## I. Littere.

## Vocales.

1. Lingua Tscheremissa vocales, qure proprix vocari possunt, has octo habet: a, e, $\mathrm{i}, \mathrm{o}, \mathrm{u}, \mathrm{y}, \mathrm{a}, \mathrm{o}$, quae similiter atque in Finnica, Russica et compluribus aliis linguis enuntiantur; practerea multas vocalium variationes. Ad has pertinent: 1:o Schevata seu semivocales; 2:o vocales empahticie. Ille pronuntiadur sono celeri, aures paene praterlabente, confuso, harum vero sonus plenior, latior, gravior est, quam ipsarum earum, que proprio nomine vocales appellantur. Schevata nisi in brevibus et accentu carentibus syllabis non inveniuntur et ei in primis rei inserviunt, ut pronunciari possint plures consonantes concurrentes. Preterea syllabx accentu carentes in fine verborum naturam schevatum frequenter assumunt, ac tum plerumque ejici solent et ante verba et ante terminationes, ex. gr. kodas'e, qui, Dativus kadaz'lan, cui. Pronunciatio vocalium, que emphatice dicuntur, ex quibusdam et antecedentibus et sequentibus consonantibus pendere videtur, inprimis e litteris $l, m, n$ et $x . A$ quando cum his concurrit, sonum suum in similitudinem littere o

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## Vowels

§ 1 The Cheremis language has eight proper vowels: $a, e, i, o, u, y^{39}, a ̈, \ddot{0}$, which are pronounced in the same manner as in Finnish, Russian and most other languages; furthermore it has many vowel variations. These include: 1. schwa or semi-vowels ${ }^{40} ; 2$. emphatic vowels. The former ones are pronounced fast, almost passing the ear, unclearly, whereas the sound of the latter vowels is fuller, stronger, more emphatic, and they are called proper vowels. The schwas are found only in short syllables lacking stress and they serve especially in making the pronunciation of consonant clusters possible. Moreover, syllables lacking stress adopt a schwa nature more often at the end of words, and then they are often apocopated both before words and suffixes, e.g., kadəža 'which', dative kadəžlan 'to which'. The pronunciation of the so-called emphatic vowels seems to be dependent both on the preceding and following consonants, especially $l, m, n$ and $\chi$. In contact with these, $a$ starts to resemble $o, i$ and becomes similar to the Russian $b^{41}$; others $(e, u)$ do not differ in weight and sharpness from the corresponding vowels in German. Further, $a$ has a strange variation where it nearly approaches $\ddot{a}$, and often especially at the end of words whose last syllable lacks stress. $4^{2}$ The vowel $u$ also has a smoother
 er duration than the full vowels. They can, however, also occur in stressed syllables. Mari phoneticians consider the two schwas to be closemid, but their quality varies and is dependent on the surrounding full vowels (Gruzov 1964: 31-34; Vikström - Zorina 2007: 41, 45, 79-82). In the first half of the 19th century, the orthography used for Mari was based on the Cyrillic script. In the two grammars and some biblical texts published before Elementa, Mari sounds not existing in Russian were written with vowel signs found in the Russian orthography or with their combinations. As such, the schwas could not be distinguished from full vowels in writing. Special signs for Mari sounds not existing in the Cyrillic orthography were not introduced until the second half of the 19th century by the Translation Committee working under St. Gurij's brotherhood in Kazan', and they are still in use today (Ivanov 1975: 2728). Using Mari informants Castrén was able to distinguish the sounds $\ddot{a}, \ddot{o}$ and $\ddot{u}$. His description of the schwas shows that he, to some extent, understood the quality of these vowels, but he was not able to mark them in a distinct way. Instead, he used full vowels. In this edition, the schwas are indicated
with the signs $ə$ (back) and $\partial$ (front).

In the case of vowels Castrén calls $a$ and $i$, he is actually describing the variation of the schwas.
This, again, concerns the schwas.
In the printed book erroneously $s$ which is later corrected in the appendix Corrigen$d a$ and in its longer version attached to EGS.
Castrén uses the signs $s^{\prime}, z^{\prime}$ and $c^{\prime}$ for $\check{s}, \check{z}, \check{c}$.
5 I.e. $\beta, \gamma, \delta$ in the Finno-Ugric Transcription.
46 In the Swedish manuscript: Tenues have the same pronunciation as in all other languages but regarding liquids one has to notice that, after $k, l$ turns into a strange, guttural sound influenced by $k$.

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variant, which can sometimes be heard after $j 43$ and which, no doubt, has been borrowed from the Russian language.
n.b. As individual changes in vowels are probably dependant either on the following consonants or on the stress or perhaps on other matters, I neither want nor dare to introduce any new letters for them, especially as experience has taught me that in less cultivated languages the pronunciation of vowels by one individual cannot be fully trusted in every respect. One must, however, observe that the vowel variations noticed by me in the Cheremis language also occur in Samoyed.

## Consonants

§ 2 The consonants in the Cheremis language are: $b, d, g, f, j, k, l, m, n, p, r, s, z, c, \check{s}, \not \check{z}$, $\check{c}, t, \chi, v .44$ The faint sound $h$ is not used at all, $f$ rarely. The spirant $\chi$ sounds like the Russian $x$. When the sounds $b, g, d$ occur between two vowels they are pronounced like spirants, thus $b$ resembles $v$ whereas $g$ and $d$ become fricatives like the ones in Lappish and other known languages. ${ }^{45}$ Otherwise they are usually pronounced like half-voiced plosives and often appear after a preceding $m$ or $n$. Tenues have the same pronunciation as in the German language with the exceptions of $k$ and $l$; the former is pronounced like $q$ in Tatar and the latter sometimes like $l$ in Russian. $4^{6}$ Of the sibilants, $s$ sometimes gets

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a smooth, slightly aspirated pronunciation close to the Finnish aspirated $t$. The other sibilants are pronounced almost in the same way as in Russian: $z$ like $з$, clike $u_{f}(t s), \check{z}$ like $\not{\not}$, šlike $u$, člike $ч$. The consonants $\check{z}$, $\check{s}$ and $\check{c}$, however, do not have the same sharp sound as the ones in Russian, instead, they come close to the composed sounds $z j, s j, c j$. *) 47

## Vowel alternations

§ 3 As in the Finnish $4^{8}$ languages in general, the vowels in the word stem do not vary, but in the suffixes, on the contrary, they vary and are dependant on the vowels in the stem; in the same way in Cheremis, the vowels in the suffixes adapt to the immutable ones of the stem. This law ${ }^{49}$ so prevalent and widely used in the Finnish language has started to lose its power and meaning in Cheremis, therefore some suffixes have already acquired fixed vowels such as $k o$ 'wave', pl. kovälä or kovlä50; pört 'room', instr. pörtän51. In the Finnish language, $a ̈$ always occurs in smooth suffixes, $a$ in hard ones. $5^{2}$ Likewise, in Cheremis, the hard suffixes take the hard $a$, but in the smooth suffixes $\ddot{a}$ and $e$ alternate. In Cheremis, a hard vowel in the suffix is always triggered by $a, o, u$ in the word stem, while a smooth vowel is triggered by all other vowels. As it sometimes happens that the stem contains both hard and
*) The letter $c^{\prime}$ compiled of the letters $t$ and $s^{\prime}$ is sometimes expressed in this book with the compound letters $t s^{\prime}$ in order to make its formation clearer.

Castrén often writes $\check{c}$ with $d c$, too. In this edition $d c ̌$ is used to represent instances of $d c$.
48 "Finnish" in this context is equivalent to the later term Finno-Ugric, which refers to both languages and peoples (cf. Ostiacica 2018: 41).
49 I.e. vowel harmony.
50 The plural ending (with its vowel) in Hill Mari goes back to an independent word of Turkic origin and it does not adapt to vowel harmony (cf. Luutonen 1997: 56-57).
51 Instead of the front schwa, ö, Castrén writes an $o$ in pörton (see marginal note 40), where it, of course, would be counter to vowel harmony. See marginal note 16 .

Castrén writes the palatalized sounds ń, $l^{\prime}, t^{\prime}$ etc. with $n j, l j, t j$.
In the first or am conjugation the present tense forms 1sG and 2sG have an $a$ in the personal suffix and an $e$ in the 3sG; these vowels belong to the suffixes.
In the second or em conjugation the present tense forms 1SG and 2SG have an $e$ in the personal suffix and $a, a ̈$ in the personal suffixes of the third persons.
The change $\partial^{-}>u^{-}$(Castrén: $o->u$-) occurs in this word alone.

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smooth or medium vowels $e$ and $i$, the suffix can have either of the two vowels ( $a$ or $\ddot{a}$ ), though most often the choice depends on the last vowel of the stem; e.g. loenäm, less frequently loenam 'I caught'. The Cheremis language, in the same way as Samoyed, often joins adjacent words, if this is possible within the laws of euphonia. But in this conjunction or composition, it often happens that the vowels in the second word adapt according to the nature of the vowels in the first, e.g., kogarnja 'Friday' from kogo 'big' and ärnjä 'week'53; tagadča 'today' from ta 'this' and kedčä 'day'; nällä 'fourty' from näl 'four' and lu 'ten'; agal 'is not' from $a k$ 'not' and $a l$ 'be'. But this law is as vague as the one concerning word suffixes. § 4 Although it may be said that according to the law mentioned above the Finnish languages like to keep the vowels of the stem immutable, the Cheremis language has nevertheless, in this respect, deviated from its original nature. It allows not only the final vowels of the stem to change in many ways, but, even in the vowels of the stem itself, it tolerates certain transformations which do not depend on the vowels of the directly preceding word. The most common transformations are $a$, ä to $e$, e.g., ladam 'I read', ladeš ‘s/he reads'; käc̆äläm 'I search', käčäleš ‘s/he searches'54; $e$ to $a$, ä, e.g., šalgem 'I stand', šalga 's/he stands'; särem 'I turn', särä 's/he turns'55; a to $u$, e.g., alam 'I am', ula '(there) is'56. The word-final vowel is often dropped, especially if the next word begins with a vowel, e.g., ves edem 'another person' (vesä 'another').

# 的 5 霑 <br> <br> Consonant alternations 

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§ 5 Most, if not all, languages of Finnish origin have traces of an important law according to which two consonants cannot follow each other in one syllable. In Cheremis, this law is modified in so far as liquids and among them first and foremost $l$ and $r$ and also sibilants can easily occur in the same syllable. Cheremis, as well as Zyrian, even place a pleonastic $d$ before a sibilant, e.g., pörtländžä (actually pörtlänžz̈) 'for his room', imnidondža (actually imnidonžə) 57 'with his horse'.$^{8}$ Sometimes even three consonants can occur in the same syllable, if two of them are liquids or sibilants, e.g., šträš ‘cloth'59. - In order to avoid a futile sound as a result of two or more dissimilar consonants interfering with one another the language uses two ways; namely either 1) it omits one consonant, e.g., šolštam 'I steal', opt. šolšnem; or 2) adds a semi-vowel between them, e.g., jalštem 'I bind', ptcp. jalštəšs (actually jalštšz or jalšča). ${ }^{60}$
§ 6 Like vowels, consonants can also be divided into hard and smooth. Hard ones are: $k, p, t, s, \check{s}, c, \check{c}$; smooth ones: $b, d, g, j, l, m, n, r, z, \check{z}$, $v, x{ }^{61}$ Most consonant alternations depend on the general tendency that the hard consonants match up with hard ones and the smooth with smooth ones. This law can be expressed simply: a hard consonant cannot follow a smooth consonant of the same speech organ. Therefore, they change: $k$ into $g$, $p$ into $b(v), t$ into $d, s$ into $z, \check{s}$ into $\check{z}$, $c$ into $d z$; and these changes occur not only in

60 According to the presentday orthography, the verbs šolaštam and jalaštem both have a schwa in the second syllable. It can be assumed that schwaless forms may exist in dialects and idiolects.
61
Castrén regards don(o) as a case suffix. In modern grammars it is classified as a postposition.
58 In the Swedish manuscript Castrén mentions that "The same $d$ also occurs sometimes before $r$ in the beginning of words, although otherwise neither $d$, $b$ nor $g$ can be pronounced in word-initial position". He may be referring here to (rare) words starting with the sequence $t(\partial / \partial \ddot{\partial}) r$-, to a few new Russian loanwords or to cases of progressive assimilation caused by the preceding word (as presented under § 6).
In Hill Mari dictionaries, this word is usually presented in the form д̈štə̈räš, but, in the dialects, forms without the schwas also exist.

Here, Castrén uses the terms "hard" and "smooth" to indicate voiceless and voiced, respectively.

62 Cf. marginal note 57.
63 This should be säpton. Stressed vowels are pronounced with a longer duration, which has led Castrén to occasionally write them with two letters.
64 Sometimes but inconsistently, Castrén writes the fricative $v$ with the letter $w$, which would actually express the phonetic value of this bilabial fricative better than $v$. This should be žava.

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the same word but also in the beginning of the following word, e.g., kambadčaš 'triple' (padčaš), pajan bört 'a rich house' (pört), iän där 'frozen coast' (tə̈r), iän zakar 'frozen bread' (szkər), ašan žümbel 'a clever brother' (šümbel), kam dzäbä 'three chickens' (cäbö), šə̈m džuda 'seven miracles' (čuda). In addition, hard consonants often become smoother after a vowel, especially in word-final position, e.g., kogäc 'out of the wave', cf. kitkə̈c 'from hand', käzz̈don ${ }^{62}$ 'with a knife', cf. sä̈pton ${ }^{63}$ 'with a rein'. In contrast, the smooth consonants following hard ones change into corresponding hard consonants, and in word-final position a smooth consonant often, though not always, transforms into a hard one, e.g., kit 'hand', illat. kidə̈š, väzät 'five' or väc 'five', etc. If a wordfinal hard consonant is preceded by a smooth consonant, this preceding consonant changes into a hard one, e.g., imnižz̈ 'his horse', imništ (instead of imnižt) 'their horse'. The smooth consonants seldom occur word-initially in a single word, but if a word is combined with others, the first sound of the second word is smoothened. According to this, a smooth consonant in wordinitial position should also become hardened after a hard consonant at the end of the preceding word, which sometimes happens, but because of the strong preference of the language to smooth sounds, often after a hard ending of the preceding word a schwa or an $n(\partial \ddot{\partial})$ is added and thus the following consonant naturally stays unchanged, e.g., wicä ${ }^{64}$ žaava ${ }^{65}$ 'five frogs' (instead of wic or

66 The word for 'frog' in Hill Mari is usually given in the form žawa. It is, however, more obvious that the word would, in some dialects, have a word-initial schwa (as, e.g., in the north-western dialect). In that case, it should read wič əžava. In the Swedish manuscript, Castrén gives another example kokz drämäš 'two women', which should definitely read kok ädə̈rämäš. Thus, in both cases, Castrén has segmented the words incorrectly.
67 In present-day Hill Mari šajac (ən).
68 Castrén writes ń with nj but not consistently.
69 Castrén regards the postposition gäc(ว̈n) a case suffix of the elative/ablative. The word gäc has its origins in the noun körgà 'inside' and the Uralic separative case suffix *-tA>-c. The unproductive case ending $c$ is used with adverbial and postpositional stems. ( $\partial / \partial \ddot{\partial}) n$ is an adverbial suffix, etymologically identical with the suffix $n$ of the genitive-instructive case. Its use is optional. (Bereczki 2002: 40-43.)
70 In the Swedish manuscript, Castrén writes kändän $\chi$ and kändän $\chi$ š, respectively. In dialects, forms like kändäkǩ̆ and kändäykš are also attested.
71 On rhotacism in Hill Mari, see Wichmann 1909: 114-119.

