Partitivity and Part-Whole Constructions in Indo-European

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Partitivity Ancient Indo-European Languages

- Fully entrenched notion in some ancient I-E languages, but
- Morphosyntactically always co-expressed: no dedicated partitive case/flag and/or construction
- Structurally akin to
 - Adnominal modification by nouns
 - ► SOURCE semantics
 - Possession
 - Quantifier constructions
- Much more research needed

Expression of Partitivity

- 1. Adverbal partitive genitives, argumental and non-argumental
 - ▶ Vedic Sanskrit (ca. 1000 BCE)
 - ► Ancient Greek (ca. 500 BCE)
- 2. Adnominal partitivity: Part-whole constructions
 - ► Hittite (ca. 1300 BCE)
 - Greek
 - Vedic Sanskrit
- → Status quo prior to Romance innovations

Adverbal Partitive Genitive

Vedic Sanskrit: Ingestion Verbs

- (1) a. pácanti te **vṛṣabhấm** átsi **téṣām**cook:PRS.3PL 2SG.DAT bulls:ACC eat:PRS.2SG 3PL.M.GEN
 'They cook bulls for you, you eat (some) of them.' (Rigveda X 28.3)
 - b. subhú ánnam atti good:ACC food:ACC eat:PRS.3SG 'He eats excellent food.' (Rigveda II 35.7)
- ► Accusative: partial **and** complete involvement of 2nd argument
- ► Genitive: partial involvement (cf. Hettrich in press; Dahl 2014; Dahl 2010)

Brugmann 1911, p. 568

"Der Gegensatz zwischen dem Objektsgenitiv und dem Objektsakkusativ ist aber nicht etwa immer der gewesen, dass der Genitiv einen Teil, der Akkusativ das Ganze betonte, sondern der Akkusativ steht ganz gewöhnlich auch dann, wenn es nur auf die Gattung im Gegensatz zu anderen Gattungen ankommt und die Quantität dahingestellt bleibt."

- ▶ ACC used for partial and complete affection, as well as generic statements
- GEN restricted to expression of partial affection

Vedic Sanskrit

Perception verbs

- ► Emitters and stimuli (probably no DOM)
- (2) a. **śyāváśuvasya** śṛṇu Śyāváśuva:GEN hear:PRS.IMP.2SG 'Listen to Śyāvāśuva!'

(Rigveda VIII 36.7)

b. víśve devāḥ śṛṇutá imáṃ **hávam**=me all.gods:VOC hear:PRS.IMP.2PL 3SG.M.ACC invocation:ACC=1SG.GEN 'O all-gods!, hear this invocation of mine!' (Rigveda VI 52.13)

Vedic Sanskrit

(3) a. ayám agníḥ **suvîryasya** īśe maháḥ 3SG.M.NOM Agni:NOM rich.in.sons:GEN control:PRS.3SG great:GEN **saúbhagasya** happiness:GEN 'This Agni here controls the great welfare of having many sons.' (Rigveda III 16.1)

- b. kşéti kşîtiḥ control:PRS.3SG race.of.men:ACC.PL
 '(With his warriors he attacks and defeats his enemy with his warriors,) he gains control over the races of men.' (Rigveda V 37.4)
- c. *índur* **devéşu** patyate
 drop:NOM god:LOC.PL be.lord:PRS.3SG

 'The drop (Soma) is lord of the gods.'

 (Rigveda IX 45.4)
- ► Lexically determined *pat* (3c): **no** genitive (ACC/LOC/INS)

Vedic Sanskrit

Praise-type verbs

(4) maháś carkarmi árvataḥ great:GEN praise:PRS.1SG steed:GEN 'I praise the mighty steed.'

(Rigveda IV 39.2)

(5) *indram* stavā nṛtamaṃ Indra:ACC praise:PRS.SBJ.1SG most.manly:ACC 'I will praise the most courageous Indra.'

(Rigveda X 89.1ab)

► Genitive with *kar*- in (4) lexically determined (no alternation)

Vedic Sanskrit 3rd Argument

- (6) yáh **sómena** jaṭháram apiprata REL:NOM.SG soma:l.SG belly:AKK.SG fill:IPF.3SG 'who filled his belly with soma"
- (7) **sómasya** jaṭháram pṛṇethām soma:GEN belly:ACC fill:PRS.IMP.2DU "With soma fill your belly!"
- ► Genitive alternating with instrumental case in 3rd Argument
- ▶ R arguments in ditransitives never take genitive case

Telicity

- ► High affinity between genitive objects and atelic verbs
- Very few examples with change-of-state verbs (8)
- ▶ May introduce a conative reading as in Avestan ex. (9)
- (8) vidanvān vai bhārgava indrasya pratyahams Vidanvat:NOM indeed Son.of.Bhṛgu:NOM Indra:GEN smite:IPF.3SG 'Vidanvat, the son of Bhṛgu (once upon a time) smote Indra.' (Pancaviṃśabrāhmaṇa XIII 11.10)
- (9) janaiti vīspaēšam aŋrō mainiiuš smite:PRS.SBJV.3SG everyone:GEN Aŋra:NOM Mainiius:NOM 'Aŋra Mainiius will (try to) smite everybody.' (Avestan, Yašt 3.5)

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 'Aŋra Mainiius will (try to) smite everybody.' (Avestan, Yašt 3.5)
- (10) Índro no **asyá** pūrvyáḥ papīyād Indra:NOM 1PL.GEN 3SG.M.GEN first:NOM drink:PRF.OPT.3SG 'Indra, the heavenly king, shall have drunk/been drinking this (soma)' (Rigveda VI 37.2cd)
 - ▶ Perfective aspect (10) "very rarely" occurs with genitive objects
 - ► Markedly atelic (Dahl 2014)



Frequencies Data: Hettrich in press

	Acc	Gen	Ins	Loc
ingest, gain, transfer, request	1420	157 (drink 106)	37	_
	88%	10%	2%	
rule over, dispose of	24	147	2	3
	13%	83%	2%	2%
mention, percieve, mind, know	224	112	-	_
	66%	34%		
be glad, enjoy	12	34	37	26
	11%	31%	34%	24%

- ▶ Highest proportion with *controll* verbs
- SOURCE (ablative) not involved, but note hig degree of GEN-ABL syncretism (underinvesigated)

1st Argument/Subject

- Rather marginal
- Very few experiencer/stimulus (12, post-rigvedic)
- (11) ákāri vām **ándhaso**make:AOR.PASS.3SG 2D.DAT soma.juice:GEN

 'Some soma-juice has been prepared for you two.' (Rigveda VI 63.3)
- (12) yád vái púruṣasya āmáyati if PTC man:GEN be.ill:PRS.3SG 'lf a man is ill.' (MS I 8.9)

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- (13) yat hē stāram baγō.dātanam aiβi raocaiiānte so.that 3SG.M.DAT stars:GEN.PL god.shaped:GEN.PL round shine:PRS.3PL
 'So that the stars, which are set up by the gods, shine around for him.'
 (Avestan, Vidēvdād 19.23)
 - ► Low agentivity/experiencers; unaccusative verbs
 - May controll agreement: raocaiiante

Adverbials

- (14) kṣapás night:GEN.SG 'de nuit; at some point during the night'
- (15) uṣásas dawn:GEN.SG 'at dawn; at some point in the morning'
 - Not all ancient I-E languages allow for genitive objects, but all do so for adverbials
 - Necessarily related to partitivity?

Observations Vedic Partitives

- Agent typically refers only to a part of the patientive concept but affects this part completely, or
- Refers to the nominal concept in its totality but affects it only partially
- Mass nouns and abstract nouns prevailing by far other semantic classes not excluded
- ▶ Verbal predicates: predominantly verbs of ruling, ingestion, transfer, striving

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- Some occurrences of GEN lexically determined
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- Definitness?

Ancient Greek Adverbal Partitive Genitive

Cf. Luraghi 2003; Conti and Luraghi 2014; Seržant 2012

- Occurs in the place of all other cases
- (16) Eisì gàr autōn kaì parà basiléi tõi Perséōn be:PRS.3PL PTCL DEM.GEN.PL and by King:DAT ART.DAT Persian:GEN.PL 'Because the Persian king has some of them.' (Hdt. Hist. 3.102.2)
- (17) óphra píoi oínoio for drink:AOR.3SG.OPT wine:GEN.SG 'that he might drink of that wine' (Od. 22.11)
- (18) nuktós
 night:GEN
 'at (some unspecified point of time during the) night'
- (19) *ẽ ouk Árgeos ẽen*Q NEG Argos:GEN be:IPF.3SG

 'was he not in Argos?'

 (Od. 3.251)

Partitive Genitive in Ancient Greek

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- Decrease of referential properties of the respective NP
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 Some behavioral subject properties

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- Decrease of referential properties of the respective NP
- Demotion of referents in discourse
- 1st arguments
 - low agentivity: stimuli with experiential predicates (needed, taken care of)
 Some behavioral subject properties
- 2nd arguments
 - Low degree of involvement
 - Reduced extent of participation
- Not attested as R arguments with communication and transfer verbs
- Loose connection with negation
- Very similar to Indo-Iranian

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- ▶ Involvement of PARTITIVE in case attraction

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- (20) takku LÚ.U₁₉LU-an ELLAM KIR₁₄ = set kuiski
 if man:ACC free nose(:ACC) = 3SG.POSS.ACC INDF.NOM
 wāki
 bite:PRS.3SG
 'If anyone bites off the nose of a free person.' (Neo-Hittite, Laws § 13)
 - ► Agreement in case of WHOLE (*man*) with PART (*nose*)

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- (21) takku LÚ.U₁₉.LU-as ELLAM KIR₁₄ =set kuiski if man:GEN free nose(:ACC) =3SG.POSS.ACC INDF.NOM wāki bite:PRS.3SG
 - 'If anyone bites off the nose of a free person.' (Old Hittite, Laws § 13)

- ▶ Predominantly in accusative case, but cf. (23)
- ► Almost exclusively in part-whole relations, mostly body parts
- (22) n=an tuīkus isgahhi
 CONN=ACC.SG body-member.ACC.PL anoint:PRS.1SG
 'I anoint his members.' (KUB 7.1+i 40)
- (23) nu=kan GAL-in arunan ^DKumarbiyaza É-irza uwater
 CONN=PTC big:ACC sea:ACC Kumarbi:ABL house:ABL bring:PRT.3PL

 'They brought the big sea out of Kumarbi's house. (StBoT 14.11.16–19)
 - ▶ Development in the history of Hittite (?)
 - ▶ Possibly contact-induced (Luraghi 2008 with further ref.)

Double Case Ancient Greek

- Well attested
- Mostly accusatives
- Dative/genitive constructions ambiguous (external possessor)
- (24) **tón** hr' Oduseùs ... bále dourì **kórsēn**3SG.ACC PTCL Odyseus:NOM hit:AOR.3SG spear:DAT brow:ACC
 'Odysseus hit his brow with a spear.' (II. 4.501–2)
- (25) boúlei pónon **moi** tēide prostheīnai **kherí** want:PRS.2SG distress:ACC 1SG.DAT ART:DAT put:INF Hand:DAT 'You want to put distress in my hand.' (Eur. Hel. 63)

Double Case Ancient Greek

- (26) Atreides d' ákhei megáloi bebolménos étor
 Atreid:NOM PTC pain:DAT great:DAT hit:PTCP.PF.P.NOM soul:ACC
 'Agamemnon, hit in his soul by great pain.' (II. 9.9)
 - ▶ WHOLE promoted to subject in passivization
 - ► PART: body parts; armor
 - ► Poetic genre (Homeric)

Double Case Indo-Iranian

- Part-whole relation
- Inclusion of abstract and concrete PARTS
- ahám etấñ ... dvấ-dvã índram yé vájram (27)vudháve DEM.ACC.PL ... two-by-two Indra:ACC REL.NOM.PL mace:ACC.PL to.fight ákrnvata make:IPF 3PI 'I (struck down) by twos those who caused Indra's mace to fight' (Rigveda X 48.06)
- tấni (28)té tvā mádā amadan DEM NOM PL 2SG ACC drink: NOM PL exhilarate: AOR 3PL DEM ACC PL vŕsniyā bullish-power.ACC.PL 'These drinks exhilarated these bullish powers of yours.'

(Rigveda I 53.6)

Double Case Indo-Iranian

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- Inclusion of abstract and concrete PARTS

tvā

mádā

- (27) ahám etấñ ... dvấ-dvā índraṃ yé vájraṃ yudháye I DEM.ACC.PL ... two-by-two Indra:ACC REL.NOM.PL mace:ACC.PL to.fight ákṛṇvata make:IPF.3PL 'I (struck down) by twos those who caused Indra's mace to fight' (Rigveda X 48.06)
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 vṛṣṇiyā

 bullish-power.ACC.PL

 'These drinks exhilarated these bullish powers of yours.' (Rigveda I 53.6)

amadan

(29) tám ... ná ródasī pári śrávo

DEM.ACC.SG.M ... NEG world.half:NOM.DU about fame:ACC.SG.N

babhūvatuḥ
become:PERF.3DU

'The two world-halfes do not encompass his fame' (Rigveda V 16.4)

tấni

Double Case Indo-Iranian

- Locative case
- Iranian evidence
- (30) å hí ruhátam aśvinā ráthe kóśe hiraṇyáye to PTCL ascend:IPV.2DU Aśvin:VOC.DU chariot:LOK cask:LOK golden:LOK 'Ascend into the golden cask of the chariot, Aśvins!' (Rigveda VIII 22.9)
- (31) hō mam ... vərənan nijainti
 DEM.NOM 1SG.ACC ... fetus:ACC.PL kill:PRS.3SG

 'He induces the abortion of my children' (Avestan, Videvdad 18.38)
 - ► Few clear instances
 - ! Genitive as means of adnominal partitive modification clearly prevails

Double case

Separative Semantics Vedic

- (32) a. duhāná údhar diviyám mádhu priyám milking:NOM udder:ACC heavenly:ACC honey:ACC dear:Acc 'milking out the lovely honey of the heavely udder' (Rigveda IX 107.5)
 - b. *nír jyótiṣā támaso gá adukṣat*out light:I darkness:GEN cow:ACC.PL he.milked
 'he milked the cows out of the darkness' (Rigveda I 33.10)
- (33) dughdó $amsúh \sim dugdhám$ páyas milk:PART.PASS plant milked:PART.PASS milk milked $plant' \sim milked out$ milk'
- ► SOURCE attracted to direct object
- Both accusatives passivizable

- (34) **vṛkṣám** pakvám **phálam** dhūnuhi índra tree:ACC ripe:ACC fruit:ACC shake:IMP.2SG Indra:VOC 'shake down ripe fruits of/from a tree, Indra!, (for us)' (Rigveda III 45.4)
- (35) **cakráṃ** muṣāyá indra **súriyam**wheel:ACC steal:INJ.2SG Indra:VOC sun:ACC
 'Indra!, you stole the wheel of the sun' (Rigveda IV 30.4)
- (36) a. **prá**tra bhedám sarvátātā muṣāyat toward=here Bheda:ACC.SG entirely steal:INJ.2SG 'He despoiled there Bheda entirely' (Rigveda VII 18.19)
 - b. muṣāyád pacatám steal:INJ.3SG porridge:ACC 'He stole the porridge' (Rigveda I 61.7)
 - ▶ Applicative *prá* for SOURCE without direct object
- ► This type syntactically clearly different from Ancient Greek

- ▶ Double object ditransitives restricted to *steal/ask*-type verbs
- Double object ditransitives historically influenced by partitive part-whole constructions?
- (37) steal cart's PR/SOURCE CASE wheel OBJECT CASE with case copying:

 steal cart OBJECT CASE wheel OBJECT CASE

Armenian Double Case

Jensen 1959; Luraghi 2008; Caha 2013

- (38) pndowt'eamb srtiw / srti steadfastness.INS heart.INS / heart.GEN 'with steadfastness of the heart'
- (39) i knojē t'agaworē-n / t'agawori-n i wife:ABL king:ABL-ART / king:GEN-ART 'by the wife of the king'
 - Attraction only with instrumental and ablative case
 - Not restricted to part-whole relations
 - ► Historically not related (?)

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 - Case copying case stacking:
- (40) y-eresac' k'o-c' from-face:ABL.PL 2SG.GEN-ABL.PL 'from your face'

Case Attraction

Partitivity in Case Attraction

- ► Hittite
 - Partitivity almost always involved
- ► Ancient Greek
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Case Attraction

Partitivity in Case Attraction

- Hittite
 - Partitivity almost always involved
- Ancient Greek
 - Partitivity very often involved
- Vedic
 - Case attraction probably not deeply entrenched
 - Partitivity mostly involved
- Armenian
 - Strong restriction on case attraction (ablative and Instrumental)
 - Partitivity clearly not dominant
- Vertical or horizontal development?
- Case attraction squares well with pervasive system of adjectival expression of different relationships within the NP
- ► Hardly extant in later attested languages (Latin influenced by Greek?)

Partitivity as a Category

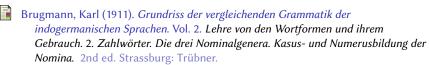
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- ▶ Some languages/communities feel no need to express it categorically
- Some structures of its own in Romance and the Baltic area (linked to possession)

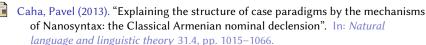
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- Strongly related to genitive and/or ablative case
- Genitive case covers most of commonly known functions of partitive semantics
- ▶ Notable gap with R arguments
- Partitivity always the marked member of an opposition
- Partitivity participates in case attraction via part-whole relation
- Partitivity reaches out to ditransitives





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