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## Parthian ž

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### Abstract\*

This article argues that the opposition between Old Iranian \*č and \*j was preserved in Manichean Parthian not only word-initially, but also in postvocalic position, at least at the time of the introduction of the Manichean script. The approach is phonological, and attempts to show that Pth. /č/ (< OIr. \*č), written <c> and <ž>, and Pth. /ž/ (< OIr. \*j and \*ž), written <j>, are consistently distinguished in the Manichean script. Pth. /č/ may have developed a postvocalic allophone [j] (not affecting the phonematic opposition), which might have been a motivation for the use of the letter <ž>. Transcriptions into Sogdian script and the cantillations suggest a coalescence of the Pth. phonemes, but it is not clear whether this is a later development of the Pth. language itself or a peculiarity of the liturgical pronunciation of Parthian as practised by Manicheans in Central Asia.<sup>1</sup>

In Parthian, Old Iranian č is preserved in word-initial position while OIr. \*j yields Parthian ž. For the word-internal position, it has generally been assumed that OIr. \*ž, \*j and postvocalic

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<sup>1</sup> The data used for this paper were extracted from the TITUS text database (<http://titus.uni-frankfurt.de/texte/etcs/iran/miran/manich/mirmankb/mirma.htm>), from BOYCE 1975, DURKIN-MEISTERERNST 2004 and its reverse index at <http://www.bbaw.de/bbaw/Forschung/Forschungsprojekte/turfanforschung/de/iranischeTexte>. I also used DURKIN-MEISTERERNST's collection of transliterated texts at <http://www.bbaw.de/forschung/turfanforschung/dta/mirtext/wmirtext.html>, and the photos of the Berlin fragments at <http://www.bbaw.de/forschung/turfanforschung/dta/>. As a rule, details about attestations of word forms, their numbers, etc. refer to the data in DURKIN-MEISTERERNST 2004 (i.e. to fragments published before 2004). Transliterated Pth. and MP words are noted without brackets here (e.g. *bwj*); phonemic transcription is noted as /bōž/. <> mark transliteration of individual letters, e.g. <j>. Transliterations and transcriptions follow DURKIN-MEISTERERNST 2004 unless otherwise noted. OIr. words and phonemes are noted with an asterisk to indicate the underlying phonemic form, disregarding the specifics of Old Persian and Avestan. Quotations from works in other languages than English are given in translation.

\*č all come out as ž (with an allophonic j after *n*), and that the Manichean letters 𐭪 (transliterated <c>), 𐭫 (<j>), and 𐭬 (<ž>)<sup>2</sup> in word-internal position all encode the (one) phoneme /ž/.<sup>3</sup> In what follows, I will investigate some evidence speaking against this assumption chiefly by looking at the Manichean Parthian orthography and the Pth. loanwords in Armenian. Parthian in Sogdian script and cantillated Pth. texts will also be discussed.

## 1. The distribution of the Manichean letters <c>, <j>, <ž> in Parthian

A look at the available Manichean Pth. material indicates that the letters 𐭪 <c>, 𐭫 <j> and 𐭬 <ž> are not used arbitrarily. Grouping the words by their spellings, the categories described in Sections 1.1–1.4 emerge.

1.1 As in other Middle Ir. orthographies, a letter corresponding to the Semitic letter *šāde* 𐭮 is used as <c> in the Manich. script.<sup>4</sup> It is regularly employed to write word-initial /č/.<sup>5</sup> As far as the word-internal position is concerned, many words are found exclusively with <c>, for instance those in Table 1.

Parthian	cognates	meaning
<i>w(y)c<sup>2</sup>r-</i>	Av. <i>vi + √ čar-</i>	"to perform"
<i>w<sup>2</sup>c-</i> , <i>wcn</i> ,	Av. <i>√ vač</i>	"to speak" "voice; word"

<sup>2</sup> This letter is commonly transliterated <ž> nowadays, probably because of the general assumption that it encoded /ž/. Since this assumption is one of the topics of the present article, I follow HENNING 1958 (e.g. pp. 74f.) and use the more descriptive transliteration <ž> (meaning the letter *zayin* 𐭮 with two dots above) to avoid phonemic or phonetic implications, and confusion between letters and their interpretation.

For a list of the graphemes of the Manich. script, see ANDREAS / HENNING (1934:911) and SKJÆRVØ (1996:519). Parthian in Sogdian script is discussed in Sections 6.1–6.2.

<sup>3</sup> Thus e.g. RASTORGUEVA / MOLČANOVA (1981:159, 168f., 176f.), SUNDERMANN (1989:122) and DURKIN-MEISTERERNST (2000:169), implicitly also BOYCE (1977 etc.) and GHILAIN (1939:42f.). HENNING (1958:75) differs a bit from this and classifies the voicing of postsonantal voiceless stops as "not being entirely completed yet" at the time when the Manich. script was introduced, and compares this to the "use of *šādē* (= č) for original č also after sonorants" (cf. footnote 4).

<sup>4</sup> HENNING (1958:75). "Conversely, Iranian č is frequently rendered by š (specifically in Arabic)" (HENNING 1958:60 note 3), e.g. Arabic *rašāš* "tin, lead" vs. Armenian (from Parthian) *arčič* (TAFAZZOLĪ 1987:232, HÜBSCHMANN 1897:111, 511). Replacement by š also occurs, "specifically in Old Aramaic, thence probably also in Parthian later on" (HENNING *ibid.*).

<sup>5</sup> In a few instances, <tš> is written instead of <c> in the word čē "what". Most attestations of *tšy(y)* (also with enclitic pronoun) occur in alphabetic hymns in the position of the letter *t* (Desmond Durkin-Meisterernst, p.c.). I have been unable to confirm the existence of other words using <tš> for <c> implied by HENNING (1958:75).

<i>pdw<sup>2</sup>c-</i>		"to reply"
<i>nm<sup>2</sup>c</i>	OIr. * <i>namāč</i> - <sup>6</sup>	"praise"
<i>pcg</i>	Av. √ <i>pač</i>	"cook"
<i>wrc</i>	Av. <i>varəčah-</i>	"deed; energy"
<i>swc-</i>	Av. √ <i>suč</i>	"to burn"
<i>pdyc</i>	OIr. * <i>patīč</i> -	"towards"

1.2 The letter transliterated <j> was newly developed in the Manich. script.<sup>7</sup> Many Pth. words are written consistently with word-internal <j>, such as those listed in Table 2. <j> is also the orthography for the Pth. outcome of OIr. word-initial \**ǰ* (see Section 4.1). For the pronunciation of Pth. <j>, a comparison with the loanwords in Armenian is particularly interesting.

Parthian	cognates	loanword in Armenian	meaning
<i>bwj-</i> , <i>bwj<sup>2</sup>gr</i>	Av. √ <i>buǰ</i>	<i>buǰ-</i>	"to save" "saviour"
<i>ʔrj<sup>2</sup>n</i>	Av. <i>arəǰah-</i>	<i>a(r)ǰan</i>	"worthy"
<i>prywj</i>	OIr. * <i>pari-auǰah</i> - <sup>8</sup>		"victory"
<i>djn<sup>9</sup></i>	OIr. * <i>daj-</i>	<i>daǰan</i>	"hot, spicy"
<i>drwj-</i> , <i>drwjn</i> , etc.	OIr. * <i>druǰ</i>	<i>drǰ-</i> , <i>dǰr-</i> <i>druǰan</i>	"to tell lies" "lying, false"
<i>dwj<sup>o</sup></i>	Av. <i>duǰ<sup>o</sup></i>	<i>dǰ<sup>o</sup></i>	"bad"
<i>xwj</i>	* <i>xwǰǰu</i> - <sup>10</sup>	<i>axorǰ</i>	"good"
<i>mwjd</i>	Av. <i>miǰda-</i>		"wages"
<i>ǰdh<sup>2</sup>g</i>	Av. <i>aǰi- dahāka-</i>		"dragon"

<sup>6</sup> The interpretation and further derivation of this word is not entirely clear (see SIMS-WILLIAMS 2007:238 for discussion and references).

<sup>7</sup> There have been various suggestions concerning its graphical basis: it could have been developed from <c> (LENTZ 1926:254) or also from <š> (BOYCE 1975:16), or from <z> (DURKIN-MEISTERERNST 2000:177 note 50) or "have the same origin" as the Christian Sogdian letter transliterated <ž> "and may be related to Tumshuqese Brahmi ž" (SKJÆRVØ 1996:533). In early Iranological works the letter is transliterated by the Hebrew letter *zayin* with macron above: *z̄*.

<sup>8</sup> BARTHOLOMAE (1904:862).

<sup>9</sup> For this word, see KORN (2005a:210).

<sup>10</sup> The word may be derived from PIE \**suǰǰ<sup>h</sup>su-* "tasty" (SIMS-WILLIAMS 2007:280).

1.3 Several words show either <c> or <j>. <sup>11</sup> In the position after *n*, <j> is used nearly consistently (e.g. *ʔnjmn* "assembly", *nydrynj-* "to oppress", *frhynj-* "to educate", etc.). The number of instances with <nc> is very small, <sup>12</sup> and at least some of them might be discounted as not being Pth., or not a real sequence of <nc>, while the remaining ones could be cases of MP orthography: <sup>13</sup>

- the hapax legomena *šqync* "twisted rope", <sup>14</sup> *tnčyšn* "?", <sup>15</sup> and *plync* "bronze"; <sup>16</sup>
- *pnc* (once <sup>17</sup>) "five" vs. *pnj*(°) (ca. 100 occurrences, including derivatives like "fifteen", "fifth", etc.);
- *dyncyhryft* "behaviour in conformity to religion" is one of the compounds with *cyhr* "essence, being; seed; shape" (*dyn-cyhr-yft*); these are always written with <c>;
- *zyncyhr* <sup>18</sup> (twice) "chain" vs. *zynjyhr* (once), the former surely being due to association with the compounds with *cyhr*.

The few words showing a variation <c> / <j> in positions other than after *n* will be discussed in Section 3.1.

1.4 <ž>, i.e. a sign corresponding to the Semitic letter *zayin* ʔ with two dots above, <sup>19</sup> only occurs in a limited number of words (listed in Table 3). Apart from one unclear hapax legomenon (which would at the same time be the only case of word-initial <ž>), all of them

<sup>11</sup> *cmn* is not a variant of *jm ʔn* "hour" (pace Andreas in LENTZ 1926:255 and ANDREAS/HENNING 1934:898), but a derivative of *cm-* "to move" (DURKIN-MEISTERERNST 2004:125b). *ʔb ʔ*, which is noted as a variant of *ʔb ʔ* "back; again" in DURKIN-MEISTERERNST (2004:7b), does not exist: its one occurrence in the St. Petersburg fragment S 32 B 3 (= SI (Kr IV/841) 30) is clearly *ʔb ʔž* (see the photo in SUNDERMANN 1996: Plate 180 top and the correct form in BOYCE 1977:4). SALEMANN's transliteration (1912:25) by the Hebrew letter *zayin* ʔ with a somewhat slanted dot above is surely a misprint for *zayin* with two dots above, i.e. <ž> (cf. footnote 19, vs. ʔ for <j>, see footnote 7). So *ʔb ʔc* / *ʔb ʔž* is an instance of the variation <c> / <ž>, which will be discussed in Section 1.4.

<sup>12</sup> There seems to be no example of <nc> for OIr. *\*nč*.

<sup>13</sup> There is an occasional confusion on the part of the scribes as to which language they are copying; i.e. a MP word may slip into a Pth. text and vice-versa (cf. DURKIN-MEISTERERNST 2000:169 note 32, KORN / DURKIN-MEISTERERNST 2009:18 note 61), e.g. Pth. *bwj ʔwm ʔn* "save us" (M 448 A 5) and *wjyydg ʔn* "Elect" (M 221 v 11; for this word, see also Section 1.4) in MP texts, etc.

<sup>14</sup> The line of the fragment reads [*ʔhynd cw*] *ʔgwn šqnc* "(the souls) are like a twisted rope(?)" (M 6300 B 12, SUNDERMANN 1997 § 105).

<sup>15</sup> The attestation is *pnjwm kw pd tncyš(n)*["fifthly, that to the prohibitions(?)..."] (M 4450 v 5, SUNDERMANN 1992:115, § 67).

<sup>16</sup> The word agrees with Arm. *plinj* etc. (SUNDERMANN 1981:168, HÜBSCHMANN 1897:231); HÜBSCHMANN (1895:28) considers the Ir. word a borrowing from an unknown source. See also footnote 31.

<sup>17</sup> The relevant line is extremely fragmentary, but the context confirms the topic: [*m ʔnh ʔg p*](*nc r*)[*wšn*] "like the five Lights" (M 5185 r 4, SUNDERMANN 1992 § 6).

<sup>18</sup> According to Henning (apud BOYCE 1952:447 note 2), the word may be derived from *\*zynčari-*.

<sup>19</sup> In early Iranological works the letter is transliterated by the Hebrew letter *zayin* with trema above: ʔ̇. Two diacritic dots below or above a letter may also be used to indicate the omission of a following *aleph*, *yod* or *waw* (cf. BOYCE 1975:19). However, I have not come across a case of <z> with abbreviation dots. For more discussion about <ž>, see footnote 2 and Section 5.

are also found with <c>, and the occurrences with <c> outnumber those with <ž>. So from a functional point of view, <ž> is an orthographic variant of <c>.<sup>20</sup>

Table 3: Pth. words with ř <ž> (full list)		
variant with <c> <sup>21</sup>	variant with <ž> <sup>22</sup>	meaning
–	<i>žyšm(r.)</i> [ (1) ]	"ʔ" <sup>23</sup>
<i>rwc</i> (ca. 130 instances)	<i>rwž</i> (#) (9)	"day"
<i>w<sup>2</sup>c</i> (1); <i>pdw<sup>2</sup>c</i> (1) <sup>24</sup>	<i>w<sup>2</sup>ž</i> # (1, MP) <i>z<sup>c</sup>wrw<sup>2</sup>ž</i> # (1, MP) <sup>25</sup>	"speech"; "reply" "liar"
<i><sup>2</sup>mwc</i> ( <sup>2</sup> ) <i>g</i> (27)	<i>hmwž<sup>2</sup>g<sup>2</sup>n</i> (1, MP) <sup>26</sup>	"teacher"
<i><sup>2</sup>b<sup>2</sup>c</i> (9)	<i><sup>2</sup>b<sup>2</sup>ž</i> # (1)	"back; again"
present stem (°) <i>s<sup>2</sup>c</i> :- <i>s<sup>2</sup>c</i> - (5), <i>p-s<sup>2</sup>c</i> - (2), <i>ny-s<sup>2</sup>c</i> - (1)	<i>ny-s<sup>2</sup>žyd</i> # (1)	"to prepare"
present stem ° <i>cyn</i> :- <i>wy-cyn</i> - (1) <i>n-cyn</i> - (1)	<i>w-žynyd</i> # (1)	"to elect" "to build"
-( <i>y</i> ) <i>c</i> in: <i><sup>2</sup>m<sup>2</sup>h-yc</i> (6), <i>mn-yc</i> (6), <i><sup>2</sup>nyc</i> (10), <i>‘yw-yc</i> (5) <i>by-c</i> (ca. 50), and many more	-( <i>y</i> ) <i>ž</i> in: <i><sup>2</sup>m<sup>2</sup>h-yž</i> (1, MP), <i>mn-yž</i> # (1), <i><sup>2</sup>nž</i> # (1), <i><sup>2</sup>nyž</i> (#) (2, MP), <i>‘yw-yž</i> (1), <i>by-ž</i> (#) (2), <i>d<sup>2</sup>lwg<sup>2</sup>n-yž</i> # (1)	"also" suffixed to /am(m)āh/ "we" <sup>27</sup> /man/ "I" /an(y)/ "other" /ēw/ "one" /bēh/ "out" /dālūg/ "tree"
<i><sup>2</sup>c</i> (over 500)	<i><sup>2</sup>ž</i> (#) (ca. 50)	"from"

<sup>20</sup> This implies that statements like <ž> has "the same value as the letter j" (BOYCE 1975:17) and <j> "usually represents the same sound as ž [i.e. <ž>], with which it alternates in all but initial position" (BOYCE 1975:16) are not quite supported by the data.

<sup>21</sup> The numbers given in this column refer to the attestations in Pth. texts. Additional instances might be found within MP texts (see footnote 13).

<sup>22</sup> # indicates that the form occurs at the end of a line, (#) that it occurs at the end of a line and elsewhere. In this column, "MP" means that the item occurs within a MP text.

<sup>23</sup> For discussion of this word, see Section 5.

<sup>24</sup> See also the (common) associated Pth. verb and its derivatives (always written *w<sup>2</sup>c*-) quoted in Table 1.

<sup>25</sup> MP also uses *z<sup>(c)</sup>wrw<sup>2</sup>g* "lying".

<sup>26</sup> *hmwž<sup>2</sup>g<sup>2</sup>n* (in a Pth. text) is a mixed form from MP *hmwc<sup>2</sup>g* (also *hmwz<sup>2</sup>*) and Pth. *<sup>2</sup>mwcg* (rarely also *<sup>2</sup>mwc<sup>2</sup>g*).

<sup>27</sup> For the possible geminate in the Pth. word, see KORN / DURKIN-MEISTERERNST (2009:11).

In some cases, the use of <ž> appears to be motivated by space restrictions (as the letter is much narrower than <c>). This is likely to hold for the variants occurring at the end of the line (marked with "#" in Table 3), e.g. <sup>28</sup>žž (which also omits the -y- and uses the abbreviation dots instead, see footnote 19), and for <sup>28</sup>ʔž in S 32 B 3 at the end of a line where <c> would not have fit at all. Other examples include a squeezed <sup>28</sup>ž"from" at the end of the line M 5815 I r 13 vs. the prolonged <sup>28</sup>c at the end of the preceding line, and M 5815 II v 18, the second half of which reads *byc rwc rwž*. However, shortage of space cannot always have been the motivation for the use of <ž>. For instance, there would have been quite enough space at the end of the line in M 801a folio c verso 7 (HENNING 1937:30 line 396) for *rwc* instead of *rwž*. Moreover, the words marked with "(#)" in Table 3 also occur in the middle of lines, and the unmarked ones only so. Nevertheless, it is striking that <sup>28</sup>ž is particularly frequent in the middle of a line.

Also, the number of fragments in which <ž> occurs at all is rather small,<sup>29</sup> with the manuscript M 5815 featuring an unusually high number of instances (3 cases of <sup>28</sup>žž and 5 other words with <ž>). Four of the nine occurrences of *rwž* are in just two lines of M 533 r 4a (an abecedary hymn), and two others are doublets of the same text line (M 667 v 1 and the combined set of M 502h & M 2751 v 3).

## 2. Interpretation of the distribution of the letters <c>, <ž>, <j>

The fact that nearly all Parthian words are consistently written either with <c / ž> or with <j> (see Section 3.1 for the exceptions) suggests the possibility that the scribes intended to encode two different Pth. sounds, and that these may have been two phonemes. Combining the spellings with the etymologies of the words yields the following preliminary results:<sup>30</sup>

<sup>28</sup> Sic; not † ʔž (see footnote 11).

<sup>29</sup> Fragments with only instances of <sup>28</sup>žž, but no other words with <ž>, are: M 4b, M 30 (= M 347 = M 468a), M 42, M 67, M 88 (= M 96), M 93 & 289a, M 94+, M 168, M 208 (& M 638), M 229, M 311, M 502b, M 741 (= Otani 6208+), M 858e (= M 6220), M 871f, M 905, M 1026, M 2315, M 2339, M 4570, M 5263, M 6041, M 6222, M 6223, M 6300, M 6680+, M 6726, Otani 6192, Otani 6205, P.M. 914.2.

The remaining fragments with <ž> are the following (those with several words with <ž> underlined): M 1, M 2, M 7, M 35, M 177, M 502h (& M 2751), M 533, M 667, M 727a, M 733, M 801a, M 5815, M 8110, Otani 6211, S 32 (= SI (Kr IV/841) 30).

"=" indicates duplicates of the same text, "&" marks joined fragments.

<sup>30</sup> This applies to the Pth. lexicon as extracted from the sources quoted in footnote 1 insofar as the words are etymologically clear.

- words written with <c> (Section 1.1) and those written with <c> and <ž> (Section 1.4) show the Pth. outcome of OIr. \*č̣,
- words written with <j> (Section 1.2) reflect the Pth. outcome of OIr. \*j̣ and \*ẓ̌, and of OIr. \*č̣ and \*j̣ in the position after *n* (see Section 1.3).

This speaks for Parthian preserving the OIr. distinction of \*č̣ (> Pth. /č/) vs. \*j̣ (> Pth. /ž/) not only in word-initial position, but in all positions of the word. The only exception is the position after *n*, where the opposition was lost. The pronunciation of <nj>, <nc> is likely to have been [n̄j],<sup>31</sup> so that /č/ and /ž/ have a postnasal allophone [j̄].

### 3. Is the Manichean Parthian orthography archaising?

Although the Manich. script is as a rule very accurate,<sup>32</sup> there are several possible arguments that appear to speak against the statement made in the preceding paragraph.

#### 3.1 One such argument is the existence of the doublets listed in Table 4.

However, except for the last item, the unetymological spellings are very rare: *brw]j'gyn* (if it is to be read this way at all),<sup>33</sup> *pdmwj-* and *twc-* occur only once each, vs. 24 instances of *pdmwc-* (plus 28 *pdmwcn* "garment") and 2 of *twj-*. Unless some specific factors are at work in

<sup>31</sup> Thus e.g. RASTORGUEVA / MOLČANOVA (1981:177), SUNDERMANN (1989:122). The issue of OIr. \*nč̣/j̄ in Western Iranian might merit another investigation, though. Potentially relevant points include the fact that there are examples of *-nč̣* in Armenian (where, however, voiced and voiceless stops vary after *n* in the manuscripts, obscuring the Ir. reflexes, HÜBSCHMANN 1895:225, 231). Also noteworthy are the MPM spellings *pnz* "five" (besides only 2 instances of *pnc*) and *hnzmn* "gathering" (Pth. *ḥjmn*) and the substitution of *nz* by *nj* in Parthian, e.g. *ḥjwg* "narrow" vs. MPM *hnzwg-* (OInd. *aṁhu-*, Av. *qzah-* "hardship"). The reason may be that */nz/* was "unusual" in Parthian (HENNING 1963:196, 1965:32 note 4). Indeed, there does not seem to be any example of tautosyllabic Pth. *nz* without an intervening morpheme boundary. The only candidate would be *brynz-* "roast". In DURKIN-MEISTERERNST (2004:111a), the lemma is marked as Parthian, but its only occurrence is marked as MP; *brynz-* is found in a fragmentary word-list contrasting Sogdian words with MP or Pth. counterparts. A couple of words with Arm. *nj* [ndz] instead of *nj̄* (HÜBSCHMANN 1895:231f.) have been assumed to reflect Ir. dialectal variation (see GIPPERT 1993/I:122f. for a summary of the discussion). According to OLSEN (2005:478), these words belong to a group that also shows peculiarities in the Arm. stem class they are assigned to, and they might have been borrowed from an Eastern Ir. variety.

<sup>32</sup> Cf. e.g. SUNDERMANN (1985:111): "With regard to what had been common until that point in the practice of writing and reading Iranian, Mani's innovation [= the Manich. script] amounted to something like a revolutionary deed. The letters rendered the phonemes of Middle Persian and Parthian of the 3rd century as accurately as possible for an Aramaic script; there were no historic orthography, no letters of same shape but with different value, and no heterograms."

<sup>33</sup> For the attestation of *brw]j'gyn*, see HENNING (1940:29), for *ʃ(b)[r](w)cyn(d)*, see SUNDERMANN (1997 § 97).

these three instances,<sup>34</sup> they might perhaps be attributed to a stage where the Pth. phonemes /č/ and /ž/ coalesced (see Section 6.2).

Table 4: Exceptional cases of Pth. orthography <c> vs. <j> (full list)	
etymological orthography	unetymological orthography
<i>twj-</i> / <i>twj-</i> "to expiate, pay back" (2 occurrences), < OIr. * <i>tauǰ</i> (?) <sup>35</sup>	<i>twcyyd</i> (1)
<i>pdmwc-</i> "to clothe" (24), < OIr. * <i>mauč</i> (?) <sup>36</sup>	<i>pdmwj<sup>h</sup></i> (1)
ǰ( <i>b</i> )[ <i>r</i> ]( <i>w</i> ) <i>cyn</i> ( <i>d</i> ) "illuminates" (1), < OIr. * <i>rauč-</i> (see Section 1.4)?	<i>brwǰ<sup>h</sup>gyn</i> "bright" (1)
<sup>2</sup> <i>c</i> / <sup>2</sup> <i>ž</i> "from" (ca. 600, see Section 1.4) < OIr. * <i>hača</i>	<i>ǰ<sup>2</sup></i> (2)
<i>wcyd</i> "chosen", <i>wcydg</i> "Elect", <i>wcydgyft</i> "the (group of) Elect" (5), < OIr. * <i>vi-číta-</i>	<i>wjyd</i> , <i>wjydg</i> , <i>wjydggyft</i> (over 90)

The two occurrences of *ǰ<sup>2</sup>* (vs. hundreds of <sup>2</sup>*c* / <sup>2</sup>*ž*, see Section 1.4) have also been seen in the context of <c> vs. <j> and have been interpreted as an "allegro" or sandhi variant produced by the affixation of the "hymnic element" -<sup>2</sup> (/ -ā/) to <sup>2</sup>*c* / <sup>2</sup>*ž* "from" (DURKIN-MEISTERERNST 2000:169 note 32), and are noted as a variant of <sup>2</sup>*c* / <sup>2</sup>*ž* in DURKIN-MEISTERERNST 2004. However, *ǰ<sup>2</sup>* (strictly speaking <sup>2</sup>*-ǰ<sup>2</sup>*) is not an "allegro" variant of <sup>2</sup>*c* / <sup>2</sup>*ž*, but its cantillated version (see Section 6.3).

The only word that shows a major variation in its spelling is *wcyd* (5 instances) vs. *wjyd* (over 90) "chosen" (including the derivatives *wcydg* / *wjydg* "Elect" and *wcydgyft* / *wjydggyft* "the

<sup>34</sup> *pdmwj-* occurs in *spyxt pdmwig pdmwj<sup>h</sup>* "Thou shalt put on a radiant garment" (combined fragment M 93 & M 289 II r 7, BOYCE 1954:100f.). Perhaps the figura etymologica (which reoccurs in M 737 v 5 in the form: *nys(ǰ)gyn pdmwig pdmwcynd* "[t]hey put on the resplendent Garment", BOYCE 1951:915) may have motivated a comparison with parallel sets of words such as *prywg* /paryōg/, *prywj* /paryōž/, both "victory" (see Table 2), *prywj-* (/paryōž-/, past stem *prywx* /paryōxt/) "to overcome", and could have favoured the association of the -*g* in *pdmwig* /padmōg/ with a present stem ending in a voiced consonant (\*/padmōž-/, past stem *pdmwxt* /padmōxt/).

<sup>35</sup> The origin of the Ir. root \**tauǰ* is not clear; CHEUNG (2007:388) suggests a relationship to Sogdian *twdy* etc. "masses", in which case \**tauǰ* might be \**taud+ǰ*(?). Note also the OInd. root variants *tuj* and *tud* "push" and the possible identity of *túj-* and *túc-* "offspring" (MAYRHOFER 1992–2001/I:652, 670).

<sup>36</sup> Cf. CHEUNG (2007:139f.).

(group of) Elect"). It is noteworthy that this word is a key term of the Manich. church while the present stem of the associated verb (*wycyn-* / *wžyn-* "to choose", see Section 1.4) agrees with the rest of the Pth. lexicon in showing a remarkably consistent use of the letters. So one wonders whether some special phenomenon might be involved. A possible explanation of the appearance of an unexpected <j> besides <c> might be that MP /wizīd/ could have been borrowed<sup>37</sup> with an adaptation to make it look like a Pth. word:<sup>38</sup> there may have occurred a hypercorrect application of the correspondence "Middle Persian /z/ equals Parthian /ž/", which speakers and scribes could surely have deduced from obvious cognates such as Pth. *ḵyw-* /žīw-/ vs. MP *zyw-* /zīw-/ "to live", Pth. *bwj-* /bōž-/ vs. MP *bwz-* /bōz-/ "to save", Pth. *ḵmʾn* /žamān/ vs. MP *zmʾn* /zamān/ "time", etc.<sup>39</sup> For instance, such a logic seems to be responsible for the unetymological ž in Pth. *ʾmyj-* /āmēž-/ vs. MP *ʾmyz-* /āmēz-/ "to mix" (Av. *\*maiz-*, PIE *\*meǵ-*, cf. CHEUNG 2007:261), another important term in Manich. theology. Alternatively, one might assume a dissimilation *\*wījīd* [widžīd]<sup>40</sup> > *wižīd* to account for the spelling *wjyd* (Nicholas Sims-Williams, p.c.).

**3.2** If one assumes that the distinction of <c / ž> and <j> reflects a writing tradition dating back to times before the beginning of the Manich. orthography,<sup>41</sup> potential candidates for a model include other scripts used for Parthian and Middle Persian.

However, the possible models are not quite similar to the Manich. Pth. orthography. The script used in the MP and Pth. inscriptions did not develop a separate letter <j>, but the Pth. epigraphic texts<sup>42</sup> do distinguish the Pth. results of OIr. *\*č* and *\*ǰ*/*\*ž* (presumably Pth. /č/ and

<sup>37</sup> Several MP terms of preeminent religious importance have been borrowed into Parthian, among these /gyān/ "soul", /farrox/ "glory" and /wurrāw-/ "to believe" (cf. KORN / DURKIN-MEISTERERNST 2009:12–16, 18), *xrwḵwʾnʾn* "preachers" (HENNING 1937:24 line 220 [MP], line 270 [Pth.]).

<sup>38</sup> Maybe *wcyd* / *wjyd* might also have been associated by popular etymology with its quasi-synonym *wyxt(g)* "selected, chosen" (for which cf. KORN / DURKIN-MEISTERERNST 2009:10 note 15), which does not have a verbal paradigm in Parthian and could have given rise to speculations whether it should be associated with a present stem *\*wyc-* or *\*wyj-*. The MPM word and its derivatives are found as *wzyd* only twice, but otherwise as *wcyd* (ca. 40 instances).

<sup>39</sup> The fragment (in Sogd. script) So 14152 (cf. RECK 2007:328) seems to reflect such a scribal logic, presenting MP *ʾzzʾn* (v 6), Pth. *z-mʾn* (v 11), both correct for the respective languages, and – in the next line – <z> for Pth. /z/ in *xwʾz-zʾm* [sic] (Manich. script *wxʾzʾm*) "we want" (corresponding to MP *xwāh-*), apparently thinking "for Parthian, <z> /ž/ is the right choice".

<sup>40</sup> For a possible change Pth. /-č/ > [j], see Section 4.2.

<sup>41</sup> Thus SKJÆRVØ (1996:521): "The Manichean script shares with the Parthian and Middle Persian [epigraphic] scripts the archaizing use of c (or j) for intervocalic Parth. ž and MPers. z." (For the latter issue, see Section 3.3.)

<sup>42</sup> This term includes the Arsacid and Sasanian inscriptions, the ostraca from Nisa and Dura-Europos and the parchment "Awroman III".

/ž/). These are written <š> and <z> respectively; i.e. in the orthography of the inscriptions, Pth. /č/ and /š/ are represented by the same letter,<sup>43</sup> while /ž/ and the postnasal allophone [j] are written with the letter also used for /z/.<sup>44</sup> So if the inscriptional orthography had been the model, one would expect that the orthography of <š> for /č/ would have been maintained (either regularly, or at least in a number of cases) in the Manich. texts, and that <z> would be used for /ž/ either regularly or alongside the newly developed <j>.

3.3 Another potential candidate for a model for the Manich. Pth. orthography is Manichean Middle Persian; it is possible that the Manich. script was used for MP first, and later on also employed for Parthian and other languages (HENNING 1958:73), but this is hard to prove (DURKIN-MEISTERERNST 2000:163–169). However, there is a major difference between MP and Parthian as far as the use of <c> etc. is concerned: in MP, <c> for MP /z/ < OIr. \*č is regularly used besides <z>, indicating systematic historical orthography,<sup>45</sup> while in Parthian, the few exceptions (discussed in Section 3.1) to the etymological use of <c> are hardly a solid basis for assuming (pseudo-)historical orthography.

To a certain extent, the assumption of the Pth. orthography being based on Middle Persian implies the underlying idea of a parallel development as sketched in Table 5. It could be assumed that there is a common Western Mlr. development producing a coalescence of OIr. \*j, \*ž and postvocalic \*č into one sound, which only differs in the language-specific articulation of the resulting sibilant. This is indeed the communis opinio,<sup>46</sup> but there is some evidence speaking against it.

The use of etymologically unjustified <c> for cases of OIr. \*z and \*j in the early Sasanian MP inscriptions shows that OIr. \*č had resulted in MP z already by that time (HENNING 1958:67,

<sup>43</sup> This orthography is unlikely to imply that /č/ and /š/ coalesced in a certain variety of Parthian (HENNING 1958:60, RASTORGUEVA / MOLČANOVA 1981:153, SUNDERMANN 1989:120 note 80). Epigraphic examples for /č/ are (transliterations based on GIGNOUX 1972 with a few modifications): *šwgwn* /čawāyōn/, *ššmk* /Čašmak/, *šyhr* /čihr/, *pšhr* /Pā-čihr/, *B<sup>2</sup>TRš* /paš-ič/; for /š/: *ršrt* /rāšt/. It is not quite clear why the letter <c> is used for /č/ in the MP inscriptions (e.g. *cygwn* /čiyōn/, *cšmk* /Čašmak/) and in the Sogdian ones, but is only employed for heterograms in the Pth. ones. See also footnote 4.

<sup>44</sup> Examples for /ž/: *wyznkn* /Wēžanakan/, *zmn* /žamān/; for /z/: *brzmrk* /Barz-mihrag/, *dyzpt* /dēzbad/. For [j], RASTORGUEVA / MOLČANOVA (1981:154) quote *rnz* /ranj/ (not in GIGNOUX 1972) from unspecified "inscriptions of the 3rd century".

<sup>45</sup> MACKENZIE (1967:21). There are also some cases of MPM pseudo-historical orthography. For a description of the extremely historical orthography of MPZ, see e.g. HENNING (1958:67–72), MACKENZIE (1967:17).

<sup>46</sup> Thus explicitly e.g. TEDESCO (1921:190–192), LENTZ (1926:254) and PAUL (1998:167, 170); the same view is usually also implied in grammars of Parthian and MP (cf. footnote 3).

MACKENZIE 1967:21, BACK 1978:135), e.g.  $\acute{c}^{\acute{t}}$  and  $\acute{z}^{\acute{t}}$  /āzād/ (< OIr.  $*\acute{a}$ -zāta-),  $py[w]c$  /pērōz/ (< OIr.  $*\acute{p}ari$ -aujah, cf. Table 2), etc. Armenian and Georgian also demonstrate that at a time when the intervocalic voiceless stops were still preserved in Western Middle Iranian, MP already had  $z$  < OIr.  $*\acute{j}$ ,<sup>47</sup> e.g. Arm. *zatic* "Pessah" < OIr.  $*\acute{j}atika$ - "immolation", Georgian *toziḱ*- "feast, banquet".<sup>48</sup> For Parthian, on the other hand, the Armenian loanwords show a preservation of intervocalic  $\acute{c}$  and stops alike, e.g. *spitak* "white", *řoćik* "daily bread".<sup>49</sup> So the MP and Pth. developments of OIr.  $*\acute{c}$ ,  $*\acute{j}$ ,  $*\acute{z}$  are not parallel.

Table 5: Communis opinio on the development of OIr. affricates and $*\acute{z}$		
Old Iranian	$*\acute{c}/\_V$ ; $*\acute{j}$ ; $*\acute{z}$	
Middle Iranian	Northwest Ir. (Parthian)	Southwest Ir. (Middle Persian)
	/ž/	/z/
Manich. orthography	𐭪 <c>, 𐭫 <j>, 𐭬 <z>	𐭪 <c>, 𐭮 <z>

3.4 The orthography of certain stops might appear to be parallel to that of the Pth. results of OIr.  $*\acute{c}$  and  $*\acute{j}$  as far as the preservation of a difference is concerned: the output of OIr. postvocalic  $*t$  (presumably Pth. /d/) may be written either <𐭪> 𐭪 or <d> 𐭫 (e.g. *pt* and *pd*/pad/ "in, at, on", OIr.  $*\acute{p}ati$ ) while the result of OIr. postvocalic  $*d$  (Pth. /δ/) is always written <d> (e.g. *kd* /kaδ/ "when", OIr.  $*\acute{k}adā$ ).<sup>50</sup> Similarly, <q> 𐭮 may be used for /g/ < OIr.  $*k$  in Parthian and Middle Persian (besides <g> 𐭮), but not for /γ/ < OIr.  $*g$ .<sup>51</sup>

<sup>47</sup> KORN (2005:287, 2009:206). See also Section 4.1 for another argument in favour of the early date of  $*\acute{j}$  > MP  $z$ .

<sup>48</sup> Note that *tōz*- ("something paid") appears to have been widely known in its MP shape as it was also borrowed into Aramaic (*twzyk*), cf. GIPPERT (2004:108–110). For the corresponding verb, see Section 3.1.

<sup>49</sup> These words belong to the Arsacid / Pth. layer of Ir. loanwords in Armenian (cf. HÜBSCHMANN 1897: 12–15), which is also characterised by (Pth.)  $\acute{z}$  for OIr.  $\acute{j}$  (see Section 4.1). The *t* of Arm. *zatic* and *řatuk* shows that not all MP loanwords are necessarily younger than the Pth. ones. Conversely, the *o* of Arm. *řoćik* (< Pth.) indicates that the word is a more recent borrowing since most loanwords from the Arsacid period show Arm. *i* and *u* for MĪr. *ē*, *ō*, respectively, in non-last syllables while later ones have *e*, *o* (cf. HÜBSCHMANN 1897:14). *spitak* (<  $*\acute{sp}etak$ ) and *tuž*- "punish" (from MĪr. *tōž*-, for which see the preceding sentence of the text) are thus from an older layer than *řoćik*.

<sup>50</sup> HENNING (1958:75), KORN (fthc., note 27), DURKIN-MEISTERERNST (2000:169–172). The latter – set in other terms than those applied here – notes that <𐭪> for  $*t$  is very rare in Middle Persian. One possible interpretation is that the voicing of the OIr. postvocalic voiceless stops happened earlier in MP than in Parthian (cf. DURKIN-MEISTERERNST 2000:172). However, OIr. postvocalic  $*d$  and  $*g$  yield MP  $-y$  (vs. OIr. postvocalic  $*t$  and  $*k$  > MP  $d$ ,  $g$ ) so that there was no opposition to be noted anyway.

<sup>51</sup> <q> may also be written for /k/ in various positions, including the postvocalic word-final one (DURKIN-MEISTERERNST 2000:170).

However, the parallelism is again only partial: <t̥> and <q> for /d/ and /g/ only appear alongside <d> and <g>, and only word-finally, while <d> and <g> are much more common (and the only orthography in word-internal position); <t> and <k> are not used at all for these purposes (cf. HENNING 1958:75 note 2).<sup>52</sup> So the opposition (if any) between /d/ and /ð/, and between /g/ and /ɣ/ is only marked in a minority of cases, and the Manich. orthography essentially uses <b>, <d>, <g> to represent the Pth. outcome of both the OIr. postvocalic voiced and voiceless stops. The opposition between the Pth. results of OIr. \*č and \*j/\*ž, on the other hand, is marked systematically, and the former is written (in all positions of the word) with the letter that is etymologically expected for the voiceless member of the series. For instance, there is no variant †<rwj> alongside <rw<sup>h</sup>c>, and no †<bwc-> alongside <bwj-> (with the few exceptions noted in Section 3.1).

So the coalescence of the OIr. postvocalic voiceless and voiced stops is likely to have been "close to its completion"<sup>53</sup> at the time of the introduction of the Manich. script for Parthian, while /č/ and /ž/ were still distinct in all positions in the word (except after *n*).

#### 4. The pronunciation of the Parthian graphemes

Concerning the pronunciation, the evidence of the Armenian loanwords shall be considered more closely.<sup>54</sup>

4.1 The transliteration <j> has been assigned to the letter յ for reasons of the MP evidence: MPM <j-> from OIr. \*y- corresponds to Arm. յ- in MP loanwords, e.g. *ḵatuk* "sorcerer" (Av. *yātu-*, New Persian *ḵādū*, cf. MPM *j<sup>2</sup>dwgy* "sorcery").<sup>55</sup> On the other hand, Arm. loanwords

<sup>52</sup> DURKIN-MEISTERERNST's (2000:173–176) explanation of the non-use of <t> for postvocalic OIr. \*t, viz. that <t̥> may have been a device for writing "foreign t", is not convincing because both <t̥> and (more commonly) <t> are regularly used for /t/ (< OIr. \*t in postconsonantal, word-initial and morpheme-initial position). Rather, one wonders whether the Manich. orthography might reflect Aramaic phonology. Semitic stops have fricative allophones in postvocalic position (for instance, <t> ܛ denotes [t] word-initially, but [ð] after vowels). Since the emphatic consonants do not show such a lenition, <t̥> ܛ̥ (whence the Manich. letter <t̥>) is an unambiguous orthography for a voiceless stop.

<t> appears to stand for the result of OIr. \*t in Pth. *pwrt* "bridge", *mwrt* "death", and in words with OIr. \*-art- while OIr. \*rt gives Pth. *rd* otherwise (cf. HENNING 1958:75 note 2). The special conditions at work here are discussed in KORN (fthc.).

<sup>53</sup> HENNING (1958:75 with note 2, see also footnote 3 above), similarly SUNDERMANN (1989:123), DURKIN-MEISTERERNST (2000:171f.). For further discussion of the Pth. development of the stops see Section 6.

<sup>54</sup> For the pronunciation of <nj>, <nc> see Section 2.

<sup>55</sup> HÜBSCHMANN (1897:232). Note that this յ- must be older than the voicing of postvocalic stops, but younger than the change of OIr. \*j > MP z (see Section 3.3) as otherwise OIr. \*y- (> MP j-) would have resulted in MP z.

from Parthian show *ž* throughout for the outcome of OIr. \**ǵ* and \**ž*.<sup>56</sup> Examples include Arm. *žahr* "poison" (Pth. *jhr*), *žamanak* "time" (Pth. *jmʹn*), *tuž-* "punish" (see footnote 49), *džox-k<sup>c</sup>* "hell" (Pth. *dwjx*) and the items in Table 2, establishing that in Parthian, <j> denotes [ž].<sup>57</sup> Also, some orthographic peculiarities seem to indicate that Pth. <j> alone was not pronounced [j], e.g. *djrtbwhr* for the place name Jaṭāpura (HENNING 1947:57) and the use of diacritic dots in the borrowing *ǵ<sup>2</sup>dyšmr* (OInd. *jātismara-*) "recollection of a former existence" (SIMS-WILLIAMS 1983:134 note 23, SUNDERMANN 1993:167).<sup>58</sup> Moreover, the position of <j> "in an alphabetical list of letters of the Manichean script after *z*, not after *c*" may also indicate that its pronunciation was "more like *z* than like *č*, i.e. it was *ž* rather than *ǵ* [= *ǰ*]" (SUNDERMANN 1993:167).

4.2 For /č/ (see Section 1.1), the Armenian evidence would suggest a pronunciation [č], e.g. *včar* "payment" (Pth. *w(y)cʹr-* "to perform"), *avac<sup>c</sup>* "voice" (Pth. *w<sup>c</sup>c* "word"), *patmučan* "garment" (Pth. *pdmwcn*, see Section 3.1), etc. (cf. HÜBSCHMANN 1895:225f.). However, the stage of Parthian reflected in the Arm. loanwords is earlier than that of the Manich. texts since these words preserve the OIr. voiceless stops in postvocalic position, e.g. Arm. *spitak* vs. Pth. *špyd* "white", *řočik* "daily bread" vs. Pth. *rwč* "day", *rwčg* "fast(-day)" (cf. Section 3.3).

It is thus quite possible that in postvocalic position, the Pth. phoneme /č/ was subject to lenition; i.e. /č/ may have acquired an allophone [j] not only after *n*, but also after vowels (see Section 5 for additional discussion). This would still not disturb the phonemic opposition with /ž/, though. The Pth. orthography situation at the time of the establishment of the Manich. script may be summarised as in Table 6.<sup>59</sup>

<sup>56</sup> HÜBSCHMANN (1897:229–231).

<sup>57</sup> Cf. LENTZ (1926:254f.), HENNING (1958:74). As suggested by MACKENZIE (1967:21), Manich. <j> can denote *ž* even in MP; it seems that the MP phoneme /j/ was pronounced [j] only in word-initial position (see footnote 55) and after *n*, but [ž] elsewhere.

<sup>58</sup> SUNDERMANN (1989:145) generalises this observation to the statement that "Buddhist terms with word-initial *ǵ*- could be written with a specific sign <j> with diacritic dots", and concludes that "[undotted] <j> in Middle Persian words perhaps still meant /ž-/. However, this conclusion is disproved by the MP loanwords Arm. *ǵatuk* just mentioned, and *ǵok*, Georgian *ǵog-* "herd" (cf. GIPPERT 1993/I:219f., for the protoform also KLINGENSCHMITT 2000:211). MPM *ǵog* is written *ǵwwg* (see HENNING 1951:50 note 1, SUNDERMANN 1981:149a and HENNING 1943:57, 61, line 52 for the two attestations) and perhaps also *ǵwwg* (in unclear context in M 788 V 5). This *ǵwwg* is the only case of MPM word-initial <j> I am aware of (*ǵ<sup>2</sup>dyšmr* is Parthian). The cases of diacritic dots above or below a word-internal <j> are instances of abbreviation dots (see footnote 19).

<sup>59</sup> The Turkic and Sogdian words and names occurring in Pth. and MP texts in Manich. script appear to confirm this: the instances of <ž> (these are the Sogdian place name *pnžknđyy* and the Turkic name *twswwž*) are likely to reflect [j]. Otherwise, <c> is used in the position after *n*. <j> does not occur in Turkic words, mirroring the lack of /ž/ from the Turkic phonemic system.

Table 6: Parthian orthography			
Manichean script	vs. inscriptional orthography	Pth. phoneme	< OIr.
𐭪 <c>, 𐭫 <ž>	<š>	/č/, maybe postvocalic [j]	*Vč
𐭬 <j>	<z>	/ž/	*j, *ž
𐭪𐭫 <nc>, 𐭬𐭫 <nj>	<nz>	/nč/, /nž/ = [nʃ]	*nč, *nʃ

4.3 This system is similar to Sogdian (see Table 7), which likewise has the phonemes /č/ <c> and /ž/ <j>, with the allophone [j] in the position after nasalised vowels (GERSHEVITCH 1954:8f., SIMS-WILLIAMS 1989:178f.).

Table 7: Sogdian orthography			
Manichean script	cf. Sogdian script <sup>60</sup>	Sogdian phoneme	< OIr.
𐭪 <c>	<c>	/č/	*č
𐭬 <j>	<z>, <ẓ>, <ẓ̣>	/ž/	*j, *ž
𐭪𐭫 <nc>, 𐭬𐭫 <nj>	<nc>	/nč/, /nž/ = [nʃ] (Vʃ)	*nč, *nʃ

## 5. The letter <ž>

One might ask whether the general practice of transliterating the Manich. letter 𐭫 by "ž" is adequate. The letter is not used to represent the Pth. (or Sogdian) outcome of OIr. \*ž and \*j. If <ž> had denoted [ž], it should have been used for writing e.g. Pth. *žahr* (Arm. *žahr*) or *duž°* (Arm. *dž°*), but all instances of Pth. /ž/ only appear with <j> (*jhr*, *dwj°*, etc.). So it seems preferable to transliterate the letter with something different from <ž>, e.g. with <ẓ̌>, indicating that the sign is formed from the letter <z> by the addition of two dots above.<sup>61</sup>

The MPM and MPZ orthographies are (following MACKENZIE 1967):

Middle Persian orthography			
MPM orthography	MPZ orthography	MP phoneme	< OIr.
<c>, <z>	<c>	/z/	*Vč, *j, *ž
<j>		/j/: [j-], [nj], elsewhere [ž]	*y-, *nč/j (plus j from loanwords etc.)

<sup>60</sup> See Section 6.1–6.2 for discussion.

<sup>61</sup> See also footnote 2. Conversely, one might consider transliterating 𐭬 <j> as <ẓ̌>, which would describe its most common value in Parthian and Sogdian adequately and would even be justifiable for Middle Persian (see footnote 57). However, such a change would result in confusion with the transliteration convention hitherto observed.

Such a notation would be parallel to the one common for the Sogdian script, where <z> with one or two diacritic dots below is transliterated as <ẏ> or <ỵ̇>, respectively.<sup>62</sup>

It is possible that <ẏ> was invented for Parthian *ǰ* (thus HENNING (1958:74),<sup>63</sup> i.e. for the postvocalic allophone of Pth. /č/ suggested in Section 4.2. This would agree with the fact that it only occurs (see Table 3) in postvocalic position, except for *žyšm(r)*, which might be connected with Pth. *ǰ̣dyšmr* "recollection of a former existence" (from OInd. *jātismara-*) as suggested by Sundermann and Yoshida.<sup>64</sup> It would also fit with the fact that the letter is derived from <z>, probably indicating a voiced consonant.<sup>65</sup>

## 6. Specific developments of the Parthian consonants

The fact that the MP and Pth. texts were preserved by Central Asian Manichean communities, who also further developed liturgical traditions, had some consequences for the Pth. sound system as reflected by the fragments.

**6.1** The speakers of Sogdian and Turkic who used the MP and Pth. texts in religious ceremonies transcribed them into scripts with which they were more familiar (HENNING 1958:76), the most important of which is the so-called Sogdian script.<sup>66</sup> The Pth. fragments in Sogdian script<sup>67</sup> do not distinguish /b/, /d/ from /β/, /δ/ respectively,<sup>68</sup> confirming that the opposition of the two series of OIr. stops (yielding Pth. postvocalic voiced stops vs. fricatives) is likely to have been lost at some point after the 3rd century AD (see Section 3.4).

**6.2** If the Sogdian orthography mirrors a development of the Pth. language (rather than the Sogdians' liturgical pronunciation of Pth. texts), the question arises whether postvocalic /č/

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<sup>62</sup> See Section 6.2.

<sup>63</sup> The occasional use of <ẏ> also in MP texts is attributed to the "later Turkestan scribes" by HENNING (1958:74). This includes the cases labelled "MP" in Table 3.

<sup>64</sup> In KUDARA / SUNDERMANN / YOSHIDA (1997:211). For further discussion of *ǰ̣dyšmr*, see Section 4.1.

<sup>65</sup> Maybe the comparatively high number of instances of *ž* "from" (see Section 1.4) could then be attributed to the clitic character of the word, effecting an earlier or clearer voicing, cf. the irregular development in its Balochi cognate *až* (besides regular *ač* etc., KORN 2005:85, 179).

<sup>66</sup> For details on the Sogdian script, see SIMS-WILLIAMS 1981.

<sup>67</sup> A list of the Pth. fragments in Sogd. script in Berlin is provided by RECK (2006:326), who also lists their previous numbers and editions where available.

<sup>68</sup> An example of <β> for Pth. /b/ is *kyrβk* "virtuous" (Manich. script *kyrbg*); <β> can also render Pth. /f/, e.g. abstract suffix *-yβt* (Manich. script *-yft* /-ift/). The opposition between postvocalic /g/ and /ɣ/ appears to be preserved, though (HENNING 1958:76).

and /ž/ also coalesced at some stage of Parthian, so that the Manich. orthography would have become historical with respect to these two phonemes.<sup>69</sup> If so, this stage of Parthian would exhibit a development also found in Modern North-Western Iranian languages like Zazaki and Kurdish, which show no difference in the products of OIr. postvocalic \*-č and \*ǰ, e.g. Zaz. /vāj-/,<sup>70</sup> Kd. /bēž-/ "to say" (cf. Pth. *w<sup>2</sup>c-* /wāč-/), Zaz. /rōj/, Kd. /rōž/ "day, sun", Zaz. /jinike/, Kd. /žin/ "woman" (cf. Pth. *jn* /žan/), Kd. /dirēž/ "long", Zaz. /pānj/, Kd. /pēnj/ "five".<sup>71</sup>

The Sogdian script regularly uses <c> for Sogd. /č/ and the postnasal allophone [j], and <z> for /z/ and /ž/ (SIMS-WILLIAMS 1989a:322); some manuscripts employ diacritic dots under <z> (<ẓ> and <ẓ̣>) to differentiate /ž/ from /z/ (see Table 7).<sup>72</sup> In its use for Parthian, the Sogdian script shows <z> with or without dots for Pth. /ž/,<sup>73</sup> <c> and (more commonly) <z> with or without dots in places of expected Pth. /č/,<sup>74</sup> and <nc> for [nǰ].<sup>75</sup> While this blurs

<sup>69</sup> Cf. HENNING (1958:72), who assumes that the Manich. script generally became historical due to language changes after its introduction.

<sup>70</sup> The pronunciation in Zazaki depends on the dialect involved (cf. GIPPERT 2009:81–87); some have ž or dz for the j noted here.

<sup>71</sup> Postvocalic stops are lost in most cases, e.g. Kd. /bā/, Zaz. /vā/ "wind" < OIr. *\*vāta-*; Kd. /pē/, Zaz. /pā/ "foot" < OIr. *\*pād-*, etc., showing a development that clearly did not yet take place in Parthian.

<sup>72</sup> Other manuscripts use the same device to differentiate /z/ from /n/ while many manuscripts do not employ <z> with dots at all (see HENNING 1958:59 note 4, SIMS-WILLIAMS 1981:348, 352, 1989:176 for details).

<sup>73</sup> Examples are:

Sogd. script	fragment	word in Manich. script	meaning
wz-yδ [k]	So 18060	the parallel texts in M 75 r 8 and M 544 r 4 have <i>wjy(y)dg</i> (see Section 3.1)	"chosen"
prywz- <sup>2</sup> n	So 20187	<i>prywjn</i> (see Section 1.2)	"victory"
[dy]z-w <sup>2</sup> ry-(βt)	So 14155 (cf. RECK 2007:325)	<i>dyjw<sup>2</sup>ryft</i>	"hardship"
z-m <sup>2</sup> n	So 14152 (RECK 2007:328)	<i>jm<sup>2</sup>n</i> (see Section 4.1)	"time"
z-m <sup>2</sup> n	So 10072		
zywn[tk,	So 20187	<i>zywndg</i>	"alive"
z-yw <sup>2</sup> ntk	So 20153		
z-yw(x)[	So 10650(9)	<i>jywhr</i>	"life"
pwz-	So 14290	<i>bwj-</i> (see Section 1.2)	"save"
k <sup>2</sup> mz-ny-βt	So 20208 (SIMS-WILLIAMS	<i>q<sup>2</sup>mjnyft</i>	"passion"
z-ryy-βt	1989a:322f., 330f.)	<i>jryyft</i>	"wisdom"

<sup>74</sup> Illustrative examples include the following (see Sections 1.1, 1.4, 3.1 for details on several of these words):

Sogd. script: <c>	Sogd. script: <z> etc.	word in Manich. script	meaning
č (e.g. in So 14290)	č̣ (several instances in So 20224 (see WALDSCHMIDT / LENTZ 1926:95f.) and So 10201(5)) č̣̣ (So 10650(9), So 20208, Ch/So 20501) both variants in So 10201 (5), p. 2 (sometimes subsumed under the no. 10200/(1) (5), see SUNDERMANN 1991:171f.)	č, č̣	"from"

the difference between /č/ and /ž/, it does not necessarily exclude the existence of two different sounds, as the scribes may have tried to render [j] (the postvocalic allophone of /č/, see Sections 4.2, 5) by a letter that they commonly used for the nearest voiced sound, all the more since a modification of <z> (i.e. <ž>) was regular for [j] also in the Manich. script (see Sections 1.4, 5).<sup>76</sup> So the evidence of the Sogdian script is not entirely conclusive for Parthian.

**6.3** The cantillations (something like songbook versions of hymns, in Manich. script)<sup>77</sup> are another reflex of Central Asian liturgical pronunciation of Manichean Middle Persian and Parthian. HENNING (1958:76 note 2) observes that they point to the same coalescence of the two series of stops that is indicated by the versions in Sogdian script (see Section 6.1). The published specimens of cantillated text<sup>78</sup> indicate that such a coalescence also applied to word-internal Pth. /č/ and /ž/ (Table 8). Both phonemes are written <j> in the cantillations while the Pth. verses in plain text preceding the cantillated versions present the usual orthography described in Table 6 above.<sup>79</sup>

<i>wcn</i> (Ch/So 20135, SUNDERMANN / YOSHIDA 1992 line 1)	<i>wzn</i> (So 18120)	<i>wcn</i>	"voice"
	<i>š<sup>2</sup>dz-n</i> (So 20185)	<i>š<sup>2</sup>dcn</i>	"happy"
	<i>rwz</i> (So 13505, RECK 2007:329)	<i>rw<sup>c</sup>, rwž</i>	"day"
	<i>nm<sup>2</sup>z</i> (So 18130)	<i>nm<sup>2</sup>c</i> in parallel text M 5262 / r 6	"praise"

<sup>75</sup> Examples are *ncywk* "life-giver, saviour", *syncyn* "salvation" (both in So 20153 and So 20224) vs. *nywg*, (s)*ynjyn* in the parallel text in Manich. script (WALDSCHMIDT / LENTZ 1926:95f.) and *pncwm* (So 10202, SUNDERMANN 1981:50) "fifth" (see Section 1.3).

<sup>76</sup> Conversely, the Sogdian words *t<sup>2</sup>zyk* "Arab" and *t<sup>2</sup>zyk<sup>2</sup>nk* "Arabic" (found in early 8th century AD documents), and *t<sup>2</sup>jyg<sup>2</sup>nyy* in a Sogdian phrase in the Manichean fragment M339 v line 7a could reflect a Pth. word \*[tāžīg] corresponding to MP *tāzīg*, both possibly from OIr. *\*tāčīk-* (thus SUNDERMANN 1993). This would imply a Pth. result [ž] from OIr. *\*-č* at the time relevant for these Sogdian sources. However, it would seem daring to base far-reaching conclusions on this widely travelled word, whose precise path of transmission is difficult to ascertain.

<sup>77</sup> For Manich. cantillation, see BRUNNER 1980.

<sup>78</sup> A list of fragments with cantillated text is given in BOYCE (1960:149). The vast majority of these are unpublished.

<sup>79</sup> A survey of the unpublished cantillated Pth. fragments on <http://www.bbaw.de/forschung/turfanforschung/dta/> appears to confirm this: <ž> does not seem to occur in the cantillations, and the cases of <c> could be instances of word-initial č- (but this is difficult to substantiate since the highly fragmentary state of preservation often makes it very difficult to determine the word from the elaborately embellished cantillations). However, it is possible that I have overlooked something and that there are instances where these letters are used just as they are in the plain text versions.

Table 8: Examples for Pth. words with postvocalic /č/ and /ž/ in cantillation			
lemma	cantillation <sup>80</sup>	fragment	meaning
<i>nm<sup>2</sup>c</i>	<i>nm<sup>2</sup>-YG<sup>2</sup>-. YG<sup>2</sup>-YGG<sup>2</sup>-j...</i> <i>n<sup>2</sup>-YG<sup>2</sup>-. YG<sup>2</sup>-YG<sup>2</sup>-m<sup>2</sup>-YG<sup>2</sup>-. <sup>2</sup>-YG<sup>2</sup>-jy-</i>	S 6 v 8f., S 6 r 3f. <sup>81</sup>	"praise"
[ <i>m</i> ]n-yc/ -yž	[ ] YG <sup>2</sup> -ny( <sup>2</sup> )-(y)-j <sup>2</sup> -	M 66 r 10 <sup>82</sup>	"me too"
<sup>2</sup> c/ <sup>2</sup> ž	. <sup>2</sup> -j <sup>2</sup> - (M 64 v 6); <sup>2</sup> -j <sup>2</sup> - (M 64 r 7)	M 64 <sup>83</sup>	"from"
<i>bwj<sup>2</sup>gr</i>	<i>bw-.w-w-w-w-w-j<sup>2</sup>-Yg<sup>2</sup>-. YG<sup>2</sup>-YG<sup>2</sup>. YG<sup>2</sup>-ry-y-</i>	S 6 r 7-9 <sup>84</sup>	"saviour"
<i><sup>2</sup>tj<sup>2</sup>n</i>	<i><sup>2</sup>-YG<sup>2</sup>-YG<sup>2</sup>-ryy-j<sup>2</sup>-YG<sup>2</sup>-YG<sup>2</sup>.n<sup>2</sup>-</i>	M 759 II v 12 <sup>85</sup>	"worthy"
<i>jywndg</i>	<i>jy-.w<sup>2</sup>-YGG<sup>2</sup>-nnd( <sup>2</sup>-. YG( <sup>2</sup>YG<sup>2</sup>)/. YG<sup>2</sup>-gyy-</i>	M 759 II r 5f. <sup>86</sup>	"alive"

So in the versification and singing tradition which developed at some stage among the Manicheans – probably in Central Asia, and rather late according to BRUNNER 1980 – Pth. /č/ and /ž/ may both have been pronounced as [ž] (written <j>) in postvocalic position.

## 7. Summary

The Manichean letters  $\text{c} <c>$ ,  $\text{d} <j>$  and  $\text{z} <\check{z}>$  show a characteristic distribution in Parthian, forming two groups of words: <j> is regularly employed for the Pth. result of OIr. \*j and \*ž while <c> and <ž> are used for the Pth. output of OIr. \*č <ž> occurs in a limited number of fragments; it is found in 10 different words (attested in ca. 50 instances of <sup>2</sup>ž "from" plus 25 other occurrences), all of which (with the exception of the hapax žyšm(r.)) are also found with <c>.

<sup>80</sup> I follow BRUNNER (1980:357, 360–367) in noting the letter group *yg<sup>2</sup>* with capitals, indicating that this element is likely to imply information for the recital rather than for the pronunciation of the text (see MÜLLER 1904:29 for a possible interpretation). Note that BRUNNER 1980 (maybe misinterpreting Salemann's transliteration by *zayin* with macron above  $\bar{z}$ , see footnote 7, and/or Müller's transcription) rather unfortunately transliterates the instances of  $\text{d} <j>$  in the fragments S 6 and M 64 as <ž>, which otherwise is a common transliteration of  $\text{z} <\check{z}>$  (see footnote 2), while he correctly has <j> in other instances.

<sup>81</sup> The fragment has the alternative number Kr IV/875. See SALEMANN (1912:2f.), BRUNNER (1980:365–367) and the photos in SUNDERMANN (1996 Plate 162) for the attestation, and Section 1.1 for the word.

<sup>82</sup> DURKIN-MEISTERERNST (2006:112f.). See Section 1.4 for this clitic.

<sup>83</sup> MÜLLER(1904:92f.), BRUNNER (1980:361–363). An additional occurrence (in the form *YG<sup>2</sup>-j<sup>2</sup>*) is in M 759 II v (DURKIN-MEISTERERNST 2006:126f.). See also Sections 1.4, 3.1.

<sup>84</sup> See footnote 81. A similar version of this word occurs on M 759 II v (DURKIN-MEISTERERNST 2006:126f.). See Sections 1.2 and 4.1 for the words with <j>.

<sup>85</sup> DURKIN-MEISTERERNST (2006:126f.), see Section 1.2.

<sup>86</sup> DURKIN-MEISTERERNST (2006:124f.).

The use of the letters is remarkably consistent. The only exceptions in the available Pth. lexicon are one case each of unetymological *twc*- "to expiate" (alongside *twj*-) and *pdmwj*- "to clothe" (alongside *pdmwc*-), plus the special case of *wjyd* "chosen, elect" (including its derivatives *wjydg* and *wjydgylt*). The latter term might agree with other Manichean technical terms in showing Middle Persian influence.

There is a clear difference between the Manich. Pth. orthography and those used for Middle Persian, as the latter employ historical orthography to a considerable extent. Evidence, e.g. from the Mlr. loanwords in Armenian, demonstrates that the MP changes of the OIr. affricates are earlier than the Pth. ones, so one need not expect the Pth. orthography to be parallel to the MP one anyway. The Pth. use of <c> / <č> for postvocalic OIr. \*č is also different from the use of <t> and <q> for OIr. \*t and \*k respectively, because the orthography is consistent for the Pth. result of the OIr. affricates, but the spellings with <t> and <q> only occur in a minority of instances, and only in word-final position.

The consistency of the Manich. Pth. orthography speaks against its being historical or archaising, and suggests that at least at the time of the introduction of the Manich. script, the Pth. phonemic system included the two phonemes /č/ (< OIr. \*č) and /ž/ (< OIr. \*j and \*ž) not only word-initially, but also post-vocally. The phonemic distinction was lost only in the position after *n*. Pth. /č/ may quite well have developed a postvocalic allophone [j] at some stage, but this change does not disturb the phonemic opposition.

It follows that it would be appropriate to differentiate the Pth. phonemes /č/ and /ž/ in phonemic transcription (all the more since it is common to differentiate e.g. /d/ from /ð/ although they are for the most part not distinguished in Manichean writing). This would be easy to do since the transliteration indicates the phoneme, so that e.g. *w<sup>2</sup>c*- can be transcribed /wāč-/; *rwč*, *rwž* /rōč/; *bwj*- /bōž-/; etc. The lexemes in Section 3.1 could be transcribed /tōž-/ "to expiate", /padmōč-/ "to clothe" (because the single instances of *twc*- and *pdmwj*- are not enough reason to assume a phonemic change in these two words), and /wižid/, /wižidag(i)ft/ (where specific conditions apply), while the assumption of a variant /ažā/ alongside /ač/ "from" is not necessary.

There is a different orthography in the cantillations of Pth. hymns and in the transcriptions of Pth. text into Sogdian script. Both appear to indicate that the Pth. phonemes /-č/ and /ž/ coalesced into /ž/ (written <j> in the cantillations and <z> with or without diacritic dots in Sogdian script, while <c> in cases of expected Pth. /č/ also occurs). It is not quite clear, however, whether the coalescence of the phonemes mirrors a change of the Pth. language in the strict sense (i.e. if it dates to a period when there were native speakers of Parthian), or whether it is to be attributed to the liturgical use of the Pth. language by Sogdians (and others), who may have developed their own "accent" in their pronunciation of Parthian.

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### Abbreviations

Arm.	Armenian	MPZ	Zoroastrian Middle Persian
Av.	Avestan	OInd.	Old Indic
Ir.	Iranian	OIr.	Old Iranian
Kd.	Kurdish (Kurmanci)	PIE	Proto-Indo-European
Manich.	Manichean	Pth.	(Manichean) Parthian
MIr.	Middle Iranian	Sogd.	Sogdian
MP	Middle Persian	Zaz.	Zazaki
MPM	Manichean Middle Persian		