## GRAMMAR. <br> PHONOLOGY.

## Phonetical System.

Vowels.
16. a $(a)^{1}$ is rather advanced, especially in nams " 19 ", where it is near, or above the cardinal point. The diphthong (ai) is $\dot{a}_{t}$ or $\ddot{a}_{I}$; but in $(a u)$ the $a$ is retracted and slightly rounded: $a \mathrm{U}, a 0$. When stressed, the $a$ is frequently lengthened:
guza'rom 'kura "I had passed", tar "at", na "not", 'kanta" "are doing", čha' ${ }^{\prime} r$ : "fell", daur "circle", laygo ${ }^{\prime} t a ̈ a t^{\prime}$ "his turban", at, $\ddot{a}_{I}$ "oh".

It is doubtful whether $\ddot{a}(:)$ in $\check{z} \dot{u} \cdot \vec{a}(:) s$ " 11 " G, T, D is a separate phoneme (žwö:s M).

Note ha'vi:, he'vi, he'vi: "this".
$a:(\hat{a})$ is in the Shutul dialect a back $a$ (close to the cardinal point
5). It is slightly rounded, especially in the pronunciation of $G$, T, less so with M. In Nijrau it is an entirely unrounded $a$ (about $4^{1 / 2}-4^{1 / 3}$ ). Before a nasal it is more decidedly rounded in Shutal, approaching Norwegian $\dot{a}:$ : a.re:m "I came", ha:l "condition", a:n "I", gulma:n "doubt", na:m "name". Before or after ${ }_{l}, i$ the sounds $a$ : and $a$ : seem to be interchangeable: $b i^{i_{1}} a$ :, $b i^{i}{ }_{K} a$ : "brother", $n_{I}$ ha:l, ni haall "shoot".
${ }^{1}$ In this section the vowel symbols of the International Phonetic Alphabet are used, the intols employed by me elsewhere being added in brackets.

This untative sketch does not pretend to give any complete and final account of Par. phonetics.

The different ' $a$ ' sounds are nearly identical with those of Afgh. Prs.
$e(e)$ is generally rather wide, approaching $\varepsilon$ : „̌aren, 弓̌aren "to say", pen "with", pą $s^{\prime \prime} 15$ ", 'mende "this" (acc.), 'merem "I die", $e^{l} d e$ : "this" (obl.). Occasionally it is lengthened: 'merem.
$e:(\bar{e})$ is higher (cardinal point 2):
'a.re:m "I came", pe:s "before", 'me:rem "I kill". As an unstressed final it is frequently shortened: 'mende:, mende(.) "this". $e, I(e, i)$ is a very high and narrow $e$, it becomes $i$ before the semivowel $I: \check{c}_{I}{ }^{\prime} r a \cdot \gamma \quad$ "lamp", $\underset{,}{e}, I$ "the izāfat", $\check{I}_{I}$ "what", $b v^{1}{ }_{a} a$ : "brother". In šarlmünda "ashamed" the $I$ has been rounded after $m$. $i:(\bar{i})$ is a narrow $i$, in some cases diphthongized: narti: "he could", si:r "satisfied", di. "two", 'ghi.etö: "has seized", |ni.etö: "is going out".
$u(u, 0)$ is a low $u$ of a very varying character. Especially before $r, l$ it approaches the mixed sounds. When stressed it is frequently lowered into $o:(u)$, $\ddot{0}$ :, or, in front of nasals, even into $0:(\hat{a})$ :
gu'na:n "doubt", mux "face", $\gamma u s$, Yos "house", zur "heart", $k \cup r$, ko:(")r "did", dhur, dhö.r "saw", bur, bu:r "carried", |bulbul "nightingale", hus, huss "all", ulsta: "rose", rusit, $\gamma^{u}$ ošt " 20 ", ruč, ru:č "day", 'үa:phune:, रa.'phö:ne: "wind", mun, mo, mo , ma: "me", 'mardum, marido.m "people".

The $o, \ddot{\partial}$ of $h o^{\prime} v i$ :, hölvi: probably belongs to the $u$ phoneme.
The rules determining the exact character of these variations are not known to me.
$u:(\bar{u})$ is a separate phoneme, although it occurs also through lengthening of $u$ (bu:r "carried", 'suu(:)kur "thank God"). It is narrow and in some cases advanced:
$\gamma^{\prime} l u:$ "much", maz'du:r "servant", xu:r "ate", ž̄u: " 1 ", ča:rbui: "fat". Between two palatal sounds we find ï corresponding to Prs. u: in 'cü̈ca "kid".
0 is probably not a separate phoneme, but is to be regarded as a variant of the $u$ phoneme: $o, o:, u$, vo: "and".
found in a few words: laygo: ṭa "turban", "spo: "louse".
$\ddot{o}:(\bar{O})$ is a mid, mixed, rounded vowel (rather high and fetracted). It is higher before nasals, lower before $r$. It sometimes approaches u:, v:, in Nijrau it is more retracted than in Shutul (about $\dot{\dot{o}}$ ): cö:r "4", pö:nč "5", hö:t " 7 ", dö:s " 10 ", sö:r "head", tö: "thee", ba:lö: "boy", kantö:n "doing".
$a$ is found as the result of the reduction of full vowels:
falla:ni:, fella:ni: "somebody", dalri:n, du'ri:n "far". Reduced vowels also in $n^{a!} h a s{ }_{s} t, n\left({ }^{( }\right) h a s t$ "sat down", d${ }^{2} h e \bar{v}$-, dhēv- "to desire". But also a:va, 'a:vo "water".
The diphthongs are $a_{I}(a i), a: I^{*}$, a:e ( $\left.\hat{a} \hat{\imath}\right), a \mathrm{v}(a u), a: \mathrm{v}$, a:o ( $\left.\hat{a} u\right)$.
Nasalized vowels occur frequently, generally as doublets of vowel + nasal: $a, a^{n}=a n, a:, a:^{n}=a: n, a: n$. Before $s$ we regularly find a nasalized vowel in paes " 15 ", 官这: $\ddot{\text { a }}: s$ etc. " 11 ".

Par. possesses long and short vowels, but not a regular system of opposition between long and short vowels of the same quality. Moreover the quantity is not always fixed.

## Semivowels.

17. The palatal semivowel occurs chiefly in loan words:
${ }_{1} a: l$ ( $y \hat{a} l$ ) "mane", $x i^{\dagger}$ a:l "fancy". The labial semivowel is found in intervocalic position interchangeable with the bilabial fricative: 'ba:ua, 'ba:"va = 'ba:va "thy father".
18. 

Consonants.

|  | Bilabial | Labio- | Dental | Alveolur | Alveolo- Palatal | Retro- | Velar | Uvular | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plosis | $\begin{array}{cc} i, & b \\ I \cdot h, & b h \end{array}$ |  | t. $d$ $t h, d h$ |  |  | $t .{ }_{t}^{d}$ | $k, g$ <br> $k h, g h$ | 4 | , |
| Affricate |  |  |  |  | $\check{c}, j$ $c h$ |  |  |  |  |
| Nasal . . | $m$ $m h$ |  | $n$ $n h$ |  |  | 4 | $\stackrel{r}{2}$ |  |  |
| Lateral . |  |  | $\stackrel{l}{l}$ |  |  |  |  |  |  |
| Rolit |  |  |  | $\stackrel{r}{r}$ | - | $F$ |  |  |  |
| Fricative | $v$ | $f$ | $s, z$ |  | $\boldsymbol{y}$, $\boldsymbol{z}$ |  | $x, \gamma$ |  | $h$ |

19. Plosives and Affricates. $t, d$ are probably post-alveolar. It is doubtful whether they are really retroflex.
$q$ occurs in loan-words. but is interchangeable with $k$ (v. 14). ' is heard, but not always, before initial vowels: 'ö:sp "horse ", 'a:llıs'ö: "has seized"; stronger in Ar. loan-words with "ain. 'elm "knowledge".

The $h$ of $b h$ etc. is probably unvoiced, and occasionally a short vocalic element is heard between the plosive and the $h$. But generally $b h$ etc. give the impression of forming one phoneme. The aspiration of $c h$ easily becomes absorbed into the second element of the aspirate. Cf. the conditions in N. Bal., where the aspiration of čh is frequently omitted, and in Welsh Gypsy (Sampson, p. 51).
20. Nasals and Rolled Sounds. Dental $n$ occurs before a palatal: рӧ:мč" 5 ".

The $r$ in $z u r$ "heart" etc. resembles Psht. $r$. The $r$ in $r t, r d$ is less energetically articulated, and is interchangeable with $r$.
21. Fricatives. $\grave{s}, \check{z}$ do not give the impression of being very markedly palatal sounds. There is no difference between $\dot{s}<{ }^{*} \dot{*}$,
 wist $\bar{a}$ " $I$ have thrown twenty fingers". Formerly the $\dot{k}$ was rounded (v. 30). $x$ is slightly palatalized before $i: x i: " 6$ ". $h$ is unvoiced.

## The Syllable.

22. Double consonants exist: "zuu m-me:hi: "one month", the $k$-ker "this work", 'na p-pari: "does not go", 's'u l-lak "three lakhs", hattö:s (or ha'tö:s) "17", rus(s) "house", hus(s) "all", rus'si: ( $\gamma u^{\dagger} s i$ :) "from the house".
A prothetic, overshort vowel occurs before initial sp, st. Apparently part of the $s$ only belongs to the first syllable, and the acoustic impression is: "s spö: (en'spö:) "dog", e'ste.è "star" etc. Similarly wa ${ }^{t}$ spe: "buttermilk" etc., which for the sake of conveniency will be written (wa'spē).

## Stress.

23. Word stress is not very marked, and varies a good deal according to sentence stress. Cf. 44.

## Rules of Sandhi.

24. $a+a, a+o>a: ; e(:)+e(:), I>i: ; a+e(:), t>a_{I} ; a+$ $a:>a_{1} a: ; a+a 0>a: 0 ; a:+e:>a: I:, a: 1:$ E.g.: edhe: $1 k a: n a+a>$ edhe:'ka:na: (edhē'lkânâ) "it is theirs", 'lavča $+0>$ 'lavča: (laučâ) "lip
 'kasti: " "[a small] girl", 'lavča +1 [1xi:rö:] $>$ 'lavǎa ${ }^{\circ}$ " [a sweet] lip",
 (zurik(̂̂u) "thy heart's", ča: $+e:>c ̌ a: I:, ~ \check{a} a: I:$ "why art thou".

Voiced consonants frequently become unvoiced in final position and before unvoiced consonants : bi: $: z^{3}$, bi:z "grain", se. $\gamma /$ se: $x$ "shade", sa'bap (Prs. sabab) "reason", we'se:j- "to send": veise:stö:n "sending", rhi:z- "to lie down": 'rhistö:n. But also: Pay'ma:n / Pax'ma:n.

And vice versa: a:z'ma:n / a:sma:n "sky", |dö:z ru:č / 'dö:s ru:č " 10 days", 'үuž lak/'үusit lak "20 lakhs".

Other types of assimilation occur in: me:m bö:st / me:n $b^{\circ}$ "girded the loins", bham'bi: (<*bham'pi:) "a wooden spade".

A final $-r$ often disappears: sö. $(r)$ "on", $\operatorname{aga}(r)$ "if", bö:( $(r)$ "door" etc. But note the inserted $r$ in hiatus: $\gamma u s w a{ }^{\prime}$ nö:-r 'a. $\gamma a$ "he came towards the house", 'phairi:-r a:ץa "he came from that side" (Phon.).

A final $n$ is often weakened or elided, with or without nasalization of the preceding vowel (v. 16): a:, a:n, a:n "I", 'kanta(•), 'kanta, 'kanta", 'kantan "are doing". Generally 'kantö: (not 'kantö:) = kantö:n "is doing" (v. 198). Also čhe: =čhe:, chēn "they went" etc.

Regarding the doubling of an initial consonant after a stressed, short monosyllabic word (tu k-ka $I_{I}$ "wbo art thou") v. 22.

## Historical Phonology.

Vowels.

$$
\text { Ir. } a^{1}
$$

 phök "cook " ipartu-), bör "door", bôst "bound", dòs " 10 ", jö
${ }^{1}$ In this and the following sections the treatment of the sounds of ancient 1 w .'s is included.

FOR SAMMENLIGNENDE KULTURFORSKNING

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BY

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