Tocharian B agent nouns in -ntsa and their origin

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Abstract

The agent noun suffix in -ntsa belongs to a complex of Tocharian B agent noun formations, similar in form, function, and inflection. Of these, two suffixes are widely believed to be related to -ntsa: the productive agent noun in -ñca and the lexicalised agent noun in -nta. The suffix -ntsa forms occupational titles to eleven verbs in Tocharian B and can be reconstructed for Proto-Tocharian through comparison with Tocharian A. In this paper, it is argued that the suffix originated in the feminine of the PIE active participle in *-nt. This is substantiated by the fact that several ntsa-nouns refer to primarily female professions, as well as the existence of the relic forms Bprentsa ‘pregnant’ and Blantsa ‘queen’. Furthermore, it is proposed that the masculine is reflected in the suffixes -ñca and -nta and that the disintegration of gendered inflection in the participle led to its development into several agent noun formations.

Keywords

Indo-European – Tocharian B – agent nouns – participles – feminine gender

1 Introduction

In the past decade, a group of competing suffixes forming agentive nouns in the Tocharian languages has received increased attention. Not only is their exact synchronic interpretation disputed, but the debate surrounding their origins has even proved to be of importance to our reconstruction of PIE.1

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1 PIE = Proto-Indo-European (including Anatolian), PT = Proto-Tocharian; TB = Tocharian B, TA = Tocharian A; * after a form indicates an inferred nominative (singular); ° indicates part of a compound.
TABLE 1  Tocharian agentive formations

| B prs-ñaça, e.g., wessesñaça 'speaker, speaking' | A prs-, e.g., kàrsnànt 'knower, knowing' |
|-------------------------------------------------|------------------------------------------|
| B prs-/sbj-ntsa, e.g., wàpàntsà 'weaver'        | A sbj-nt, e.g., pekànt 'painter'         |
| B sbj-ntsa, e.g., wàpàntsà 'weaver'             | A sbj-nts *, cf. wàpànts * 'weaver'     |
| B sbj-uka: e.g., kàrsauca 'knower, knowing'     |                                          |
| B prs-uki: e.g., ersùkt* 'evoker, evoking'      |                                          |
| B prs-mo, e.g., càmpamo 'being able'            | A prs-m, e.g., càmpam 'being able'      |

a  These agentive nouns are formed to either the present or the subjunctive stem, here indicated by superscript prs. or sbj.

b  The only TA form with this suffix, wàpànts *, is assured from the abstract wàpàntsunè 'weaving' (YQ 1.21 a8).

A remarkable fact is that TB shows a significantly larger inventory than TA; cf. Table 1.

In terms of attestation, TB prs-ñaça and TA prs-nt are by far the most numerous, and these two are therefore generally taken as equivalents in Tocharian scholarship. Although the suffixes resemble each other formally, the palatalization in TB prs-ñaça excludes an exact phonological match. Additionally, it has been shown that both prs-uki and sbj-uka are functionally and syntactically equivalent to prs-ñaça in TB (Schaefer 1997; Itkin & Kuritsyna 2020). These suffixes exist in the grey area between agent noun and participle (Dietz 1981: 13, 144), showing features of both word classes. Agent noun features include that they do not inflect for gender, that they have a substantival declension (cf. Table 2), and that they are found most often in substantival function (Peyrot 2017: 328–329). Participial features include the fact that they can occur in attributive position as adjectives, that they are sometimes modified by adverbs, and that they govern an object in the oblique (Fellner 2017). However, other transitive verbal nouns also govern an object in the oblique, e.g., the verbal abstract in B-lìñe, A-lune which is purely substantival (TEB1: 187–188). In the present article, I will use the term 'agent noun' to refer to these formations with the caveat that their interpretation is not clear-cut.

2 Sometimes forms in B-ñstä, A-ts are included in discussions of agent nouns because of forms like Bìärjoñstä 'merchant' and Àmokàts 'artisan'; cf. Adams (2015: 142). It is however clear that these forms are secondary substantivizations of primarily denominial adjectives; cf. Fellner (2014a), Itkin & Kuritsyna (2020: 83 fn. 1).

3 B-mo, A-m is generally accepted as an agentive verbal adjective and will be left out of the discussion here.
There are two TB agentive suffixes that form purely substantival agent nouns. One is *prs/sbj-*nta, found with a small number of verbs. These never occur in attributive position, pace Fellner (2017: 77), and consist of lexicalised relics, sometimes found next to newer looking ṇca-forms, e.g., weñenta – wešeñca to Bweñ- ‘speak’; cf. section 5. The other is sbj-*ntsa, which forms agent nouns denoting occupations and seems to have been somewhat productive in the pre-history of TB. These two suffixes also share the agentive *a*-declension, as well as a remarkable similarity in phonological structure to the suffix *prs-ṅca*.

From an etymological point of view, a connection between the agent nouns with a formant in /-NTa/ and the PIE *nt*-participle is obvious. This connection is mirrored by the existence of another verbal nominal, B-*mane*, A-*māṃ*, an exact formal match for the Indo-European middle participle *-mh₁nó*; cf. Gk. -μενος, Skt. -āna-, -māna-, Av. -mna-, Arm. -own (Klingenschmitt 1975: 159–163). It is notable that neither B-ṅca, A-*nt* nor B-*mane*, A-*māṃ* shows a synchronic affinity with active or middle voice. This has led scholars to conclude that they were not marked for voice in the proto-language until after Tocharian split from the rest of IE; cf. Melchert (1983: 24–25), Malzahn (2010: 480), Pinault (2012: 179). However, in the small group of verbs in Tocharian that show a semantic difference between active and middle, there is a clear tendency for B-*ṅca*, A-*nt* nor B-*mane*, A-*māṃ* to have the semantics of the finite middle, while forms with B-ṅca, A-*nt* always show semantics related to the finite active. This demon-

| NOM.SG.  | voc.sg.  | obl.sg.  | gen.sg.  | nom.pl.  | obl.pl.  |
|----------|----------|----------|----------|----------|----------|
| kauṙeñca | kauṙeñcai | kauṙeñcai | kauṙeñcantse | kauṙeñcañ | kauṙeñcaṃ |

a TEB₁ classifies it as adjectival (class II.1.3, § 233), but the vocative singular in -ai and the genitive singular in -antse are both substantival features.

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4 N = n, ň, m, T = t, c, ts.
5 For the synchronic use and function of B-*mane*, A-*māṃ*, cf. Peyrot (2017).
6 The verbs in question are intransitive in the present middle and transitive in the present active.
strates that at a prestage of Tocharian these forms were indeed assigned to middle and active voice respectively; cf. also Fellner & Grestenberger (2018: 68–69, 74–78).

The hypothesis that the agent nouns in */NTa/ go back in some way to the PIE active participle in *-nt- raises new questions: why did they develop into agent nouns, why are there so many competing suffixes in TB compared to TA, and how are these related within the history of Tocharian? In this article, I would like to present a new explanation for the origin of one of these suffixes, which in part answers all three questions.

2 Occupational titles in *nts-

The occupational agent noun suffix *nts- is given as *(t)tsa in the handbooks of the 20th century, mostly as part of a list of deverbal agent nouns; cf. Krause (1952: 47), TEB1 (151), Pinault (1989: 83), Hilmarsson (1991: 124–125). Schmidt (2001: 20) proposed that the suffix was to be read *nts- rather than *tts- on the basis of *wāpāṃtsun ‘weaving’ (YQ 1.21 a8), an abstract derived from an unattested *wāpāṃts ‘weaver’. The ligatures for *(nts) and *(tts) are quite similar; however, the spelling *(nts), equivalent to *(nts), is unambiguous. Since then, this interpretation has become the communis opinio. It has broken the link with what had previously been a core member of the class, *aknātsa, *āknats ‘fool(ish)’, which is always written with single *(tsa), never *(tts). On the other hand, the suffix can now be added to the group of TB agent noun suffixes with the phonological structure */NTa/. The discovery of *wāpāṃtsun ‘weaving’ also meant that the suffix could reasonably be traced back to PT.

Since many of the *nts- forms are attested only once or twice, their exact meanings are often hard to establish. Some can, however, be determined active. These are *nək-ṣə/se- ‘destroy; mid. perish’, *pək-ṣə/se- ‘ripen, cook’, *luk-ṣə/se- ‘illuminate; mid. be illuminated’, *tsək-ṣə/se- ‘burn’, *tüm-nāṣū/ṣə ‘beget, generate; mid. be born’. The intransitive meaning is found in *pākšemanā (THT 107 a2) ‘cooking (itr.)’, *tsākšemanā (IOL Toch 5 a4) ‘burning (itr.)’, *tmāṃṣamā (A 152 b4) ‘being born’. The transitive meaning is found in *nākšemanā (PKAS 2B a2, PKNS 48 a5, THT 30 a6, SI P 1 a3, THT 252 a2, THT 1919 b3) ‘destroyer, destroying’ and *tmāṃsant (A 292 a8) ‘generating’. The only counterexample is found in *nāk-, to which the one attested mane-form in all likelihood is transitive: nākšemanā (90K-58F-01 a3) ‘destroying’; cf. Ogihara (2015: 150–152). Remarkably, all but one of these verbs have solid Indo-European etymologies; for *tüm-, cf. Malzahn (2010: 654).

7 Unlike the preterite participle from the PIE perfect participle *-uos-, which remained adjectival; cf. Pinault (2008: 530–531), Peyrot (2010).

8 Whether the two are related farther back is still a subject for debate (cf. section 6).
through Sanskrit parallels. One such form is *tarkāntsa* (PK NS 107 b1) ‘carpenter’, which translates Skt. *takṣaka* ‘id.’ (Thomas 1977: 110). Another is *walāntsa* ‘hindrance’, attested once in the oblique plural (THT 229 b1–b2), which corresponds to Buddhist Sanskrit *nīvaraṇa*- ‘disturbance, hindrance’. It is derived from *Bwala*- ‘cover’ with a semantic development similar to the Tibetan translation of the term: *chod pa* ‘covering over’ (Edgerton 1953: 311; Adams 2013: 631). The meaning of *wapāntsa* ‘weaver’ is also beyond dispute. The derivational base is the verb *Bwapa*- ‘weave’ (sbj.[5], prt.[1]). It is attested once in a fragment of the Jyotiṣka-Avadāna in THT 1165 + 1548 b2 (Ogihara 2012: 113) and thrice in THT 375 (a2, a4, b2), in apposition to the male personal name *Varddhane* as a professional title. A possible fifth attestation is *wawāṃntsa*, found in a cave inscription in Qizilgaha (Kg-025-ZS-R-01 2; cf. Ching & Ogihara 2020: 275).

The form *taktsāntsa* (U 5208 a7–a8) is interesting, especially from an Indo-European perspective, since it has long been connected to Skt. *tákṣaṇ*-, Gk. *téktnw* ‘carpenter’; cf. K.T. Schmidt *apud* Mayrhofer (1992: 614) and J. Schindler *apud* Ringe (1996: 4). It is translated by Schmidt as ‘einer, der etwas kann’. Accordingly, Ringe (*l.c.*), argues that the form might be influential in the understanding of so-called thorn-clusters in Tocharian; it must be a very archaic form to which the base verb has been lost. The form is found in a TB—Old Uyghur bilingual. The Old Uyghur equivalent of the form reads <u – čı>, restored by Maue (2015: 505) to *udačı*, a present participle in -dačı with agentive meaning (Clauson 1972: 2). This would have meant ‘einer, der etwas kann; Könner’ to the verbal root *u*- ‘be capable’. It is highly likely that Schmidt’s proposed meaning of the Tocharian form is based on the same restoration of the Old Uyghur.

However, in the edition of the bilingual, Peyrot, Pinault, & Wilkens (2019: 79) argue that the lacuna in the Old Uyghur form is too big for the single akṣara <da> and restore instead *uvdačı*, likewise a present participle, but to the verb *uv*- ‘crush, crumble’. The Tocharian form would thus be an ntsa-form from the root *Btaksas*- ‘destroy, smash’ with *t*-epenthesis possibly meaning ‘crusher, grinder’, which also on semantic grounds would be more attractive as an occupational agent noun than ‘Könner’. The link to *tákṣan*-, *téktnw* should therefore be given up.

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9 Although the meaning is reasonably assured, the exact verbal base of this form is disputed. Thomas (*l.c.*) suggests *Btärk*- ‘twist’, but since this root is not *a*-final, Malzahn (2010: 486) proposes a new root *Btarka*- ‘do carpentry vel sim.’

10 For the vowels in TB in attested or inferred forms, I use the standard conventions: ā indicates /á/, a indicates /a/ or /ə́/, and ā indicates /ə/. In verbal roots, I use -o- and -a- following the convention in Peyrot (2013).

11 According to Wilkens (2021: 784), other instances of *udačı* should be taken as mistakes for *udčı* ‘cowherd’.
The meanings of the forms without extra-Tocharian parallels have to be determined purely on the basis of their derivational base verb. These forms are most commonly found in monastery accounts and often in very fragmentary contexts. First off is naskāntsa* ‘spinner’. It is attested once in THT 2718 a6 and its meaning is determined on the basis of Ḗnaska- ‘spin’ (Pinault apud Ching 2010: 266). The attested form is remarkable because it shows the feminine plural ending -na with the addition of the genitive plural -ṃs:

[/] [na]s[ka]tsānṃs cokiš šalywe wsāwa šaṅk [\]

THT 2718 a6

‘I gave lamp oil to the spinstresses: 1 pint’

The ending -na makes plurals exclusively to feminine nouns (TEB₁: 120–121). It is probably in analogy to feminine nouns with the same declension (nom.sg. -a, obl.sg. -ai, nom-obl.pl. -ana) that -ntsa forms acquired this ending to explicitly mark the feminine plural. Since there is no separate feminine singular to -ntsa and the regular plural -aṅ is not overtly marked as masculine, the ending functions in an almost derivational way: nom.pl. naskantsaṅ* ‘spiners’, but nom.-obl.pl. naskantsāna* ‘female spinners, spinstresses’. The same ending is found with Ḗ-ñca: e.g., f.pl. yamaṣṣeñcana (IOL Toch 257 b2) to Ḗyam- ‘do’, f.pl. enķaseñcana (THT 1107 b5) to Ḗenk- ‘seize’.

A recently discovered ntsa-noun is paikāntsa, attested twice in a Qizil cave inscription (Kz-181-ZS-Z-01; cf. Ching & Ogihara 2020:109). Clearly derived from the verb Ḗpəyka- ‘paint, write’, it is very likely that this word means ‘painter’. In line 1, it is found in the nominative singular in apposition to a male personal name: paikāntsa Raktasene ‘the painter Raktasene’. In the second line, we expect a comitative plural, but find a corrupted form instead: škaspaikāntsām-pa ‘along with six painter(s)’.

The word sarāntsa* is attested once in the genitive plural (Tumšuq 97 a2–a3); cf. Pinault & Ogihara (2010:185). It is quite likely derived from the verb Ḗsar- ‘plant’ and could therefore mean ‘planter’ (or possibly ‘gardener’?).

For warwāntsa*, attested five times in the perlative singular warwantsaisa (Ching 2010: 251), it is more difficult to determine the meaning as there are several candidates for the base verb: Ḗwarpa- ‘receive, enjoy’,12 Ḗwarpa- ‘sur-
round’, or \textsuperscript{8}warwa- ‘be urged’. Adams (2013: 630) makes a good case for the first option, suggesting that the warwāntsa* was a receiver of goods. This fits well with use of the perlative, which can be translated ‘through’ or ‘by way of’:

\[
\text{warwantsaisa cokase salywe wsā(wa)}
\]

\text{THT 2718 a5}

‘I gave lamp-oil by way of the [monastery’s] receiver of goods’

\text{tr. Adams; his brackets}

The form spartāṃntsā is found once in THT 558 a2. It is derived from \textsuperscript{8}spartta- ‘turn (itr.); behave’, to which also the noun \textsuperscript{8}spārtto ‘discipline’ is formed. Adams (2013: 783), followed by Itkin & Kuritsyna (2020: 90), translates ‘± scrupulous person’ in the sense “one who behaves hypercorrectly.” In the passage, however, it seems to refer to a person who practises asceticism habitually, rather than someone who only does it for show to receive gifts from laymen; cf. Chen (2019: 224–226).

\[
\text{ompostāṃ sparttāṃntsā sū pañākte kā-a\textsuperscript{3}șintse palsek yānmāśeņca māsketrā}
\]

\text{THT 558 a2–a3}

‘[If] afterwards [he is] a practitioner [of discipline], he becomes an achiever of the mind of the Buddha teacher’

The form mall[\textsuperscript{a}]ntsasmem (THT 4062 a1) was first identified by Schmidt (2001: 20–21) who translates ‘vintner’ (German ‘Kelterer, Winzer’). He suggests that the form is derived from \textsuperscript{8}məla- ‘oppress, deny’. In this case, the form would show an archaic semantic step between PIE *melh₂- ‘grind, mill’ (cf. Hitt. malla-\textsuperscript{i}, Lat. molō, Got. malan ‘id.’) and Tocharian. Subsequently, however, it has been established by Ching (2013: 69) that the text does not pertain to winemaking, so it is quite unlikely that mallāntsā* would mean ‘winemaker’. Another major problem with the form is of a morphological nature. The form clearly contains the ablative case suffix \textsuperscript{8}-mem, preceded by -s-. In Tocharian, the secondary case suffixes such as the ablative are added to the oblique stem. If the form is an ntsa-form, one would expect either singular †mallantsaimem or plural †mallantsaimem; cf. the discussion in Ching (l.c.). Unfortunately, that means that both the morphological analysis and the exact semantics of the word are beyond our reach at the moment.
An interesting case is tällaikāntsa*, found twice in monastery records. The derivational base does not correspond to any known verb, as verb bases are rarely trisyllabic. Instead, it has been suggested that the word is a compound with an ntsa-form as final member. Adams (2013: 315) suggests that the first member is tälle ‘burden’, compounded with °ikantsa to the verb B[i]- ‘go’ to mean ‘burden-goer’ → ‘porter’. Similarly, Malzahn (2010: 487) proposes tälle-aikāntsa ‘burden-knower’ to B[aik- ‘know’. Elsewhere, the noun tälle ‘burden’ is only found in figurae etymologicae with the verb B[təl- ‘carry’ (Adams 2013: 300). In the following passage, Adams (2013: 315) restores a genitive plural tällaik[a]nts[aṃts] and translates “five women of the porters”. In the manuscript, however, there does not seem to be room for an extra aksara ⟨tsˎ⟩ (cf. Ching 2010: 284), so a restoration to oblique plural is preferable:

\[ \text{ikāṃ ņune piś tällaik[a]nts[am] tlaīyn(a)^{13} ///} \]

THT 484 a2

‘On the 29th (day), five tällaikāntsa-women …’

A third possibility would be to segment the form differently: tāl-laikāntsa. In this case, the ntsa-form would be derived from the verb B[laika- ‘wash’ compounded with an unknown first element tāl°, tān°, or tār°.

Another possible case of a compound ntsa-form is k(e)wyomntsai, likewise found in the monastery records (THT 2694.2). Ching (2010: 242, 400–401) identifies it as an occupational title next to a female personal name: ///k·wyomn-ntsai Sumapriśkai[m]n(em)/// ‘from Sumapriśka, the X’. Ching & Ogihara (2010: 97 fn. 43) suggest that the word consists of ke ‘cow’ and an ntsa-form to the verb B[yənm- ‘get’ and propose the meaning ‘cattle-keeper’. If this is the case, this passage would be clear evidence that ntsa-forms can have feminine reference as well as masculine much like ñca-forms; cf. the masculine varddhaneṃ wapāntsai (obl.sg., THT 375 b2) ‘Varddhane the weaver’. However, it is not completely clear how they arrive at the suggested meaning considering the meaning of B[yənm- ‘get, obtain, reach’.\(^{14}\) G.-J. Pinault apud Ching (2010: 401 fn.

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13 tlaīyn(a) should be read klaīyn(a) obl.pl. ‘women’ (Sieg & Siegling 1953: 302).

14 An interesting suggestion from one anonymous reviewer is that the second member is derived from B[nau-n- ‘hit, pierce’ with the compound meaning ‘cattle-prod’. This would necessitate the adjective kewiye ‘bovine’ as first member since the -y- of the form would otherwise be unexplained. However, a derived adjective in this position would be quite unusual in TB grammar, making the suggestion less likely than that of Ching & Ogihara (2010: 97 fn. 43); cf. Adams (2017: 1378–1379) for Tocharian compounds in general. B[ka, rṣe,
91) offers another interpretation, namely that \(k(e)\text{w}ym\text{ntsai}\) is the feminine oblique singular of an adjective \(k\text{ewye}_u\), showing the late TB sound change -\(aun\)- > -\(omn\)- (Peyrot 2008: 52).\(^{15}\) In that case, it would probably have been derived from the adjective \(k\text{ewy}e\) ‘bovine; butter’, found several times in the monastery records as \(k\text{ewye}\), rather than directly from \(k_e\) ‘cow’. Semantically, this would fit quite well with the translation ‘cattle-keeper’ in light of the pair \(yenme\) ‘gate’ \(\rightarrow\) \(yenme_u\) ‘gatekeeper’ (Adams 2013: 546). Ching & Ogihara (l.c.) identify the title later in the same text, this time in apposition to a man \(\text{Sumaiyše}:\,[k]e\cdot[o]\) (THT 2694.8). If this reading is correct, it would be an argument in favour of the \(ntsa\)-interpretation, since the masculine oblique of an adjective in -\(e_u\) should end in -\(ent\) and thus cannot have an o-vowel. However, the passage is too broken to be definitive, and on semantic grounds, Pinault’s suggestion is preferable.

In the end, 11 \(ntsa\)-forms may be considered reasonably certain:

- \(\text{wapāntsa}\), cf. \(\acute{\text{w}}\text{apā}ṃtsune\) ‘weaving’
- \(\text{naskāntsa}\), ‘spinner’
- \(\text{tāllaikāntsa}\), ‘?-washer (?)’
- \(\text{taktsāntsa}\), ‘grinder (?)’
- \(\text{pakāntsa}\), ‘painter’
- \(\text{tārkāntsa}\), ‘carpenter’
- \(\text{walāntsa}\), ‘hindrance’
- \(\text{spartāṃtsa}\), ‘practitioner’
- \(\text{malāntsa}\), ‘(op)pressor (?)’
- \(\text{sarāntsa}\), ‘planter (?)’
- \(\text{warwāntsa}\), ‘receiver (?)’
- \(k\text{ewymntsa}\), ‘cattle-keeper (?)’

\(^{15}\) For the inflection of adjectives in \(-e_u\), cf. Table 3 below.
3 Derivational explanations

It is generally accepted in Tocharian scholarship that the agent noun suffixes in -nta, -ña and -ntsa are based in one way or another on the PIE *nt-participle; cf. Malzahn (2010: 488–491), Hackstein (2012), Pinault (2012), Fellner (2014b), Adams (2015: 140). It is also commonly agreed that for -ntsa a PIE phonological sequence *-ntih₂ is by far the best option as it would regularly give Pre-PT *-ntya > PT *-ntsa. In 2012, both O. Hackstein and G.-J. Pinault proposed derivational solutions to explain the morphological structure of this sequence.

Hackstein’s (2012) solution is the more extensive of the two. He proposes that TB agentive suffixes go back to collectives in *-h₂ originally from *nt-participles, some by way of *i-abstracts (Hackstein 2012: 167–168):

- -nta < *nt-eh₂
- -ña < *nt-i̯-eh₂
- -ntsa < *nt-i-h₂
- -tsa < *t-i-h₂
- -ca < *t-i̯̇-eh₂

The fact that these formations do not inflect for gender is to Hackstein an indication that the collective suffix *-h₂ had only begun its development into a feminine suffix at the time Tocharian split from the Indo-European family tree. This solution relies on the development of collective-abstracts to agentive nouns on a large scale, described by Hackstein (2012: 164) as a “diachronic tendency or ‘drift’ in Tocharian.” This is rightly criticised by Fellner (2014b: 60–62), who points out that individualizations of abstract nouns usually happen on a lexical, not on a morphological basis, and that the examples used by Hackstein as parallels all retain their original abstract meaning side by side with the new agentive use, e.g., Germ. Bedienung ‘service, server’, OFr. justice ‘justice, judge’. Lastly, the fact that Tocharian shows inherited gendered inflection in the preterite participles, using the formant *-ih₂ to mark the feminine, makes it quite likely that other participles showing this suffix were also inflected for gender; cf. TB m.nom.sg. yāmu, f.nom.sg. yāmusa < PIE *yōs, *usih₂ (Pinault 2008: 530; Peyrot 2010).

Pinault (2012) proposes two possible etymologies for -ntsa. In the first solution (Pinault 2012: 187–188), he suggests that the word PT *aknatsa ‘fool(ish)’

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16 There is also a phonological problem with the variants in *eh₂ posited by Hackstein which should give B-0, not B-α (Pinault 2012: 188–189; Fellner 2014b: 60).
could have been reanalysed as a participant noun pertaining to ability: ‘one who is unable to understand’; cf. section 6. From there, *-tsa was extracted and added to the stem of the *nt-participle. These forms then developed the specific meaning of an occupational suffix: *wapant-tsa ‘one who is able to weave’ → ‘one who weaves professionally’. Since Pinault takes *aknatsa as an original collective abstract ‘ignorance’ (PIE *n̥-ǵneh₃-ti-h₂), there are at least three non-trivial semantic developments required by this hypothesis, not all of which are backed up by typological parallels. His second solution (Pinault 2012: 188–189) compares the ntsa-suffix to Hittite nouns in -anzan-, which seem to go back to *-nt-i-ō̆n (Melchert 2003). This solution is supported by Fellner (2014b: 62–63).

The advantage of the *ōn-suffix is that it is individualising in function, so the leap to agent noun is a short one. However, analogy is needed to explain the nominative singular B-an, since PIE *-ōn most likely would yield B-ō; cf. Bokso ‘ox’ < PIE *uksōn.18

4 The origin of ntsa-nouns

I would like to present an alternative explanation for -ntsa and the other agent noun suffixes. It begins in a different area of TB nominal morphology, namely the adjectives in B-āu and B-ėu originally from PIE *u̯ont-stems; cf. Table 3. This paradigm shows us what we could have expected if the PIE *nt-participle had been continued without detours into Tocharian. What is remarkable is that the paradigm shows the same three phonological variants as the agent nouns; compare -nta with the m.obl.sg. -nt, -ñca with the m.nom.pl. -ńc, and -ntsa with the f.nom.sg -ntsa, obl.sg. -ntsai.

A look at the occupational ntsa-nouns suggests that it might not be a coincidence that the variant -nts- is found in the feminine singular of Btallāu and Bperneu.19 Among the ntsa-forms are occupations that are partly or fully undertaken by women, such as wapāntsa ‘weaver’ and naskāntsa ‘spinner’. The same

17 Cf. Haspelmath (1994: 171): “Participant nouns like agent nouns (e.g. writ-er), patient nouns (e.g. employ-ee), place nouns (e.g. Greek théa-tron ‘theater’, lit. ‘lookingplace’), etc., are among the best-known examples of derivational morphology, showing frequent formal and semantic idiosyncrasies.”
18 Cf. the discussion in Del Tomba (2020: 141–142). For a different viewpoint, see Jasanoff (2018).
19 With the identification of Bwāpāntsune ‘weaving’, Ji, Winter, & Pinault (1998: 148) also noticed this formal identity, as they suggested that the abstract was derived from a feminine term for ‘weaver’, *wāpamts. Since the masculine at this point was assumed to be A†wāpats, the connection to the *nt-participle was not made.
is probably true of *tällaikàntsə*, especially if it is derived from *błaika-* ‘wash’. In any case, the attestation of the form in THT 484 a2 indicates that women could be *tällaikàntsəs*, whatever the exact meaning. A more tentative addition could be *taktsəntsə* ‘grinder (?)’, if this perhaps pertains to kitchen terminology. Such a suggestion is not out of the question, since the Old Uyghur verb *uv*- ‘crush, crumble’ mentioned above is found in relation to food: *öl etmek uvdı* ‘(s)he crumbled the bread’; cf. Clauson (1972: 4–5). With this in mind, as well as the phonological identity of the forms, the simplest solution in my opinion is to derive the *ntsa*-agent nouns from the feminine singular of the PIE *nt*-participle.

Besides the occupational titles in -ntsa, there are two strong arguments in favour of this hypothesis: the first is the word for ‘queen’, the second the word for ‘pregnant’. It is a longstanding hypothesis that the words for ‘king’, *bwalo, Awäl*, and ‘queen’, *bḷāntsə, Alāṃts*, are relics of an athematic *nt*-participle to a root aorist *yélH-/yłH- ‘control’; cf. Van Windekens (1979: 554), Lubotsky (1994), Adams (2013: 631). These forms must have been lexicalised very early to have avoided any subsequent changes that happened in the participles. The word for ‘queen’ is therefore in my view direct evidence that Tocharian continued the feminine *nt*-participle in the familiar shape *-nt-ih₂.*

The second word *bpremtsə* carries even more promise, although it is much more disputed. In early scholarship, it was taken as an adverb meaning ‘instantly’, derived from the noun *bprentsə* ‘instant, moment’; cf. Couvreur (1955: 224), Sieg (1955: 76). Arguing that the word is found exclusively in medical texts, including one pertaining to ‘Frauenkrankheit’, Schmidt (1975: 294) pro-

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20 For the inflection of *bḷāntsə, Alāṃts*; cf. Del Tomba (2020: 69–70).

21 IOL Toch 306 b5, W 33 a6, THT 505 a2, a5–b1, b4.
posed that preṃtsa is rather an adjective meaning ‘pregnant’. From this analysis, he proposed a lāntsa-type etymology of the form, namely that preṃtsa is the feminine of the nt-participle to the PIE verb *bʰer- ‘carry’ and is thus directly comparable to Skt. bhárantī and Gk. φέρουσα < PIE *bʰérontih₂. According to Schmidt (l.c.), there is also one instance showing a secondary meaning ‘sexually potent (of a man)’: 

||22 tso23 staukkanatär-me śle yasar kaltrā klainats preṃtsa ynāṁ yamastrā
IOL Toch 306 b5

‘(Nicht) wird der Penis ihnen schlaff, [sondern] steht mit Blut: Von den Frauen wird er [als] potent [zeugungsfähig] geschätzt.’

tr. SCHMIDT 1975: 294; his brackets

However, Carling (2003) has conclusively shown through comparison with Sanskrit parallels that the passage in question pertains to the symptoms of uterine cancer (Skt. raktagulma-).

‘their [i.e. of the women] abdomen grows, likewise the [menstrual] blood stands still [i.e. is obstructed]. It [i.e. the raktagulma symptoms] is evaluated by the women as if [they are] pregnant.’

tr. CARLING 2003: 91; her brackets

Thus, preṃtsa means only ‘pregnant' and does not refer to male potency. It is noted by Carling (2003: 88) that it is problematic that preṃtsa as an adjective does not show agreement with the other constituents in the sentence. On those grounds, she questions Schmidt's etymology and instead presents an etymology by G.-J. Pinault, namely that preṃtsa is a perlative of an other-
wise unattested noun *preṃ ‘plainness’; cf. Bemprem ‘true’. The use of preṃtsa to mean ‘pregnant’ would thus be metaphorical in origin. However, the problem of agreement can be circumvented with a slight alteration in the interpretation of the passage, if one accepts that it is the (medical) patient, not the symptom of the tumour, who is the subject of ynāṁ yamastrā ‘is evaluated, is deemed’:

///tsostaukkanatār-me śle yasar kaltrā klainats preṃtsa ynāṁ yamastrā
1OL Toch 306 b5

‘Their stomach grows, likewise the blood stands still. She is deemed by the women to be pregnant.’

Elsewhere in the text, the patient is referred to both in the singular and the plural, so the change in number in this line is understandable; compare line b5 tsostaukkanatār-me ‘the stomach grows for them (pl.)’ with line b6 āñme spā māsketār-ne ‘and desire arises for her (sg.)’. Schmidt’s analysis of the form as an adjective from a lexicalised participle, here used substantivally, is therefore in my opinion the best interpretation from both a synchronic and a diachronic perspective.

If preṃtsa does continue *bʰérontih₂, the word constitutes a significant archaism within Tocharian. It is well known that the verbal stem *bʰer-e/o- is continued in Tocharian as the present stem Bpərə/e-, Apärə/e- ‘carry, bring, take’, one of the few thematic presents with direct cognates outside the branch; cf. Ringe (2000: 125). Outside the present, the verb is suppletive. In TA, the stem kāmā- ‘carry, take’ expresses both the subjunctive and the preterite; in TB, kama- ‘id.’ forms only the preterite, while as- ‘fetch’ and ay- ‘give’ express the subjunctive. According to Schmidt (1974: 367), the meaning ‘take’ is predominantly found outside the present, and it therefore seems likely that it is a recent addition to the semantic sphere of PT *pərə/e-. The semantic development preṃtsa from PIE is therefore easily understood: ‘carrying’ (f.) → ‘(child-)bearing’ → ‘pregnant’; cf. Skt. bibharti ‘to carry (a child)’, Goth. berusjos ‘parents’, Germ. gebären ‘give birth’, Russ. béremennaja ‘pregnant’.

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24 This was noticed simultaneously by D. Ringe and J. Jasanoff; cf. Ringe (2000: 121 fn. 1).
### Table 4
Analogy in the plural of the *nts*a-paradigm

| Pre-Proto-Tocharian | Tocharian B |
|---------------------|-------------|
| nom.sg. *-nts*a     | > -nts*a    |
| obl.sg. *-nts*a     | → -nts*ai   |
| nom.pl. *-ntan*     | → -nts*an* |
| obl.pl. *-ntan*     | → -nts*am* |

5 Development from participle to agent noun

The development I am proposing took place in three steps. First, the feminine *nt*-participle was restricted in use to female-specific occupations, e.g., *w*ap*ants*a ‘weaving (f.nom.sg.)’ → ‘female weaver’, while the masculine took over as the productive agentive formation for both grammatical genders. Such a development can explain why descendants of the PIE *nt*-participle surface in Tocharian as agent nouns without additional derivational suffixes. The disintegration of gendered inflection was the key development that took the formation from primarily adjectival to primarily substantival. At this stage, the stem allomorph in the singular *-nts* replaced *-nt* in the plural; cf. Table 4.25

Secondly, the *nts*a-forms lost their specifically female reference and were reinterpreted as agent nouns forming occupational titles: *w*ap*ants*a ‘female weaver’ → ‘weaver’. The existence of *w*āp*ānts*une ‘weaving’ indicates that this happened in Pre-PT. The third step is only evidenced by TB, namely that the *nts*a-suffix became productive to form occupational titles.

The development from feminine to epicene agent noun may appear counterintuitive, but it does have several parallels, especially on the lexical level. For instance, Danish syg*ep*l*er*sk*e ‘nurse’ is overtly marked with the feminine agent noun suffix -s*ke* (cf. sy*er*sk*e ‘seamstress’, m*ör*d*ers*sk*e ‘murderess’), but is used generally regardless of gender. The same is true for Dutch secretariessel ‘secretary, administrative assistant’ and kassière ‘(shop) cashier’, to which the masculine

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25 Since the expected feminine plural *-nta* is formally identical to the *nta*-agent noun in the nominative, it could be tempting to derive the latter from the former. Semantically, however, there is nothing that suggests an original feminine origin for the agent nouns in *-nta*, unlike those in *-nts*a. In addition, one would have to explain why a plural developed into a singular. Deriving *-nta* from the masculine singular is thus in my opinion much easier.
counterparts show a different meaning: *secretaris* ‘administrative member of a board or organization’, *kassier* ‘bank teller, treasurer’.

A more systematic parallel can be found in English, namely in the suffix OE *-estre* (> ModEng. *-ster*). While there has been quite a lot of scholarly debate over the origin and meaning of this suffix (cf. Peterson 2013 for references), the attestations indicate that the suffix was used almost exclusively to form feminine agent nouns in Old English: e.g., *lērestre* ‘female teacher’, *hoppestre* ‘female dancer’, *webestre* ‘female weaver’. At this time, the only agent nouns in *-estre* with masculine reference were “renderings of Latin designations of men exercising functions which among the English were peculiar to women, as *byrdistre* embroiderer (gl. *blaciarius, primicularius*), *bæcestre* baker (gl. *pistor*), *sēamestre* tailor (gl. *sartor*), *wæcestre* washer (gl. *fullo*”) (OED Online 2021: s.v. *-ster*). Support for the original feminine status of the suffix can be found in Dutch, where it is continued as the marked feminine counterpart of the unmarked agent noun suffix *-er*: *werker* ‘worker’ ~ *werkster* ‘female worker’, *gebruiker* ‘user’ ~ *gebruikster* ‘female user’. In Middle English, from the 11th century CE onwards, forms like *baxter* ‘baker’ and *webster* ‘weaver’ began to be used as titles next to male personal names and as surnames; cf. *Liuegerse Bacestere* (before 1093), *John le Webestere* (1275) (Hanks, Coates, & McClure 2016: 170, 2853). Only much later, from the 17th century CE, did female occupations begin to remake with the borrowed feminine marker *-ess*, showing the loss of feminine connotation for *-ster*, e.g., *seamstress, spinstress, songstress*. Finally, the suffix *-ster* found moderate productivity as a denominal agent noun suffix (‘someone to do with/working with X’): e.g., *trickster, gangster, hipster*.

On the lexical level, the similarity between English and Tocharian suffixes is quite striking. The agent noun *wapāntsa* ‘weaver’ has the direct Middle English parallel *webster* ‘id.’, while *naskantsāna** ‘female spinners’ with its overt feminine marking can be taken as equivalent of the antiquated English form *spinstress*. Lastly, forms like *lāntsa* ‘queen’ and *preṃtsa* ‘pregnant’, which kept their feminine gender reference through specialisation of meaning, can be com-

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26 Certain inanimate nouns with a similar suffix are also attested in Old English, e.g., *ēowestre* ‘sheepfold’, *heolstor* ‘hiding place’. This is present in other Germanic languages as well, e.g., Got. *awistr* ‘sheepfold’, *hulistr* ‘veil’, *gilstr* ‘tribute, tax’, ON *hulstr* ‘sheath, case’, *blōmstr* ‘flower’, OHG *gelstar* ‘tribute, tax’ (Peterson 2013: 3). Due to the difference in function, it is difficult to tell whether and how this suffix is related to agentival *-ster*.

27 It is commonly assumed that *-er*, found in most North and West Germanic languages today, was borrowed from Latin *-ārius*; cf. Davis (1992: 103–104), Ringe & Taylor (2014: 138). For a different explanation, see Gąsiorowski (2017) who takes both *-er* and *-ster* as derivatives of a feminine suffix *-s(o)r*.
pared to Modern English *spinster*, originally referring to a female spinner, now 'single woman past the typical age of marriage'.

An important caveat to this hypothesis was noted by G.-J. Pinault (p.c.), namely that weaving is not universally a female profession and that there are in fact examples of Central Asian cultures in which it is considered primarily a male occupation. Since the development proposed here has to be placed in the Pre-PT period, the sociolinguistic circumstances surrounding it are by default speculative. However, one important observation is that textile and food production belong both to the general sphere of housekeeping, as well as to commercial enterprise, which cross-culturally tends to be divided along gender lines. When predominantly female household occupations, such as cooking and weaving, become commercialised, men tend to take over the means of production (Minturn 1996; O’Brian 1999). The fact that these occupations are not strictly female, but rather show a tendency to shift from female to male, motivates the development from marked feminine agent noun to unmarked agent noun in these types of professions.

One of the formal aspects of the *ntsa*-forms which has yet to be discussed is the fact that they are seemingly derived exclusively to subjunctives of class [5] with stem vowel *-a*. In this way, they differ from the *ńca*-forms, which are exclusively derived from the present stem, and the *nta*-forms, which are derived from both the subjunctive and the present. There is good reason to assume that these two suffixes have the same origin, and that *-ntsa* represents a more archaic stage of *-ńca* originating from the masculine *nt*-participle. This is best exemplified by the pair *weñenta* ‘speaker, orator’ ~ *weṣṣeñca* ‘speaker, speaking’. Synchronically in TB, *weñenta* looks like it is derived from the subjunctive [2] stem bweñə/e-, while *weṣṣeñca* is derived from the present [9] stem bweṣṣə/ske-. This present is not of PT date in light of the TA suppletive present stem trāṅk-; it was most likely created in Pre-TB, relegating the original present weñə/e- to the subjunctive (Winter 1977: 134–135; Malzahn 2010: 343–344). The agent noun *weñenta* must have been lexicalised before the new present was created, thereby explaining the apparent affinity with the subjunctive. I think that a similar explanation can be applied to the case of *-ntsa*. The form mall[a]ntsasmeṃ is not built to any known stem of the verb b*mala*-‘oppress’, which is only attested with a present of class [10]: b*mallaṣṣ/ske-. The geminate of mallāntsas* suggests that the form continues the archaic unextended nasal present stem PT *məl-n-a-* with assimilation of the nasal of the

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28 For instance, in the pre-industrialized Uzbekistan of 1926, 98.2% of weavers were male (Sacks 1992: 188).
suffix, possibly even going back to PIE *ml-n-h₂; cf. Hackstein (1995: 316).  
Similarly, *naska- ‘spin’ must reflect an old derived present in *-sk- if to PIE *(s)neh₁- ‘spin’; cf. LIV₂ (571–572). The possibility of original aorist participles is also present in light of lāntsa ‘queen’ < *ulH̥-nt-ih₂; cf. section 4. From a few forms in stem-final -a- (e.g., *malla-ntsa, *wapa-ntsa, *naska-ntsa), the suffix could have become productive in subjunctive [5].

As for the inflection nom.sg. -a, obl.sg. -ai, nom.pl. -añ, which cannot be original in either -nta or -ńca, Hilmarsson (1987: 42) suggests that it spread from root nouns with final laryngeal, found as final member in verbal governing compounds of the type *kārtse-rita ‘seeker of the good’. It has been argued that the rita-type compounds were not influential enough on their own to be the nucleus of the agentive a-inflection; cf. Malzahn (2010: 488): “there is no productive agentive suffix *-ā in Tocharian.” If, however, the feminine *nt-participle with endings *-a, *-ai had developed into an agent noun while the masculine was still a real participle, the basis for an agentive a-inflection would be more considerable. Eventually, the masculine was also transferred to this declension. The lexicalised nta-forms would have been incorporated into this declension before -ńc- spread throughout the paradigm in the productive participle, so that they preserved the unpalatalized variant; cf. Ringe (1991: 96 fn. 85), Malzahn (2010: 491).

6  *bāknātsa, *āknats ‘fool(ish)’

Finally, the word *bāknātsa, *āknats ‘fool(ish)’ deserves attention. Phonologically, the word resembles the ntsa-nouns, while syntactically and morphologically it behaves like *-ńca and *nt, i.e., it functions as both adjective and substantive, it has both female and male reference, and it inflects according to the same declension. It is therefore no coincidence that diachronic accounts of the agent nouns take this word into consideration in one way or another.

29 But differently LIV₂ (432–433).
30 In light of *pekant ‘painter’, derived from the subjunctive stem PT *paika-, *paikā̄ntsa ‘painter’ must be an innovation replacing an earlier nta-agent noun. This could have easily happened when -ntsa became productive as an epicene occupational suffix.
TA substantival use, feminine reference

/// mätne āknats mätne trišant mät(n)e p///
A 8ɔ a4

‘As if a fool, as if mistaken, as if ...’

TB adjectival use, masculine reference

walo aknatsa su mārsau śañ āñm atsaik ńem arañe-a3mi
THT 8I a2–3

‘The foolish king, by the name Arañemi, having forgotten even himself’

Since the ntsa-suffix was transcribed as -ttsa until 2001, Ḳaknatsa, Ṭaṅknats was interpreted as a member of that class in all the traditional handbooks; cf. section 2. With this connection broken, both Hackstein (2012: 156–157) and Pinault (2012: 187) take *aknatsa as a privative abstract going back to PIE *ŋnéḥ₃ṭih₂; cf. section 3. They cite Gk. ἄγνως ‘ignorant’ as well as Gk. ἄγνωτς, Skt. ájñāta- ‘unknown’ as related deverbal nouns to an original PIE base *n-ŋnéḥ₃-t-. As pointed out by Pinault (2012: 187), the formation looks very archaic within Tocharian: in PT, the building blocks (namely privative *a- and the verbal root *-kna-) were probably not available for productive use, so *aknatsa therefore looks older than PT. Semantically, the transition from abstract *aknatsa ‘ignorance’ to participant noun ‘ignorant (one)’ on a lexical basis is acceptable.

However, explaining Ḳaknatsa, Ṭaṅknats as an archaic feminine *nt-participle is also a possibility. Like Ḹlāntsa, Ḹlāṃts, the form would then be a relic of a PIE root aorist. On both the formal and functional sides, this suggestion does face some hurdles. First of all, one has to explain the lack of a nasal in the suffix. One possibility is that the form arose through dissimilation of nasals. Reconstructing the PIE active feminine participle of the root aorist of *ŋnéḥ₃- with a privative prefix forwards into PT would look like this: *n-ŋnéḥ₃-nt-ih₂ > *enknantsa. Under these circumstances, with three nasals in successive syllables, it is conceivable that the third nasal was dropped by dissimilation. Secondly, one must account for the fact that Ḳaknatsa, Ṭaṅknats, unlike Ḹpreṃtsa

31 Line spoken by Bhadrā, referring to herself; cf. Sieg (1952: 16–17).
32 This possibility was suggested to me by Michaël Peyrot (p.c.).
and Blāntsa, Lānts, does not have any particular semantic affinity with the feminine. Perhaps the dissimilation itself motivated the semantic change. If *aknantsa became *aknantsa, the link to the participial paradigm would have been weakened considerably. Later in Tocharian, any reintegration effort would be impossible due to the elimination of athematic /NTa/-forms on one hand and the further development of *-ntsa on the other.

7 Conclusion

In conclusion, there is a case to be made that the TB agent noun in -ntsa continues the PIE feminine active participle in *-nt-ih₂. This is substantiated partly by occupational ntsa-nouns pertaining to female professions and partly by the relic forms preṃtsa ‘pregnant’ and lāntsa ‘queen’. Under this hypothesis, it can be explained why the TB agentive formations with suffixes in /-NTa/ do not show gendered inflection, even though they continue the PIE *nt-participle. In fact, the assumption that gendered inflection was lost helps explain why they began to develop into agent nouns. A further conclusion is that all three TB agent nouns in /-NTa/ can be explained from a single paradigm which underwent two splits: one in Pre-PT leading to the lexicalisation of -ntsa, and one in Pre-TB leading to the lexicalisation of -nta and the phonological renewal of -ñca. This scenario is compatible with the simpler system in TA, which has a two-way contrast between -nts (cf. wāpamts* ‘weaver’) and productive -nt. From a phylogenetic point of view, this also means that the Tocharian branch aligns with Core Indo-European in having inherited a participle in *-nt- with active voice and gendered inflection.

Footnote 33: The TB ůca-forms seem only to be created productively to thematic present stem classes [2], [8], [9], and [10]. Very few athematic forms exist: māskeñca ‘being’ to prs.[3] Bməske-‘be(com)’, sāwāñca ‘eater, eating’ to prs.[5] Bšəwā- ‘eat’. The form yneñca ‘goer, going’ seems to be formed from the thematic variant yone- (cf. prs.pl. ynam, 3pl. yanem) of the otherwise athematic prs.[1] Byn(n)- ‘go’ (Malzahn 2010: 355–356). There are no ůca- or nta-forms attested to present class [6], a curious fact since the verbs of this class are numerous and predominantly transitive. The role of productive agent noun is instead filled by the suffix -uca added to the subjunctive stem. It is highly likely that these two facts are related; cf. the proposal by Itkin & Kuritsyna (2020: 97).
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