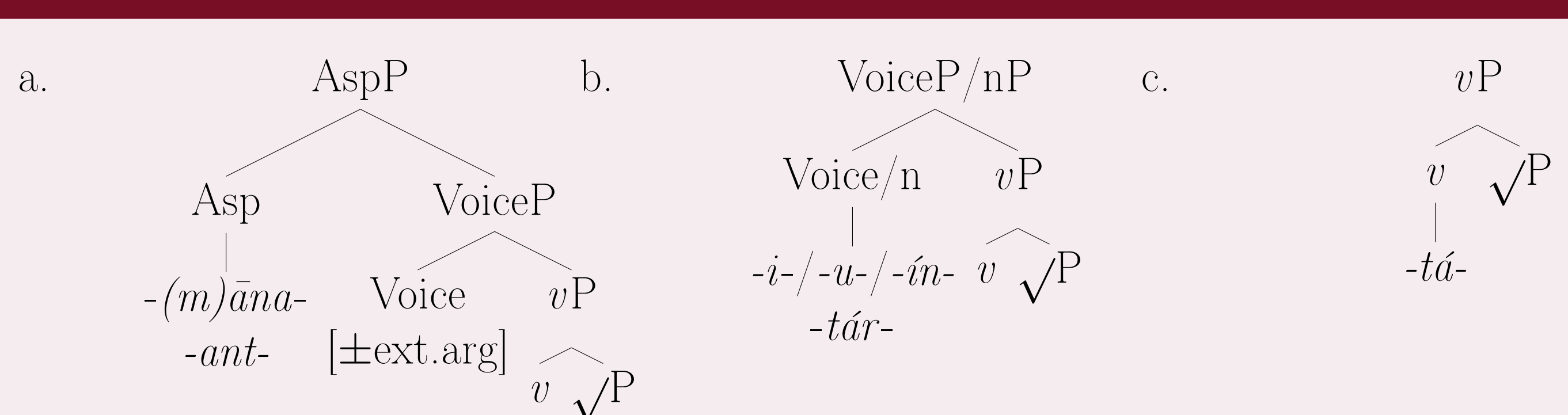
VS		AG	
<i>sthī-tá-</i>	‘standing’	<i>sta-tós</i>	‘standing’
stand-ADJ-		stand-ADJ.NOM.SG.M	
<i>ga-tá-</i>	‘gone’	<i>-gnē-tos</i>	‘born’
go-ADJ-		bear-ADJ.NOM.SG.M	
<i>ha-tá-</i>	‘slain’	<i>do-tós</i>	‘granted, given’
slay-ADJ-		give-ADJ.NOM.SG.M	

3. Analysis

The suffixes in Fig. 1 can be divided into three classes:

- ▶ **(a):** suffixes which spell out Asp and include Voice and lexical aspect, i.e., “participles”.
- ▶ **(b):** suffixes which spell out (different types of) Voice and therefore contain Voice-related properties (i.e., ACC on objects), but not Asp.
- ▶ **(c):** suffixes which spell out (stative/resultative) *v* and contain neither Voice nor Asp → “theme-oriented” (≈ PPP) interpretation (cf. Anagnostopoulou 2003 & passim).

Figure 2: Structure of “participles”



- ▶ Asp in (a) is spelled out as active or non-active (“middle”) in VS and AG depending on whether Voice is [±ext.arg] (Embick 2000, Grestenberger 2018)
- ▶ The (b) suffixes spell out Voice([+ext.arg]) → ACC objects, or n (in complementary distribution with Voice along the lines of Baker and Vinokurova 2009) → GEN objects.
 - The “substantival use” with genitive objects and the GEN/ACC object variation primarily concerns the (b) class → **two lexical entries**
- ▶ The (c) suffixes spell out *v* (“lexical Asp”); hence reduced argument structure and no ACC

This analysis explains why the (a)-(b) categories pattern together w.r.t. ACC case on objects (both contain Voice) to the exclusion of (c). Moreover, these categories can be used in (reduced) relative clauses with, (6-a), and without, (6-b), overt head nouns or relative pronouns, giving the impression of agentive nominals with “verbal” properties (cf. Baker and Vinokurova 2009).

- hoi dē phéro-nt-es gēn te kai
REL.NOM.PL PART bring.IPFV-PTCP.ACT-NOM.PL earth.ACC and also
hūdōr
water.ACC
‘who (were) bringing earth and water.’ (AG, Hdt., Hist. 7.131)
- tarānir ná árvā **vyānaś-í** **ródasī**
overtaking.NOM.SG like steed.NOM **traverse-ADJ.NOM.SG** **world.ACC.DU**
‘like an overtaking steed, **traversing the two world-halves**’ (VS, RV 3.49.3)

Diachrony:

- ▶ Participial affixes tend to develop from (denominal) adjectival affixes (Haspelmath 1994), demonstrably the case for most of the affixes in Fig. 1.
- ▶ The (b) affixes can lose functional structure (→ agent nouns) or gain functional structure → participles, periphrastic tense constructions, e.g.:

(7) kar-tā-smi ‘I will do’ (Classical Sanskrit periphrastic future)
do-NOM.AG-COP.1SG.PRES

4. Conclusion and implications

- ▶ Although languages like VS and AG have a broad variety of (de)verbal adjectives, generalizations w.r.t. their properties are possible and have cross-linguistic analogues.
- ▶ Syntactic diagnostics (object case, adverbial modification, etc.) can be shown to correlate with particular structural features, independent of whether a given deverbal formation has traditionally been classified as “participle” or “adjective” → no need for special assumptions w.r.t. “category”.
- ▶ **Future work:** More detailed studies of different (VS, AG, ...) corpora, additional diagnostics.

References

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