Issues in Sanskrit Agreement

HANS HENRICH HOCK

University of Illinois at Urbana-Champaign

Two strategies for predicate gender agreement with mixed-gender conjunct antecedents can be observed in Sanskrit. One is agreement with the nearest conjunct, as in [1]; the other is gender resolution (examples further below). My focus in this paper is mainly on gender resolution.

[1] kāntimatī rājyam idam mama ca jīvitam apy adya prabhṛti tvad adhīnam (Daś. 135)

'Kāntimatī [f.sg.], and this kingdom [n.sg.], and also my life [n.sg.] [is] from today under your control [n.sg.].'

Two major accounts have been proposed for how gender resolution is accomplished.

Under Pāṇini's account, masculine + feminine yields masculine [2a]; any combination + neuter yields neuter [2b] which may optionally be singular; and in the case of adult herd animals the default gender is feminine [2c].

- [2] sarūpāṇām ekaśeṣa ekavibhaktau (1.2.64) 'Of words of the same form, one remains, in case of having the same case'
 - a. pumān striyā (1.2.67) 'In case of masculine with feminine, the masculine remains'
 - b. napumsakam anapumsakenaikavac cāsyānyatarasyām (1.2.69) 'In case of a neuter with a non-neuter, the neuter remains and is optionally singular'
 - c. grāmyapaśusamgheṣv ataruṇeṣu strī (1.2.73) 'In the case of a herd of domestic animals, other than young ones, the feminine remains'

Speijer (1886: 19-20) provides the account in [3], which can be formalized as in [4].

[3] '... as to the **gender** there must be distinguished between persons and things. When relating to persons of the same sex, the common

predicate or attribute is of the same gender: pitā bhrātā ca dvāv api / mātā ca svasā ca dve api. When applying to persons of different sex, it is always put in the masculine: pitā mātā ca dvāv api. But when belonging to inanimate things or things and persons mixed, it is neuter. Kâm. 1, 54 mṛgayā 'kṣas tathā pānaṁ gārhitāni mahībhujām; M 4, 39 mṛdāṅgaṁ daivataṁ vipraṁ ghṛtaṁ madhu catuṣpatham / pradakṣiṇāni kurvīta.

Rem. If neuter words are mixed with words of other gender, it is allowed to put their common predicate in the neuter of the *singular*. Mṛcch. V *pakṣavikalpaś ca pakṣī śuṣkaśca taruḥ saraśca jalahīnam / sarpaścoddhṛtadamṣṭras tulyam loke daridraśca* (the bird, whose wings are clipped, the leafless tree, the desiccated pool, the toothless snake are equal in the eyes of men, so the moneyless man). [With reference to P 1.2.69]

- [4] a. Personal (male + female): masculine default
 - b Elsewhere: neuter default

Although the two accounts are superficially similar, they differ in important ways. Pāṇini's account seems to focus entirely on grammatical gender, except for the "cattle provision" [2c]. Speijer's account, by contrast, focuses on the semantic/pragmatic difference between "personal" or "human/animate" and non-personal or mixed personal/non-personal. Even if we ignore this important distinction, the two accounts make very specific, different predictions. Pāṇini's account provides for masculine agreement with antecedents of the type [5a], while Speijer's assigns neuter [5b].

[5] a. yajñaḥ (m.sg.) + āhutiḥ (f.sg.) → tau (m.du.) [Pāṇini's prediction]
 b. yajñaḥ (m.sg.) + āhutiḥ (f.sg.) → te (n.du.) [Speijer's prediction]

Unfortunately, Speijer does not provide any examples of the type [5b]; and the commentatorial literature on Pāṇini (at least up to the Mahābhāṣya), as well as Indian grammars of Sanskrit reflecting the indigenous grammatical tradition (e.g. Kale 1894) do not give examples that would illustrate [5a].

Now, there is reason to believe that Speijer was influenced by the earlier grammar of Borooah (1879), where we find generalizations very similar to those of Speijer. Moreover, Borooah does indeed give an example of the [5b] pattern, namely the first line of [6], with the specific claim that the neuter agreement found here, with all antecedents in the masculine, contradicts Pāṇini 1.2.69.

[6] trīṇi śrāddhe pavitrāṇi dauhitraḥ kutapas tilāḥ | trīṇi cātra praśaṁsanti śaucam akrodham atvarām || (M 3.235)

Borooah's intended reading must have been something like [6a]; and this is indeed a possible interpretation. However, there is nothing to preclude the interpretation in [6b]. As a consequence, the example cannot be considered to provide unambiguous support for the [5b] account.

- [6] a. 'A daughter's son [m.sg.], a mountain-goat blanket [m.sg.], and sesame seeds [m.pl.], (these) three [n.pl.] are purifying [n.pl.] at a śrāddha; they praise in this context (these) three [n.pl.]: cleanliness [n.sg.], suppression of anger [m.sg.], absence of haste [f. sg.].'
 - b. 'There are three [n.pl.] purifiers [n.pl.] at a śrāddha: a daughter's son [m.sg.], a mountain-goat blanket [m.sg.], and sesame seeds [m.pl.]; they praise (these) three [n.pl.]: cleanliness [n.sg.], suppression of anger [m.sg.], absence of haste [f.sg.].'

We are, thus, left with no examples to test the different accounts in [5a] vs. [5b].

While I do not have a good collection of post-Vedic Sanskrit examples, I have built up a fairly large collection of examples with conjuncts differing in gender from the Vedic period, mainly from Vedic Prose. True, some 30 examples may not sound like a lot; but it is certainly more than the two or three examples that Delbrück (1888) was able to come up with. [1888: 87-88] is certainly correct in saying that examples are difficult to find.)

What, then, does this evidence contribute to the debate?

First of all, the pattern of "personal" or "human/divine" conjuncts with different (masculine and feminine) gender and with default masculine gender resolution is widely attested; see e.g. the examples in [7]. Since these are not problematic, being compatible with both Pāṇini's and Speijer's accounts, I have not made any effort toward a more complete collection.

[7] a. ayám hí netấ váruṇa ṛtásya mitró rấ jāno aryamấpo dhúḥ | suhávā devy áditir anarvấ **té** no ámho áti parṣann áriṣṭān (RV 7.40.4)

Twelve of my examples come from Oertel 1926; the rest, from my own collection.

- 'For this leader [m.sg.] of cosmic order, Varuṇa [m.sg.], Mitra [m.sg.], Aryaman [m.sg.], the kings [m.pl.] do their work; Aditi [f.sg.], the Goddess [f.sg.], easy to invoke [f.sg.], unreachable [f.sg.] these [m.pl.] shall carry us uninjured across the danger.'
- b. so 'śvinau ca sarasvatīñ copādhāvac chepāno 'smi namucaye ... (iti) || **te** 'bruvan ... (ŚB 12.7.3.1-2) 'He (Indra) went to the Aśvins [m.du.] and Sarasvatī [f.sg.], (saying) "I have sworn to Namuci ..." They [**m.pl.**] said ...'

The only major exception that I am aware of, pointed out by Brugmann (1925), is the fact that in a number of Rig-Vedic cases, the conjunction of 'father' and 'mother' yields feminine agreement, rather than the expected masculine agreement; see e.g. the examples in [8].

- [8] a. idám dyāvāpṛthivī satyám astu pítar mấtar yád ihópabruvé vām | bhūtám devấnām avamé ávobhir (RV 1.185.11ac)

 'May this be true, heaven and earth, father and mother, which I ask you here: Be the nearest [f.du.] among the Gods with your support.'
 - b. uruvyácasā mahínī asaścátā pitá mātá ca bhúvanāni rakṣataḥ (1.160.2ab)
 'Far-reaching [m./f.du.], great [f.du.], without fail [m./f.du.], father and mother protect the creatures.'
- vs. c. (tvám) mātā ca me chadayathaḥ samā (RV 8.1.6c) '(you) and a mother seem the same [**m.du.**] to me.'

What is relevant here is that in all cases in which 'father' + 'mother' yield feminine agreement, the two words explicitly [8a] or implicitly [8b] refer to 'heaven' + 'earth'. The word for the latter, pṛthivī, is clearly feminine; and as is well known, the word for 'heaven', dyauḥ, is increasingly treated as a feminine, too. Moreover, expressions of the type dyāvāpṛthivī, dyávākṣámā, and ródasī referring to heaven + earth are all feminine dual; note also ródasī mātárā (RV 9.85.12d). The feminine agreement for 'father' + 'mother' in [8ab], thus, can be explained as a transfer from the expressions that the words refer to, namely 'heaven' + 'earth'.

Things are much more complex when it comes to non-personal, mixed-gender agreement. Two major patterns are observable, one employing neuter (whether singular or dual/plural), the other masculine.

Structures with neuter agreement, not surprisingly, contain at least one neuter antecedent, and at least some of the antecedents are non-human/divine; see [9] for neuter dual/plural and [10] for neuter singular. These examples, thus, are compatible with both Pāṇini's and Speijer's accounts. Moreover, the examples in [10], though rare, confirm that Pāṇini's provision of optional neuter singular resolution has some validity.²

- - b. iṣé rāyé ramasva sáhase dyumnāyorjé 'patyāya | íty etāny evāvarunddhe (MS 1.8.8)
 - "Abide for thriving [f.sg.], for wealth [m.sg.], for power [n.sg.], for glory [n.sg.] for strength [f.sg.], for offspring [n.sg.]", (with this) he obtains these [n.pl.] indeed."
 - c. etāny adhvaryuḥ purastād upakalpayetādhiṣavaṇam carmādhiṣavaṇe phalake droṇakalaśam daśāpavitram adrīn pūtabhṛtam cādhavanīyam ca sthālīm udañcam camasam ca (AB 7.32.4)
 - 'The adhvaryu should make these [n.pl.] ready ahead of time: the soma-press skin [n.sg.], the two pressing boards [n.du.], the soma vessel [m.sg.], the filtering cloth [n.sg.], the (pressing) stones [m.pl.], the receptacle [m.sg.], and the cleansing vessel [m.sg.], and the cauldron [f.sg.], and the upward-turned goblet [m.sg.].'

Similarly elsewhere; altogether some 13 examples.

- [10] a. tásmān mánaś ca vấk ca samānám evá sán nấneva (ŚB (K) 1.3.1.10)
 - 'Therefore mind [n.sg.] and speech [f.sg.], being [n.sg.] equal [n.sg.], are different as it were.'
 - b. āsandī co 'khā ca śikyam ca rukmapāśaś cā 'gniś ca rukmaś ca tat sat (ŚB 6.7.1.27)
 - 'The seat [f.sg.] and the fire-pan [f.sg.] and the netting [n.sg.] and

Is the fact significant that the two clear examples that I have found both come from the late Vedic Śatapatha Brāhmaṇa, relatively close in time to Pāṇini? In this regard, consider the agreement between the Śatapatha Brāhmaṇa and Pāṇini as regards the accentuation of prefixed verbs in the éta ... stávāma construction (Hock 2002).

the sling of the gold plate [m.sg.] and the fire [m.sg.] and the gold plate [m.sg.], — these [n.sg.] (make up) six.' (Oertel's translation³)

What is problematic is that there is also a sizable number of examples with what look like non-personal conjuncts, where neuter gender resolution should be expected according to Pāṇini and/or Speijer, but where we find masculine agreement instead; see [11]. A few of these contain neuters [11ab] and thus are a challenge to both Pāṇini and Speijer. The majority contain only masculines and feminines and would thus be compatible with Pāṇini, but not with Speijer [11c-g]. However, [11h], which follows the same pattern, contradicts Pāṇini's adult-cattle provision (1.2.73), assuming that the qualification *apravītāḥ* indicates that the three-year-old female cows are adult enough to bear calves, but aren't pregnant yet.

- [11] a. ahaś caivāsyaitat sūryaś cābhijitā abhihutau bhavata(ḥ) (KS 6.8) 'At this point day [n.sg.] and the sun [m.sg.] are won [m.du.?], are offered [m.du.].'
 - b. etasya vā akṣarasya praśāsane gārgy ahorātrāṇy ardhamāsā māsā rtavaḥ samvatsarā vidhṛtās tiṣṭhanti (BAU (M) 3.8.10) 'Under the control of this Indestructible, Gārgī, the days and nights [n.pl.], half months [m.pl.], months [m.pl.], seasons [m.pl.], years [m.pl.] remain distinct [m.pl.].'
 - c. dyāvāpṛthivī agnim tān eva prīṇāti (KS 6.8) 'Earth and sky [f.du.], Agni/the fire [m.sg.], these [m.pl.] he pleases.'
 - d. apa oṣadhīḥ paśūms tān evā 'smā ekadhā samsrjya madhumataḥ karoti (KS 31.7, MS 4.1.9 etc.)

 'The waters [f.pl.], plants [f.pl.], (and) cattle [m.pl.], uniting these [m.pl.] together he makes (them) sweet for him.' (Oertel's translation)
 - e. agnes sūryasya divas teṣām ānītās smas teṣām sakāśena jīvāmas tān evālabdha ta enam āneṣata (KS 8.11)
 'Of Agni/fire [m.sg.], the sun [m.sg.], the sky [f.sg.], of these [m./n. pl.] we are led on, in their presence we live. These [m.pl.] he obtained; they [m.pl.] have led him on.'
 - f. oṣadhayaśca vai vanaspatayaśca divā samadadhus ta ito 'nyat

³ Here as elsewhere I add grammatical information to Oertel's translations.

sarvam abādhanta (KS 8.11)

'the plants [f.pl.] and the trees [m.pl.] associated with the sky. They [m.pl.] rejected everything other than it.'

- g. trayó vaí naírṛtā akṣāḥ stríyaḥ svapnaḥ (MS 3.6.3)
 'There are three [m.pl.] nirṛti-related [m.pl.] (problems): dice [m.pl.], women [f.pl.], sleep [m.sg.].'
- h. saptadaśa pṛśnīn ukṣṇaḥ pañcavarṣān saptadaśa pṛśnīs trivatsā apravītās tān paryagnikṛtān prokṣitān e'tarā labhante pre'tarān sṛjanti (PB 21.14.7)
 - 'Seventeen speckled [m.pl.] five-year-old [m.pl.] bulls [m.pl.] (and) seventeen speckled [f.pl.] three-year-old [f.pl.] cows which are not with calf [f.pl.], these [m.pl.] after the fire has been carried round them (and) after they have been consecrated, the female ones [f.pl.] they take (for slaughter), the male ones [m.pl.] they let go.' (Oertel's translation)

Now, some of these structures could be analyzed as involving nearest-conjunct agreement. This analysis is almost certainly correct for [11g] and could be extended to [11b, d, f]. But it would certainly fail for the other examples.

Probably the best explanation would start with example [11h], whose conjuncts may not be human/divine, but nevertheless are higher animals and may thus be treated as close enough to human/divine beings to be treated as "personal". Similarly, in [11f], the plants and the trees are treated as having human/divine-like agency, conspiring with the sky. Finally, examples [11a-e] contain elements that are often, in Vedic ritual, considered to have divine qualities — day and night, sun, the sky, fire/Agni, the year, the seasons, etc. Consider in this regard example [12], where several of the same elements are brought together and identified as the divine class of the *Vasus*.

[12] katame vasava iti | agniś ca pṛthivī ca vāyuś cā 'ntarikṣam cā 'dityaś ca dyauś ca candramāś ca nakṣatrāṇi cai 'te vasavaḥ (ŚB 11.6.3.6, JB 2.77, etc.)

"Who are the Vasus?" — "Agni and the Earth and Vāyu and the Atmosphere and Āditya and the Sky and the Moon and the Constellations, — these are the Vasus." (Oertel's translation)

Put differently, most of the examples in [11], with the exception of [11g] (which seems to involve nearest-conjunct agreement), can be explained by defining "personal" a bit more broadly than Speijer did. If we make this allowance, these

examples can be considered as tilting the argument in favor of Speijer, rather than Pāṇini.⁴ Recall, too, that [11h] fails to conform to Pāṇini's adult-cattle provision (1.2.73).

What, then, about the different predictions made by Pāṇini and Speijer regarding mixed-gender conjuncts that are not personal, but do not include neuters? Here the evidence that I have been able to come up with is disappointingly meager, limited to just the one example in [13]. Interestingly, however, this example does show the neuter agreement predicted by Speijer, rather than the masculine agreement of Pāṇini.

[13] kṣīyanta āpaḥ | evam oṣadhayaḥ | evam vanaspatayaḥ | tena tāny asarvāṇi (JUB 3.1.1.11)

'The waters [f.pl.] perish, likewise the plants [f.pl.], likewise the trees [m.pl.]; therefore these [n.pl.] are incomplete.'

Though the Vedic evidence that I have been able to amass is not overwhelming, it does suggest that for this period of the language Speijer's account, with some modifications regarding the definition of "personal", is preferable to Pāṇini's, and that therefore semantic/pragmatic notions related to animacy play a more significant role in gender resolution than purely grammatical gender. This, of course, is not surprising from a cross-linguistic perspective, since semantically/pragmatically based gender resolution is a common phenomenon in the world's languages; see the work by Corbett (1991, 2006), as well as Hock (2008, 2009) for early Indo-European,⁵ and Johnson (2008) for Latin. As for the discrepancy between Pāṇini's account and that of Speijer, it may well be attributable to the same geographical and linguistic differences between Pāṇini's northwestern area and the madhyadeśa that have been noted by Deshpande 1983 and Hock 1981.

As it turns out, Vedic Sanskrit also seems to conform to a rather unexpected and striking consequence of nearest-conjunct agreement, namely the fact that

⁴ Interestingly, Borooah (1879: 88) cites a similar example from the Mahābhārata, which would suggest that this broader definition of "personal" may not be restricted to the Vedic period:

jyotir ākāśam ādityo vāyur indro prajāpatiḥ | nopaiti yāvad adhyātmam tāvad etān na paśyati ('Mah. XIV. 35. 41')

^{&#}x27;Light [n.sg.], ether [n.sg.], the sun [m.sg.], the wind/air [m.sg.], Indra [m.sg.], Prajāpati [m.sg.] — as long as he does not enter the supreme ātman, so long he does not see these [m.pl.].'

The characterization of Sanskrit in Hock 2008, 2009, of course, needs to be supplemented by the findings of the present paper.

elements preceding the conjunct take their agreement features from the first conjunct, while elements following take it from the last conjunct. To my knowledge, this kind of agreement was first noted by Arnold, Sadler & Villavicencio (2007) for Portuguese; see [14a]. It has since been observed in other languages as well, including Latin; see [14b] from Johnson 2008. To these we can now add the Vedic example in [15] (from Delbrück 1888: 86).

- [14] a. Esta canção anima os corações e mentes brasileiras 'This song animates the [m.pl.] Brazilian [f.pl.] hearts [m.pl.] and minds [f.pl.].'
 - b. ... non **eadem** alacritate ac studio **quo** in pedestribus uti proeliis consuerant utebantur (BG 4:24)
 "... did not employ the **same** [f.sg.] ardor [f.sg.] and zeal [n.sg.]
- [15] **vyāmamātrau** pakṣau ca puchaṁ ca **bhavati** (TS 5.2.5.1) 'the two wings [m.du.] and the tail [n.sg.] are (lit. **is** [sg.3]) **measuring-a-fathom** [m.du.].'

which [n.sg.] they had used to employ in land combat.

Given the limitations of the data on which this paper is based, the conclusions reached must, of course, remain fairly tentative. This holds especially for the patterns in [13] and [15], which are supported by just one example each. Unfortunately, as indicated already by Delbrück, relevant examples are difficult to find. Expanding the data base for the Vedic language or creating a data base for post-Vedic Sanskrit, therefore, would be an arduous task. At the same time, the results would seem to encourage further empirical work — a worthy target for somebody looking for a suitable dissertation topic.

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