THE "UNKNOWN LANGUAGES" OF EASTERN TURKESTAN.

BY

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Fol 31. Reverse.

Fol 32. Obverse.

Fol 44. Reverse.

Stein M.S. of the Vajra-chedikā Original size 3" x 10"
XXXI

THE "UNKNOWN LANGUAGES" OF EASTERN TURKESTAN

By A. F. RUDOLF HOERNLE

IN the July number of this Journal, p. 836, I promised to publish the text of the Aparimitāyuh Sūtra. As I have not yet received the Cambridge manuscripts of that Sūtra, I must defer the fulfilment of my promise to a later issue of the Journal. In the meantime I have compared the Sanskrit text of the Vajracchedikā, in Max Müller's edition, with the "unknown language" text in Dr. Stein's manuscript; and I may now present two extended "bilingual" extracts from the two texts. So far as I am able to judge at present, the East-Turkestan text does not appear to be a translation, throughout, of the Sanskrit text, as published by Max Müller. It is so, however, quite clearly in certain portions; and it is some of these portions that I am now presenting as a preliminary contribution. I may add that I have compared the East-Turkestan text of Dr. Stein's manuscript also with the Sanskrit text preserved in the manuscript of Dr. Stein's first collection (1900–1), of which I gave a short notice in this Journal for 1903, p. 364. That manuscript is incomplete, and the second extract, given below, is not found in it, having stood on its fol. 12, now missing. A portion of the first extract occurs in it, but its Sanskrit text is rather shorter than the Sanskrit text printed in Max Müller's edition, and, to that extent, differs also from the East-Turkestan text.

I take this opportunity also to reprint corrected versions of the extracts from the Vajracchedikā and the Aparimitāyuh Sūtra, given on pp. 837–8 of my previous communication. Not having had the originals to refer to
when I wrote from Wiesbaden, certain letters had been wrongly transcribed.

The Sanskrit text is printed in italics, interlinearly and verbatim, under the lines (in roman) of the "unknown language" text. In either case the words of the text are printed in the exact sequence (with two or three exceptions, duly indicated by numerals) of the originals. Where the East-Turkestani text differs, or is not intelligible, the syllables (aksara) are printed discretely.

**V AJRACCHEDIKĀ: FIRST EXTRACT.**

Stein MS., fol. 36iii = M.M. ed., p. 9, § 1.

Nta-nta\(^1\) mammā pyūṣṭā še snye (še snye\(^2\)) tā gyastānā

\[\text{Evaṁ mayā śrutam | ekasmin samaye} \]

\[\text{gyastā-}^{\text{iv}}\text{bāysā}^{3} \quad \text{Śrāvastā-kṣirā āstā-vyā}^{4} \quad \text{Jīvārispurābāga} \]

\[\text{bhagavān} \quad \text{Śrāvastyāṁ viharati-sama Jetavane} \]

\[\text{Anā[4a]}^{5}\text{]thapindhi-hārū samkhyerma mistānā}^{5} \quad \text{bil-sāgāna}^{6} \]

\[\text{Anāṭhapindasya ārāme mahatā bhikṣu-samghena} \]

\[\text{handasa | dvāsi-pamjāi}^{ii} \quad \text{sau āśiryausla} \quad \text{sārdham ardha-trayodasabhīr} \quad \text{bhiṣku}^{8} \quad \text{-śataih samiba} \]

\[\text{— — — — — — — — nti} \quad \text{gyastānā} \]

\[\text{hulaiś ca bodhisattvair mahāsattvaiḥ} | \text{atha khala} \quad \text{—— — — — — — — væysye}^{iii} \quad \text{pāntara} \]

\[\text{bhagavān pūrv-āhna}^{9} \quad \text{-kāla-samaye nivāsa} \quad \text{pātra-civara pananātī Śrāvasta mistā-kitha pindā} \quad \text{trāmā} \]

\[\text{civaram ādāya Śrāvastīṁ mahā-nagarīṁ pindāya prāvikṣat} | \]

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1 Lit. Skt. evam etad ; see fol. 7a\(^{iii}\).

2 Wrongly repeated ; še is loc. sg. of šau = Skt. eka ; see fol. 5b\(^{iii}\).

3 See Remark 11, below.

4 Apparently lit. Skt. viharan abhūt ; see vya in fol. 33a\(^{ii}\).

5 Cf. Skt. mahistha = mistā, of which mistānā is the instr. case.

6 Sāgā = Skt. saṅgha with disaspirated gh, as in dharma = Skt. dharma.

7 Hadāna, loc. sg. of haḍā, Skt. ahaṇ; see below, in Remarks 7 and 13.
ivnti — gyastā-ḥaysā (nti gyastā-ḥaysā) kū Śrāvastā atha khalu bhagavān ārtha-kitha pindā [4b\(^1\)] vātsuta-hamye\(^2\) tā kū mahā-nagarinī pindāya carītvā — — khāysta-kīrā-yudā - yūde hvaďā khāysā\(^3\) kū "scetā- bhakta — kṛta - kṛtyah paścad bhakta- — pindapāta paryeta-hamye\(^2\) pāntara - civarā pājsi byi-pāha\(^4\) pratikrāntah pātra - civarāni pratisāmya pādau ysnatā — iii prañavyi — āyaṁ vīra ṇastā\(^5\) bastā prakṣalya nyaśidat praṇāpta eva āsane palaṅgā (ra-ṣtā nta ram da ivra na vi snā tā paryāṅkam (ābhujya ḍu kāyam prañidhyaḥ pyam tsā ntu śa nte tā byā ta jā va e vyeta |)\(^6\) pratimukhīṁ smṛtim upasṭhāpya |)

Nti tā [5a\(^1\)] pharāka āśirya\(^7\) kāmma hālai Atha khalu sanibahulā bhīkṣavo yena — gyastānā gyastā-ḥaysā vyeta\(^8\) hāṣṭā tsuām\(^{ii}dā\) kū — bhagavān — (tena) upasamikraman — vara-hamya gyastānā gyastā-ḥaysā pā ntirajsa (upasamikramya)\(^9\) bhagavatah pādau śirobhir namasyā\(^{iii}dā\) gyastā-ḥaysā ḍrai tcira-hvaram\(^10\) -cāi-ānā-abhīvantā bhagavantaṁ triś pradakṣiṇī - kṛtya tvanā tsuāmā\(^{ii}dā\)\(^{11}\) u śau-hālvaimi\(^12\) ṇastā | — — — ek - ānte nyaśidan ||

1 The bracketed phrase is wrongly repeated.
2 Apparently lit. Skt. caran bhūtvā, pratīkrāman bhūtrā.
3 Probably wrong for khāystā.
4 Apparently Skt. dvau pādaū.
5 ṇastā = Skt. nyaśidat is transplaced ; see folgs. 5a\(^iv\), b\(^i\).
6 Apparently in the bracketed portion the two texts differ.
7 Apparently āśirīa sg., āśirya pl. = Skt. bhīkṣuḥ, bhīkṣavaḥ.
8 Apparently vyeta = Skt. abhūt or some similar word ; cf. fol. 4b\(^iv\) ; ante foot-note 4, infra foot-note 22.
9 The bracketed equations are doubtful.
10 Hvaram = Skt. daksināni ; cf. fol. 5b\(^ii\).
11 Repeated from above.
12 Ḫālaimi, loc. sg. of Ḫāla, "locality" = Skt. anta = sṭhāna ; cf. fol. 5a\(^i\), hālai.
Ntye (scera vā-tcā)1 ——— ationship Subhūta vara 2
Tena (khalu punah)1 samayena āyusmān Subhūtis ——
ntiṇa parśaṇā [5b] hamgri vyitā3 u 4 yastā
tasyām parśadi samnipatito bhūt — samniṣanṇaḥ |
nti —— ationship Subhūta āyaṁ napata ta iiśau - sve
atha khalu āyusmān Subhūtir āsanād utthāya ek - āṁsaṁ
cevarā prahausti5 u 4 hvarain dai ysāṁnu——
uttarāsāṅgam kṛtvā dakṣiṇam — jānu-maṇḍalam
sadya pāraviiṇti kāmma ṣālā6 gyastā-ḥaṁsā
prthivyām pratisṛṭhāpya yena — bhagavān
aṣṭā7 ṣārṣṭā ajamāla8 dasta iyuḍai9 u gyastā-ḥaṁsā
—— (tena) amjalīṁ praṇaṁya — bhagavantam
nta hve sā10- duṣkāra miḍāmna gyastā-ḥaṁsā [6a]
etad avocat | — āścaryām ——— bhagavān
—— ——— cu ntira gyastānā gyastā-
(param-āścaryāṇi Sugata)11 yāvad eva ———
haṁsāna ntaḥhirauḥvānākānā (pa-jśa-iṁmānā a śa nna ra-
—— tathāgatena (arhatā samyak-
sta bi-sā hā lā bi ysā dā a hu jśa)12 bauii-dhisatva
sambuddhena)12 bodhisattvā

1 The two texts differ; the E. Turk. may mean Skt. pīṇḍapātāṁ
cāritvā; cf. fols. 4aw, b, u.
2 See fol. 5a, vara-hamya; 'Sanskrit equivalent unknown.
3 Apparently vṛityā = vṛeta, fol. 5a, foot-note 15.
4 Here, and elsewhere, u = Skt. ca, resolving Skt. conj. participles into
finite verbs.
5 Probably śau-sve cevarā prahausti lit. = Skt. ekāṁśāc cīraram apaṇiṣa,
having withdrawn the robe from one shoulder.
6 Ṣaḷāmi, loc. sg. of hāla, 'locality' = Skt. anta = sthāna; cf. fol. 5a,
ḥāla.
7 Perhaps Skt. abhūt or āśūt; cf. āstā-vya, fol. 3b, and āstā,
fol. 32aw.
8 Probably wrong for amjalā.
9 Apparently lit. Skt. hastāṇjaliṁ kṛtvā; cf. yuddā-yude, fol. 4b, and
dastā = haste. Regarding the whole passage, see Professor Leumann's
remarks in JGOS., lxi, p. 107.
10 Perhaps sā = Skt. parama.
11 Bracketed phrase omitted in E. Turk. text.
12 The equivalence of the two bracketed texts is not intelligible.
OF EASTERN TURKESTAN

mistä-baysum ūnuysā¹ hamadādana bīśāpirmāṅtamye²
mahā - sattvā —— anugṛhitāh paramena
hamdārājsa ——— cu ntarā gyasta-baysāna
anugrahena | āścaryāṁ bhagavan yāvad eva
ntāharātsukana [6b] (tkhai śi nām nā sā nām nā tvī śa
tathāgatena (arhatā
ya nā-kā-na sa mna bi-sām nā hi rām nā īva ma sū-
samyak-samuddhena)³
ka-na u hu jsa)³ baudhisatvā mistā-baysum ūnuysā¹
bodhisattvā mahā - sattvāh ———
yṣīniṇyauhūḍi bīśāpirmāṃtamye² yṣīniṇyauhārāmejṣa
parinditāh paramayaḥ parindanayāḥ
ntā khuivā midāmna gyasta-baysā baysu⁴ ūnuysaina¹
tat kahaṁ ——— bhagavan ———
baudhisatvā-yaṁṇa- [7a] hamīsadāina mara⁵
bodhisattvā - yāna-
samprasthitena kulaputraṇa vā mahāyāmnā ——— viṣṭāṇa u khaiv
kuladuhitrā vā sthātavyam khamī pratipattavyam - khamī
aysmu baysamjāṃṇa
cittam pragrahitavyam ||

²Ntye hvaye-hvaṇai gyastānā gyasta-baysā āśiri
Evam ukte ——— bhagavān āyuṣmantam

¹ Here mistā-baysum = Skt. mahā-sattva, but the two texts really
do not agree. In the Sanskrit text mahāsattvāḥ goes with bodhisattvāḥ,
both being nom. plur., but in the E. Turk. text mistā-baysum
ūnuysā seems to stand by itself, for some of the parallel passages
have only baysum ūnuysā (fols. 6biv, 7aiv, 8a, biv, 9aiv), though
what the word ūnuysā may exactly mean is not clear. See Professor
Leumann’s remarks in JGOS., lxii, p. 109, with which, however, I do
not agree.
² Mye, or ma, is an inflectional suffix, like mī in hālaimi, fol. 5aiv.
³ The equivalence of the two bracketed texts is not intelligible.
⁴ Probably wrong for baysum.
⁵ Apparently mara corresponds to the technical term jāra, Skt. yāvat
of Jaina texts, used to indicate omitted standing formula, such as
kulaputraṇa, etc. It means also Skt. iha, fols. 9aiv, 31b.
Subhúta[iii]nta hve śírā śírā Subhúta nta nta śi-hārā  
Subhútim etad avocat śādhu śādhu Subhúte evam etad ————
Subhúta — — — — — —  hāmdādā iv gyasta-ḥaysāna
Subhúte evam etad yathā vadasi| anugṛhītās  tathāgatena
buddhisatva ————  ḍaysūṃ śāvuyṣaina 2
bodhisattvā mahāsattvāḥ
bhūṣpirmāntamāyē 3 [7b]ī hamdārajsa
paramēṇa anugraheṇa 4 cu ntirā gyasta-
ḥaysāna ntahirautsukana tsai śi nām nā sa nām nā tvī śā ya nā-kā na sa mna ba-śām na hi rām iii nā va ma
śa-kā-na u hu jṣa buddhisatva mista-ḥaysum śāvuyṣai
iv na yṣiniyahaudā bhūṣpirmāntamā yṣiniyāhaurāmmeṣa
[8a]ī nta khuva miḍāmṇā gyasta-ḥaysa ḍaysu śāvuyṣaina
buddhisatva-yām ii nā-hamjisadaiṇa mara mahāyāṃśa vishṭāṇa
u khuai aṣmyu nāiiiśaṇā 4 ntye hvaive-hvaṇαι gyasta-ḥaysa
aṣiśi Subhúta nta hve iv śirā śirā Subhúta nta nta śi-hira
Subhúta hāmdāḍa ḍaysana 5 bau[8b]īḥdisatvā bhūṣpirm-
māntamā hamdārajsa
yṣiniyahaudā 6 gyasta-ḥaysaṃ bauiiḥdisatvā
parinditās tathāgatena bodhisattvā mahāsattvāḥ
bhūṣpirmāntamāḥ yṣiniyāhaurāmmeṣaḥ ta ntina Subhúta pyū
paramayā parindanayā hi tena Subhúte śṛṣṇi
iiśiśi — subijī — aṣmayayam aṣye hvaṇī mā khu
śādhu ca susṭhu ca manasi kuru | bhāṣiṣye aham yathā
ḥaysu 7 śāvuyṣainsaḥ buddhisatva-yāmṇa-hadaina
bodhisattvā-yāna-samprasthitena

1 Apparently śi-hārā = Skt. tasya, gen. of śi or śa, Skt. saḥ, demonstrative pron., corresponding to ci-hārā = Skt. kasya, interrog. pron., fols. 10aiv, b, 31b, 32a, 37a; the rel. pron. is cu = Skt. yaḥ, nom. sg., fols. 9b, ii, iii, 32a, bii, iv, 33a, ii.
2 See n. 1, p. 1287.
3 Mye, or ma, is an inflectional suffix, like mī in hālainī, fol. 5aiv.
4 Apparently by the copyist’s carelessness this paragraph has been repeated from fol. 6a, the only point of difference being nāśaṇā = Skt. pragrahitavyam for baysamāṃṣa, introduced from fol. 9a.
5 Read gyasta-ḥaysāna, as above, fol. 7aiv.
6 Apparently wrong for yṣiniyāhauḍā; see fol. 6bi.
7 Probably wrong for ḍaysumī.
mahāyāmīna — viṣṭāṇā u khui [9a1] mara

aysmu nāsāṇā nta nta śīrā 3 
gyasta-bāysa —
cittam pragrahitavyam | evam — — bhagavan iti
ntūnājṣadā āṣi12ri Subhūta gyasta-bāysāna pyūṣte

őyūmān Subhūtir bhagavataḥ pratyaśrauvāt ||

Gyasta-bāysi nta hve mara iii Subhūta bāysu 4
Bhagavān etad avocat | iha Subhūte —

(G) na(vu)ysaina 5 bauḍhisatva-yāmīna-hamjśamdai1vna nta

bodhisattva-yāna-samprasthitena evam
(na 6) aysmu upevāmīna cu-burā — satva —
cittam utpādayitavyam yāvantah Subhūte sattvāḥ sattvā—
sattvām-nāsāmejṣa ham[9b1] khiśaysāya 7 u āhyā-
dhātau sattva-samgrahaṇa sam grīha — anūd-
yśāta wa purāmīṇa-ysāta cu 8 ganiṣṭā-ysā12ta — ūvavā
jā vā jāvāy-u-jā vā samsveda-jā vā upapādūkā
cu 8 hamtsa-rūvina 9 (rūvana 10) — anau-rūvāna 11 cu 8
vā rūpiṇo vā a-rūpiṇo vā hamiiutsa-syāmejṣa cu 8 anau-syāmejṣa cu-vā 8 nti satva cu

samjñīno vā asamjñīno vā eva — —
ni hamivtsa-syāmejṣa — anau-syāmiṣa — ku-burā

na samjñīno na asamjñīno vā yāvan-kascit
satva-dāta-prañavāṇa [10a1] ma-ta-nā-pi-ya nti —
sattva-dhātu-prañnapyamānaḥ prañnapyate te ca
satva muhujṣa haribā mahān nirvāṇa —

mayā sarve anupadhiṣeṣe nirvāṇa-dhātau

1 See n. 5, p. 1287.
2 Mara, if it is jāva = yāvat, seems to be here superfluous.
3 The Sanskrit equivalent of the E. Turk. text would be evam etad sādhu.
4 Probably wrong for ḷaysum.
5 See n. 1, p. 1287.
6 Apparently nta has been wrongly repeated.
7 Reading doubtful, folio damaged.
8 The Sanskrit text has vā, but the E. Turk. cu would rather be =

Skt. yaḥ, rel. pron.
9 Lit. Skt. sārīham-rūpiṇaḥ.
10 Wrongly repeated.
11 Lit. Skt. vīṇā-rūpiṇaḥ.
"The "Unknown Languages"

pa³ranirvåna | dädirå avamåta satva ku
parinirvåye ^^hamåti | na hañi kåmåju šai sau satva
parinirvåpya na — kašcit — sattvåh
paranirvåye ^tvåmå | nta ci-håra kidåna — ci Subhûta
parinirvåpto bhavåti | tat kasya hetoh | sa cet Subhûte
bauhisanautsa — samñña [10b] hâmåta ni sà
bodhisattvasya sattva-samjña pravarteta na sa
bauhisanautva — hvañai nta ci-håra kidåna | ni sì Subhûta
bodhisatva iti vaktavyåh | tat kasya hetoh | na sa Subhûte
bauhûdhisanautva hvañai ci satvå-våra-samñña hamåta
bodhisattvo vaktavyo yasa sattva — samjña pravarteta
va jvåkå-våra-samñña wa pudgalå-våra-samñña —
— jiva — samjña vå pudgala — samjña vå
hâme
pravarteta |

Here four folios are missing, Nos. 11–14.

Second Extract.

Stein MS., fol. 31α = M.M. ed., p. 35, l. 18, § 17.

Nti vå aširi Subhûta gyaivsta-baysà nta hve
Atha khalu âyushman Subhûtir bhagavatam etad avocat
khuvå midåmna gyasta-baysa baudhisatvå-yǻmnì
katham ——— bhagavan bodhisattvasya-yǻna
marå [31b] mahåyåña ——— samprasthitena
sthåtavyam katham pratipattavyam
— aysmu biysamjåmnà gyastà-baysì nta hve
katham cittam pragrahîtavyam | bhagavăn — åha |

1 The two texts seem to differ in this passage; dädirå is hardly = Skt. evam, which is nta, and ku parinirvåye hamåti would mean Skt. kañ (or katham) parinirvåpitaḥ pravarteta; see fol. 10α, b, 31b, 32α.
2 The colophon of the MS. has hañi = Skt. ârya, fol. 44b.
3 Lit. kåmåju šai sau = Skt. kašcit sa ekañ.
4 Perhaps a mere clerical blunder for jiva; see fol. 32α.
5 See n. 5, p. 1287.
6 Read mahåyåña; cf. fol. 7α.
mara Subhūta baudhisāṯva— māstā-
iha Subhūte bodhisattva-yāna-samprasthitena  
ḥayuṃ ṇavuysaina 1 nta-nta ayasmu upevānā biśā 
 evam cittam utpādayityavayam sarve 
satva — ahariiṣṇa — paranirvāyāṃ 
śattvā mayā anupadhiśe nirvāṇa-dhatau parinirvāpayitavyāḥ 
— — — — ni haḍ 2 kāmuṣā satva 
evam ca sattvān parinirvāpya na — kāṣcit sattvah 
paranirvāṇa 3 ivāhāṃ | nta cī-hāra 4 kiṇa | — ci Subhūta 
parinirvāpito bhavati | tat kasya, hetoh | sa cet Subhūte 
baudhisatvā satva-samāṇa hamāti [32a1] niṣa 
bodhisattvasya satva-samjñā pravarteta na sa 
baudhisatvā — hvaṇai wa ātma-samāṇa wa vā jiva-
bodhisattva iti vaktavyaḥ | [vā ātma-samjñā 5] vā — jiva-
samāṇa — wa pudgala-samāṇa — ivāhamati ni śi 
samjñā yāvat vā pudgala-samjñā vā pravarteta na sa 
baudhisatvā — hvaṇai nta cī-hārā kiṇa ni-śtā — 
bodhisattva iti vaktavyaḥ | tat kasya hetoh | nāsti Subhūte 
śi dharmā iii kāmuṣā — baudhisatvā-yāmnā-hamjṣedai Ąya | 
ṣa dharmah kaṣcit yo bodhisattva-yāna-samprasthito nāma || 
— — — — aśta nai ści Subhūta — 
Tat kim manasye Subhūte asti — sa — kaścid 
ivādharma cu 4 gyasta-ḥaysāṇa Dipamkarā ya 
ghastya-bhaya dharmo yas tathāgatena Dipamkarasya 
tathāgatasya iṅaka — biṣāpirmāntāma [32b] ḥaysu-śtā 
antikād anuttarāmī samyak-
sambodhiḥ 
bustā Ąya ntye hvaye-hvanai āṣiri 
sambhuddhaḥ | [nāma] evam ukte āyuṣmān 
Subhūta gyasta-ḥaysā ii nta hve 
Subhūtir bhagavantām etad avocat | yathāhāni

1 Here the two texts do not quite agree; see folgs. 6biv, etc.
2 The colophon of the MS. has haḍi = Skt. ārya, fol. 44b i.
3 Read paranirvāyāye, as in fol. 10a1ii ; for paranirvāṇa = Skt. parinirvā-
payitavya see fol. 10a1ii.
4 See n. 1, p. 1288.
5 For the Sanskrit version see foot-note 1 on p. 21 of M.M. edition.
bhagavan bhagavato bhāṣīṣṭasya artham ājānāmi — nāsti mādāmna — gyastā-ḥaysā kāmμuṣā śa dharmā cu¹
sa bhagavan kaścid — dharmo yas gyastā-ḥaysāśa (—)
tathāgatena (Dipamkarasya tathāgatasya arhataḥ)
samyak - sambuddhasya antikād anuttarām
biśāpiṃmāntama²-ḥaysu-stā bustā āya)a³ ntye hvaye-hvanai
samyak-sambodhim sambuddhaḥ|³ evam ukte
gyastā-ḥavyasā āśiri Subhūtā nta hve nta nta
bhagavān āyuṣmantaṁ Subhūtim etad avocat | evam etad
gyastā-ḥavyasā Śi-hārā¹ Subhūta ni-stā kāmμuṣā Śi
Subhūte evam etad — Subhūte nāśa kaścid sa
dharmā cu¹ [33a¹] gyastā-ḥaysna Dipamkarā
dharmo yas tathāgatena Dipamkarasya
gyastā-ḥaysana⁴ (——)
tathāgatasya (arhataḥ samyak-sambuddhasya
—) ṣaḥy-ḥaysu-stā bustā āya)a³ —
antikād anuttarām samyak-sambodhim sambuddhaḥ|³ sa
ci — Subhūta "kāmμuṣā Śi¹ dharmā vya cu⁵
cet punaḥ Subhūte kaścid — dharmas —
gyastā-ḥaysana ṣaḥyusṭābustā vya ni muhu
tathāgatena abhisaṃbuddho abhaviṣyat na māni
—— — tviṣuvaḥ samyak-sambuddhāsa

¹ See n. 1, p. 1288.
² This represents here Skt. samyak, and in fols. 6aiii, 6ii, 7ai, 8bi, Skt. parumāṇa or paramāyā; and biśa by itself represents Skt. sarve (properly viśvāḥ) in fol. 31bi; hence biśa-pirmāntama perhaps lit. = Skt. sarve-prakāreṇa, or some similar phrase.
³ In the bracketed portion the two texts do not agree.
⁴ Perhaps wrong for gyastā-ḥaysā, for the form ending in na usually stands for the instrumental case.
⁵ Vya cu = Skt. abhaviṣyat yāḥ, missing in the Sanskrit text.
ustamājśī bādā Śākya-munā nāma gyaśta-ḥaysā |
āgate adhvani Śākya-munā nāma tathāgato

arhan samyak-sambuddha iti

The continuation does not seem to agree in the two texts.

APARIMITĀYUḤ SŪTRA, fol. 1b.

Saddham nta nta muhumjśa pyūṣṭa śīṇa1 beda
Siddham| evam — mayā śrutam| ekasmin samaye
gyastā-ḥaysā Śrāvastā āsta-vye Jīvārīspuraḥāśa
bhagavān Śrāvastyāṁ viharati-sma Jetavane
Anāthaśi pīṇḍi-hārū samkhyerma

Anāthapīṇḍasya ārāme mahatā bhikṣu-saṁghena
dvasse-panīsā sau āśīryauja u
sārdham ardha-trayōdaśabhir bhikṣu - śataih ca
pharaṇyau baudhisatvau mistyau-ḥaysu ṇāṇuī[yasyauja2
sambarhalaiṣ bodhisattvair mahā-sattvaiḥ

hatsa3 | Ntiṇa4 — bedami gyastā-ḥaysā Mamjuśri

— Tatra khalu — bhagavān Mamjuśriyaṁ
eyśāxam5-gurṣte untaipastisa aścā6 Mamjuśryu
kumāra-bhūtam āmantryate-sma | asti Mamjuśriḥ

ivsarbaṁdā-hālai guṇā7 Aparamiṁta-saṁcayā nāṁma

upariṣṭāyāṁ aparimita-guṇa-saṁcayo nāma

lova-dāvāra8 |

loka-dhātuḥ |

1 Loc. sg. of śau = Skt. eka.
2 Cf. ṇānuysaina in Vajracchedikā, fol. 31bii; i.e. ṇānuysai with
instrumental suffix na or jsa.
3 Hatsa = Skt. sārdham, placed earlier after saṁghena.
4 Loc. sg. of nta = Skt. tat.
5 The consonant (x) of the final syllable is broken off.
6 Perhaps an error for āṣṭā; see fol. 32aiv.
7 Guṇa is placed differently in the two texts.
8 Dāvāra may be a clerical error for dāṭara, for v and t are not
unfrequently confounded, and dāṭa = Skt. dūṭu, see fol. 9biv; dāṭara
would seem to be the plural of dāṭa: see my “Report”, JASB., 1901,
Extra No. 1, p. 34.
Remarks.

1. The term "E. Turk.", occasionally used in this paper, is not to be taken to prejudge the question of the identity of the "unknown language", but is simply a convenient way of indicating the language as coming to us from Eastern Turkestan.

2. A peculiar diacritical mark occurs in the original manuscript under certain syllables (aksara). It resembles a rough semicircle, opening upwards (see Plate, fol. 3, l. 4, in ḍaysā and bāṣa, and in fol. 32, l. 1, ṣa and l. 2, śi). In the transcript it is indicated similarly. The syllables, with which, so far, I have found it, are ṇa (in nastā), ḍa (in ḍaysa), ṣa (e.g. in parsā), ḍa (e.g. in hadaina, fol. 8biii), and once pā, fol. 5aiv; again, śi, fols. 32aii, bii, and śi (e.g. in āširi). It will be seen that it usually occurs in syllables containing a short vowel, which, as a rule, is a, though it may be i. The single case of a long vowel is pā. The significance of the mark has, so far as I know, not yet been discovered; nor whether it is concerned with the consonant or the vowel of the syllable. I may, however, draw attention to the curious circumstance attending the spelling of the word which I have transcribed ḍaysā, as possibly throwing light on the phonetic value of the mark. The circumstance I refer to is detailed below in No. 11.

3. Another peculiar diacritical mark, now well known, is the double dot over a syllable containing the short ("inherent") vowel a. I have never found it with any other vowel, save an exceptional ā. Its significance is not exactly known, but it appears to indicate an indistinct, or "neutral", vowel: for some words are found spelled indifferently with ā or i, e.g., mistā or māstā, hamāti or hamātā, hirā or hārā, śi or ṣā; similarly, munā for Skt. muni, rūvina or rūvāna for Skt. rūpinaḥ. The exceptions of ā are hamāti or hamātā, fol. 10bii, and hamārājsa, fol. 7bi, or hamārājsa, fol. 8bi. It may be observed that in both these cases the usual ā occurs also in the adjoining syllable.
4. There occur two peculiar consonantal signs. One appear in wa = Skt. vā, fols. 9b¹, 10b¹, ii, 32a¹; the other, as a conjunct, in drāi = Skt. trī, and, as a non-conjunct, in raṣṭā = Skt. ābhujya, fol. 4biii, etc. The latter I take to represent the cerebral consonant ṛ (as in Hindi). Its form may be seen in ri, in the accompanying Plate, fol. 3, l 4, aksara 7 from the right.¹ The other was identified by Drs. Sieg and Siegling in Sitzungsberichte, K. Preuss. Akademie der Wissenschaften, No. xxix of 1908, p. 918, where its form is shown in facsimile. Its form may also be seen in the accompanying Plate, fol. 32, l. 1.²

5. Other peculiarities are an occasional disaspiration in Sanskritic words, such as dāta for Skt. dhātu, fol. 9biv, and sägā for Skt. saṁgha, fol. 4a¹; and an occasional suppression of the vowel a, as in baysna (Skt. sattvena) for baysana or baysāna, fol. 33a¹; perhaps also in harbisā, fol. 10a¹, for hara-bisā, for bisā by itself means Skt. sarva (properly viśva), fol. 31bii; and in bilsāgāna, fol. 1a¹i, for bila-sāgāna, Skt. bhiksū-saṁghena.

6. Mere scribal errors are the repetition of āe sneye, fol. 3biii, of nti gyastā-baysā, fol. 4a¹v, of rūvana, fol. 9bii, of the long paragraph on fol. 7b, and probably of nta, fol. 9aiv; so also probably the misspellings ajanāla for amjalā, fol. 5biii, ysmihauḍā for ysmiyahauḍā, fol. 8b¹; and perhaps also jvākā for jivā, fol. 10bii.

7. Regarding the inflection of nouns: na or jsa indicate the instrumental case, e.g., gyasta-baysāna = Skt. bhagavatā (or tathāgatena), by the Blessed; mistāna bilsāgāna, Skt. mahatā bhiksū-saṁghena, by a great congregation of friars; brū-haḍāna = Skt. pūrvāḥna, by (or in) the forenoon.

¹ See also No. iv, l. 4, ṛa (formerly read by me cā) of pl. iv in my “Report on Three Further Collections” in the JASB., vol. lxvi, p. 234, 1897.

² See also fig. 4, l. 3, wa (formerly read by me first as kha, afterwards as āa), of pl. iii in my “Report on the Weber MSS.” in the JASB., vol. lxxii, p. 35, 1893, also in the same Journal, vol. lxx, Extra No. 1, Appendix, pp. 1, 15, leaf 33bii, 1902.
Again, e.g., sg., muhuja = Skt. mayā, by me, nāśamejsa = Skt. samgrahena, by the complex, hāmdārājsa = Skt. anugrahena, by the grace; or pl., āsiryauja = Skt. bhikṣubhikṣ, by the friars, ntirājsa, Skt. śīrobhikṣ, with the heads. Na indicates also the genitive, in sg. gyasta-baysana = Skt. bhagavataḥ, of the Blessed, and in pl. gyastānā = Skt. devānām, of the gods. The suffixes mye, or mi, or ma, or mā indicate indifferently the locative or instrumental case; e.g., āu-hālaimi = Skt. ekānte, in a solitary place, and biśā-pirmāntamye = Skt. paramena (lit. sarva-prakāreṇa), in every way, thoroughly. Hāra (or hirā) or hārū seem to indicate the genitive, as in cihāra = Skt. kusya, of which, Anāthapindīhārū = Skt. Anāthapindasya, of Anāthapindā.

8. Regarding the inflection of verbs: we have 3rd sg. pres. ind., hāmā = Skt. bhavati, he is, fol. 10ai⁵; 3rd sg. pres. subj., hamāti or hāme = Skt. pravarteta (or bhavet), fols. 31bi⁴, 10bi³; 2nd sg. fut. (or perhaps rather the 2nd sg. pres.), hamathu = Skt. bhaviṣyaśi, fol. 33ai³. To the same series apparently belongs hamye, fol. 4bi¹, ii. To another auxiliary verb seems to point vya = Skt. abhaviṣyat, fol. 32ai³; in fol. 3bi⁴ it seems simply to mark past time, being attached to the part. āstā, he was staying (see below); it would seem to be an abbreviation of vyetā or vyitā = Skt. abhūt, fols. 4bi⁴, 5bi¹. Again, another is āstā = Skt. asti, fol. 32ai⁴, ni-stā = Skt. nāsti, fol. 32ai². The suffix of the part. fut. pass. is ni, or nai; e.g., upēvāṁṇa = Skt. utpādayitavya, fol. 9ai⁴; nāsāṁṇā = Skt. pragrahitavya, fol. 9ai¹; paranirvāṇa = Skt. parinirvāpayitavya, fol. 10ai²; biyamsāṁṇā = Skt. pragrahitavya, fol. 31bi¹; mahāyāṁṇā = Skt. sthātavya, fol. 7ai¹; viśtāṁṇā = Skt. pratipattavya, fol. 8bi⁴; hvaṁṇai = Skt. vaktavya, fol. 10bi¹. To the last-mentioned verb belong the 3rd sg. past, hva = Skt. avocat or āha, fols. 5bi⁴, 31bi¹, the 1st sg. fut., hvaṁṇi = Skt. bhāṣisye, fol. 8bi³, and the part. past, hvaṁṇai = Skt. ukte, fol. 7ai². Forms of the participle, or of the
imperfect, in tā (ta) or dā, seem to be nastā = Skt. niśāṇa or nylaṣiḍat, fols. 5ai, vi; paryeta = Skt. pratikrānta, fol. 4bii; āstā = Skt. viharan (āsan), fol. 5biv; vātsuta = Skt. cāran, walking, fol. 4bvi; namasyāda = Skt. abhivandya (lit. namaskṛitya); tsuamādā = Skt. upasamkraman or upasamkramya, fol. 5ai, iii.

9. Regarding pronouns, we have the personal, 1st nom. sg., mā = Skt. aham, fol. 8biii; acc. sg., muhā = Skt. mām, fol. 33ai; instr. sg., māmma, fol. 3biii, or muhujṣa, fol. 10ai = Skt. mayā. Again, the demonstrative, nom. sg. masc., sa or si = Skr. sah, fol. 10bvi, or saī, fol. 10ai, and neut., nta = Skt. tat, or etat, fols. 31ai, bii; instr. sg., ntye, fol. 5ai, or ntina, fol. 8bii = Skt. tena; gen. sg., si-hāra (= Skt. tasya), fol. 7aiv; loc. sg. fem., ntiṇa, Skt. tasyāṁ, fol. 5ai, and Ap., fol. 7biii; nom. pl. masc., nti = Skt. te, fol. 10ai. Again, the relative, nom. sg. masc., cu = Skt. yah, fols. 32ai, bii; instr. sg., kāṁma = Skt. yena, fol. 5ai; gen. sg., ci (perhaps wrong for ci-hāra) = Skt. yasya, fol. 10bii, and quantitatively, nom. pl. masc., cu-bura = Skt. yāvantah, fol. 9ai. Again, the interrogative, gen. sg., ci-hāra = Skt. kasya, fol. 10ai, or adverbially, kuva (kuva ?) = Skt. katham, fol. 6biii. Again, the indefinite, nom. sg. masc., kāmujā = Skt. kaścit, fol. 10aii, or quantitatively, ku-bura = Skt. yāvan kaścit, fol. 9biv. That both the relative and interrogative pronouns equally show forms with initial c and k appears noteworthy.

10. Of numerals we have šau = Skt. eka, one, fols. 4ai, 5aii, bii; loc. sg., še or śiṇa = Skt. ekasmin; and dvāsapāmjaśā, fol. 4ai, which corresponds to Skt. ardha-trayodasabhīh, “with half-thirteen,” but which literally seems to mean “with twelve and half” (Skt. dvādaśa-ardhaśī).1

11. The word baysā has hitherto been transcribed as balsā by myself, as well as by Dr. Sten Konow in a dissertation

1 See my “Report” in JASB., lxx, Extra No. 1, pp. 34 ff. In Document 5, l. 4, p. 38, occurs trai-sc paṃ-śaya, i.e. three hundred (and) half-hundred (350); also l. 5, šau, one; and in Document 8, l. 3, paṃ-haśro, half-thousand (500). In the list on p. 34, “500” should be “50.”
and transcript of some manuscript fragments in the "unknown language" supplied to me by him in 1906 (see JGOS., vol. lxii, p. 92, foot-note), and as balysā by Professor Leumann (see ibid., p. 107). The fact is that the word is written in two different ways in different texts. In the two texts of the Vajracchedikā and Aparimitāyuh Sūtra its first syllable ba is written with the semicircular mark under it, and its second syllable ysa is written with exactly the same conjunct sign as ysa in the word navuysaina. On the other hand, in other texts its first syllable is written ba, without the subscribed semicircle, and its second syllable is written with a conjunct sign which suggests the presence of some l-consonant, and which has been variously read as ñsā or lysā. These two signs, ñsa (lysa) and ysa, may be seen, in juxtaposition, in the second line of the obv. fol. 8 (D. iii, 1) in plate ex of Dr. Stein's Ancient Khotan, vol. ii, in the phrase māṣṭābalysūn navuysai, as transcribed by Professor Leumann (see JGOS., vol. lxii, p. 107). Exactly the same phrase occurs in our Vajracchedikā text, fol. 31b, l. 2 in the accompanying Plate, māṣṭābaysum navuysaina, as transcribed by me in the second extract; but here the identical conjunct sign ysa is found in both words baysum and navuysaina. This state of things seems to suggest some connexion between the semicircular mark and the l-sound. Might the mark not signify the cerebral consonant l when it occurs as the second, or lower, part of a conjunct consonant, so that we should have to read the word in question as blaysā? The existence, in these "unknown languages" of Eastern Turkestan, of the cerebral l, as a consonant, was first discovered by Professor Leumann; see his paper, "Ueber eine von den Unbekannten Literatursprachen Mittelasiens," in the Transactions of the Russian Imperial Academy, vol. iv, No. 8 (1900), p. 10. Its form, as non-conjunct, may be seen very clearly, e.g., in suksme (formerly read by me wrongly suksmeu), fig. 5, line 2, of
12. As regards the word gyastā, its correspondence to the Skt. deva was first pointed out by Dr. Sten Konow, in the dissertation above referred to, from its occurrence in the standing phrase gyasta-nāga-aysura, etc. = Skt. deva-nāga-asura, etc. But though thus its positional parity is assured, it is not necessarily so with its connotational equivalence. In that respect gyastā might still be = Skt. bhagavat, the well-known Indian epithet of the Divine being. Similarly, it remains to discover the connotational equivalent of āśiri, which takes the place of both Skt. bhikṣu and āyuṣmat.

13. So far as I can judge at present, the language seems, in the main, to be identical with the language of the “Brāhmī Documents”, published by me, in 1902, in my “Report on the British Collection of Antiquities from Central Asia”, in the JASB., Extra No. 1 to vol. lxx, pp. 30 ff. For example, both have hadā, day, hāmā, he is, hanītsa, with, pam, half (see foot-note to No. 10), pharāka, many, śi, that, u, and, ciburā, as many, beda, time. On this point I am now disposed to agree with Drs. Sieg and Siegling (see their paper “Tocharisch, die Sprache der Indoskythen.” in Sitz. Ber., K. Preuss. Akad. der Wiss., xxxix, pp. 915 ff., 1908), and Professor Leumann, who has fully gone into the question in his paper on the “Arische Textsprache” (JGOS., vol. lxii, pp. 83–110, 1908). To the latter scholar, who has been working for some time with great acuteness and success, notwithstanding the absence, hitherto, of any bilingual text, on fragments of “unknown language” texts from my own collection as well as from that of Dr. Stein’s first tour of exploration (1900–1), we may look for the
elucidation of those phrases and passages which, even with the now available Sanskrit version, remain obscure or unintelligible. In my "Report", p. 33, I connected the language with "the so-called Ghalchah dialects of the Pamir". As a fact, the people who spoke it appear to have lived (speaking roughly) in the south of Eastern Turkestan, while the people living in the north spoke the other "unknown language", which Drs. Sieg and Siegling, following herein Dr. F. W. K. Müller (Sitz. Ber. P. Ak. W., liii, p. 960, 1907), call Tokhari ("Tocharisch," l.c., p. 916). The character, common to it and the Ghalchah dialects, appears to be that, while being Indo-European, there is no direct affinity with either the Iranian or the Indo-Aryan class of languages.
The "Unknown Languages" of Eastern Turkestan. II

By

A. F. Rudolf Hoernle

[From the Journal of the Royal Asiatic Society, April, 1911.]
SINCE writing the article in the October number of the Journal for 1910 (pp. 1283 ff.), I have been further examining some of the manuscript treasures which Dr. Stein succeeded in recovering from the immured Temple Library near Tun-huang. In that article I gave extracts from two "bilingual" texts which I discovered among those treasures, and which promised to furnish us with the key to the southern of the two unknown languages of Eastern Turkestan.¹ In the present article I propose to report another discovery, which seems to throw light on some phonetic peculiarities of that language.

Among the Stein MSS. there are a number of rolls, varying in length from about 2 to 23 feet, and in breadth from about 10 to 12 inches. They are inscribed on one side with Chinese and on the other with Eastern Turkestani characters.² The latter are not that species of upright Gupta characters of the essentially Indian type in which the two "bilingual" texts are written, and of which a specimen is shown in the Plate accompanying my article in the Journal for 1910. They rather constitute a development from the Indian Gupta characters, which has never been found in India, but which appears to have originated among the Eastern Turkestanis themselves. Moreover, in our present state of knowledge, this

¹ It is the "Sprache II" of Professor Leumann: see his articles in JGOS., lxi, p. 651; lxii, p. 83. His "Sprache I" is the Tokhari of the German savants mentioned below.

² They present, however, in no case anything bilingual; so I am informed by Dr. Stein, who has had the Chinese writing examined by M. Chavannes.
essentially Eastern Turkestan species of Gupta characters, which in my early report on them, in 1897, in the Journal of the Asiatic Society of Bengal (vol. lxvi), I have named “cursive”, appears to have been restricted to that relatively southern area of Eastern Turkestan in which the language of the two “bilingual” texts was current. In the relatively northern area of the other “unknown” language of Eastern Turkestan, to which the Berlin savants propose to give the name of Tokhari, the Indian Gupta developed what, in my still earlier report on the Weber MSS., in 1893 (ibid., vol. lxii, p. 4), I named the “slanting” species of it; and this species appears to have been limited to that area. We have, therefore, in Eastern Turkestan three species of Gupta characters: (1) the upright Gupta of the Indian type, (2) the “slanting” Gupta, and (3) the “cursive” Gupta, both these latter species being of Eastern Turkestani origin, and apparently restricted to the relatively northern and southern parts of Eastern Turkestan respectively. In the sequel, I shall, for the sake of brevity, provisionally distinguish the two still undefined languages of these two areas as the “northern unknown” and the “southern unknown”.

Further, according to our present knowledge, the “slanting” species originated at a very early period (circa fourth century A.D.); for it appears in manuscripts which, so far as we know, are practically contemporary with the earliest written in the upright Gupta species.¹ On the other hand, the “cursive” species appears to have originated at a much later period, about the sixth or seventh century A.D.,² if we may judge from the

¹ e.g., in the Weber MSS., and in Dr. Stein’s palm-leaf MS. from Miran, of the third or fourth century A.D.

² According to the testimony of Chinese pilgrims of the sixth and seventh centuries, the script of Khotan and its district was that of the Brahmans. This, however, may, and probably does, refer to the upright Gupta script, which was current in those parts of Eastern Turkestan alongside of the “cursive” Gupta. See Dr. Stein’s Ancient Khotan, vol. i, p. 90, where the authorities are quoted.
age of the Chinese documents, together with which the
documents in "cursive" Gupta have been found, and
which belong to the eighth century (see Dr. Stein's
Ancient Khotan, vol. i, p. 271). There is a curiously
suggestive similarity of ductus between the Kharoshthi
and "cursive" Gupta types of writing found in Eastern
Turkestan. Both favour an elongated form of letters, as
compared with the squat form of the upright or Indian
Gupta. This similarity suggests that the "cursive"
Gupta may have developed under the influence of the
Kharoshthi script, which was current in the same
area at a much earlier period, and that the "cursive"
Gupta came in when the Kharoshthi went out of
fashion.

Our acquaintance with the "cursive" Gupta script dates
from the year 1895, when the Godfrey MSS. fell into
my hands. The first specimens of it were published by
me from those manuscripts in 1897, in the Journal of
the Asiatic Society of Bengal (vol. lxvi, pp. 225 ff., pls. iv-
vii). Additional specimens from them were published
in 1901 in my "Report on the British Collection of
Central Asian Antiquities", pt. ii (published as an Extra
Number of JASB., lxx, pp. 30 ff., pls. vi, vii), and by
Dr. Stein in his Ancient Khotan, vol. ii, pl. cx (D. iii, 12).
In my description of the documents in which the script
occurred, I said that "the characters of the writing are
evidently Brāhmi of a very cursive type" (JASB., vol. lxvi,
p. 229), and in my Report (p. 32) I spoke of the script as
"a species of cursive Brāhmi". The main reason for thus
designating the script was that it represented a very
degraded type of the upright Gupta script, and that
its use seemed to be confined to documents, public or
private, semi-religious or secular, to the exclusion of
all literature proper, whether religious or secular. The
latter distinction still holds good. Even now, with all
the mass of manuscripts, literary and documentary,
which Dr. Stein has brought back from his last tour of exploration, the "cursive" Gupta script has not been found employed in any literary work, nor in any pothi. The single exception I know of are the two folios, 7 and 8, which have been inserted into the pothi of the Aparimitayuḥ Sūtra, to replace two lost folios which had been written in the ordinary literary upright Gupta of the rest of the work (see this Journal for 1910, p. 834). Still, though provisionally I retain it, because of its convenience, the term "cursive" is hardly appropriate, because the letters of the script, however quickly or badly written, are not "running", that is, not connected with one another. In this respect they do not differ from the letters of the upright or slanting species of Gupta. Moreover, as may be seen from the illustrative plates accompanying this article, they may be written with any variety of neatness or coarseness.

The initial difficulty in reading the letters of the "cursive" Gupta script was that some of them had grown so similar to one another and others had wandered so far away from their original Gupta form that their identity became almost unrecognizable. As explained in my Report of 1901 (loc. cit., p. 32), it took some years before the identity, e.g. of the signs for ma and bhut, was recognized. In these circumstances it was a most welcome discovery to find on the back of some of the rolls, which Dr. Stein submitted to me for examination, more or less complete tables of the Eastern Turkestani cursive alphabet and its syllabaries, which were evidently modelled on the similar tables current in India. For an account of the latter I may refer to Bühler's Origin of the Indian Brahma Alphabet (2nd ed., 1898, pp. 27 ff.), and of their Eastern Turkestani counterparts, to Watters' remarks in his Yuan Chwang's Travels in India, vol. i, pp. 154 ff., and to Dr. Rosthorn's letter in the Vienna Oriental Journal,
vol. x, pp. 280 ff., also to Dr. Takakusu's Translation of Itsing, pp. 170-1. From the report of the Chinese writers about these tables, which they call si-t'an-chang, i.e. siddham-sections, it appears that they commenced with the word siddham, followed by the alphabet, or series of radical signs (Sanskrit mātrkā), that is, the twelve (so-called) vowels, a ā i ī u ū e ē o āu am ak, and the thirty-four consonants, k kh g gh ŋ, c ch j jh ŋ ī, t th d dh n, t th d dh n, p ph b bh m, y r l v, š s s, h, ks. Huilin, a native of Kashgar, who wrote his account at some time between 788 and 810 A.D., adds the four vowels r ō l ū, which he calls supplementary. From this it may perhaps be inferred that the rolls, none of the alphabets of which includes these four supplementary vowels, must be referred to a date earlier than Huilin. The alphabet was followed by a set of syllabaries, the first of which gave the combinations of the consonants, singly, with the vowels, while the others gave the same vowel-combinations with the consonants in various ligatures. All Chinese accounts agree with regard to the first syllabary, which comprised thirty-four series of combinations, beginning with the series ka kā, ki kē, ku kū, ke kāi, ko kau, kām, kāh, and ending with the series kṣa kṣā, kṣi kṣī, etc. Regarding the other syllabaries the accounts do not agree. Hiuen Tsiang (seventh century) gives their number as twelve; but the number usually given (e.g., by Itsing, seventh century, Huilin, ninth century) is eighteen. The precise reason for this difference does not clearly appear from the accounts; but according to Bühler the tabulated ligatures included those made with y, r, l, v, and the five nasals; and that much the rolls tend to confirm. The whole siddham-chang, then, would appear to have been a long statement, consisting of a number of "sections" (chang), which began with the alphabet and continued with a varying number of syllabaries, the whole statement being headed by the word siddham, which served as its
name. The term *siddham-chang*, accordingly, would mean "the sections of the siddham".¹

Now the rolls discovered by Dr. Stein in the main confirm those Chinese accounts. The most important, for our immediate purpose, is the Roll Ch. cviii, 007, which is 10 ft. 9 in. long by 10\(\frac{3}{8}\) inches wide. On its back it is inscribed with a very long statement, which practically covers its entire length. It is divided into three sections, the first of which gives the alphabet, while the two others contain syllabaries. See Plate I, which shows the alphabet in ll. 1–6, and the commencements of the two syllabaries in ll. 8–10, 42, and ll. 43, 44. Of the two syllabaries, the first gives the vowel combinations of the single consonants (l. 9), *ka kā ki kī ku kū*, and so forth, down to (l. 42) *ksa ksā ksi kṣī*, etc., while the second gives the syllabary of the conjuncts made with *y*, that is (l. 43), *kya kṣa kyī kṣī*, and so forth down to *lyā lyāi lyē lyēi*, etc. It is not complete; the series of vowel combinations of the last six ligatures, *vy, sy, sy, sy, hy, kṣy*, are wanting. Why they should have been omitted is not apparent, for there is just sufficient blank space left at the bottom of the roll to have taken them. But whatever the reason may have been, the omitted six series are found at the extreme top of the back of another roll, Ch. xc, 002. See Plate II, ll. 1–6 (the original size of the portion shown is 19 by 10\(\frac{3}{8}\) inches). The line of the first series (*vyā vyāi vyēi*, etc.) stands so close upon the upper margin of the roll that its edge cuts through some of the vowel marks, thus proving that at one time the roll must have been somewhat larger than it is at present, its present length being only 6 ft. 5 in. (with a width of 10\(\frac{1}{2}\) inches). As, however, the papers of the two rolls are of entirely different make—Roll 002

¹ There has been some dispute as to the precise meaning of the Chinese word *chang*, whether it means "table" (Legge) or "section" (Julien) or "chapter" (Watters) or "composition" (Takakusu). The evidence of the rolls supports the meaning "section". But the translation "table", if not literal, is at least more suggestive of what the thing really was.
is soft, while Roll 007 is hard—they cannot have con-
stituted two portions of a single roll torn asunder. At
the same time, the handwriting in the syllabaries on the
two rolls is so strikingly alike as to make it impossible
to doubt the identity of their writers. Roll 002 is so
short that it may be suggested that originally it was some
10 feet longer, and that the portion now missing carried the
alphabet and the complement of the syllabary. The upper
portion being torn away and lost, the missing portion of
the statement was rewritten on Roll 007. This would
explain the abrupt ending of the second syllabary on the
latter roll. Following immediately on the completion of
the syllabary of the conjuncts with $y$, on the back of
Roll 002, there comes the syllabary of the conjuncts with $r$. It begins (l. 7) with the series $kra$ $kra$ $kri$ $kri$, etc., and ends
(l. 39) with the series $ksra$ $k$ $s$ $ri$ $k$ $s$ $ri$ $k$ $s$ $ri$, etc., each series
occupying a separate line. There are, however, only
thirty-three lines instead of thirty-four, because the series
with the vowel notations of the conjunct $bhr$ is omitted—
whether intentionally or not will be considered in the
sequel (p. 464). At the end of this third syllabary there is
 appended the following remark:

\[
\text{vimjilaki byam di ni tsa nrvi (?) hā yam ni dau la ni pa}
\]
\[
\text{ja dra ā yā sa ja ga tca sni pi ka sadham}
\]

This remark concludes the statement of the alphabet and
syllabaries, which commences on the back of Roll 007 and
continues on the back of Roll 002; for what follows the
remark on the back of the latter roll is written in an
entirely different hand, and refers to a different statement,
which will be explained further on (p. 457).

The precise meaning of the remark is at present not
intelligible, but one point is fairly certain, namely, that
the term vimjilaki must denote the preceding "statement",
and is probably equivalent to the Chinese term chang or
siddham-chang, "sections of the siddham." For we meet
with that term, variously spelled vajalaka or vaijalaku, also
on other rolls, but always in immediate reference to statements of the alphabet and syllabaries. Thus (below, p. 457) it occurs twice on the back of Roll Ch. 0042, by way of introducing a siddham statement. It is found also in a like connexion on three minute fragments of the Roll Ch. 0046 in the phrase

(1) eysa vajalaka sūhaṅka,
(2) . . . vajalaka sūhaṅka,
(3) eysa sūhaṅka vajalaka.

We have, then, here on the back of the Rolls 007 and 002 an example of the siddham-chang as described by the Chinese witnesses, comprising the initial siddham, the alphabet, and a varying number of syllabaries, in the present case only three. But our example amplifies their testimony in two particulars. In the first place, the word siddham stands at the head, not only of the whole statement, but introduces also each of the "sections" (chang). In fact, our example interpolates a sentence between the alphabet and the series of three syllabaries. The latter are introduced thus (Pl. I, l. 7):

sidham nta nta mahājsa pyū,

i.e. "listen to this siddham from me".

In the second place, the alphabet includes not only the radical signs of the letters, but also those of the numerals. It runs as follows (Pl. I, ll. 1–6):

1. 1, sidham a ā e ē ī ī u ē a i o au aṁ a
2. 2, k kh g gh ū • c ch j jh ŏ • t th ṇ d
3. 3, dh n • nt th d dh n • p ph b bh m
4. 4, y r l v ś s s h ks ~ ∞ □
5. 5, 1 2 3 4 5 6 7 8 9 10 20 30
6. 6, 40 50 70 60

There are some peculiarities in this scheme of radical signs, to which I shall return later on. With regard to my transcript of the radical signs of the consonants, it should be observed that, as written in the original (viz., without the virāma attachment), they represent, considered from the Sanskrit point of view, not radicals
(k kh, etc.), but syllables (aksara, ka kha, etc.). But the Chinese accounts explain that in the alphabet the signs express "half-sounds", while in the syllabaries they express "full-sounds" (VOJ., x, 281). Thus the "full-sound" of a syllable (aksara), e.g. of ka, consists of the two "half-sounds", the consonantal element k, and the vocalic element a.

The second peculiarity, regarding the composition of the alphabetical table, is fully confirmed by another roll. This is Roll Ch. xc, 003. It is very long, measuring 22 feet, with a width of 10 inches; but with the exception of the small space (about four inches) at the top of the roll, occupied by the alphabetical table, the remainder is blank. The table is shown in Fig. 1, reduced to about one-third of the original.

Fig. 1.

It runs as follows:—

1. 1, sidham a : u k kh g gh n - c ch j jh n - t th
1. 2, nd dh n : nt th d dh n : p ph b bh m : y
1. 3, r l v s s h ks Tā 1 2 3 4 5 6 7 8 9
1. 4, 10 20 30 40 50 60 70 80 90 100 1000 10000 100000

It will be observed that in this table the series of the numeral radicals is more extended: and that it places the radicals for 60 and 70 in their proper order. In the table of Roll 007 they are misplaced, probably by a mere scribal error. The syllable tā which introduces the series of the numeral radicals in both tables may possibly be the
Eastern Turkestani term (or the initial syllable of it) for "numeral". On the other hand, our present table apparently omits the vocalic radicals altogether; for the two solitary radicals a and u probably represent merely the mystic syllable om (i.e. auṃ).

Attention may be called to the calligraphic execution of the "cursive" Gupta writing in the alphabet and syllabaries of the rolls 002, 003, and 007. They were evidently written by a practised hand. The appearance of the writing is very different in the rolls to which we now proceed. In them it is exceedingly coarse, and points to an illiterate person or to one who was quite unfamiliar with the "cursive" Gupta script.

This coarse handwriting may be seen on the back of Roll Ch. 0042. The roll measures 6 ft. 5 in. in length by 10 inches in width; but only about 16 inches (from the top) are inscribed; the remainder is blank: see Plate III. The inscribed portion commences with seven lines of most disorderly writing. Then follow five lines (ll. 8–12) of more orderly writing, beginning with—

1. 1, Sidham nta nta majsa vā pyūsta he bye khu spa naman
1. 2, diśabhala (ca) kakravanti Śakyaṃuni gyistibaysi, etc.
i.e. "Siddham. Thus it has been heard by me. Salutation to Daśabhala, Chakravartin, Śakyaṃuni, the Blessed ", etc.

After this comes (ll. 13, 14) an attempt at the table of radical signs, which reads as follows:—

1. 1, abayā daṃ vaiyalaka Sadham a (u) u k kh g gh
1. 2, ŋ c ch j jh ŋ t (th) ṭh
1. 3, ṇ nd th d dh ṇ p ṇh

Then follow other five lines of text (ll. 15–19), commencing with—

1. 1, Sidhama ūma śava budārave suhā
i.e. "Siddham Oṁ to all Buddhas svāhā ",
and ending with garoṇḍa (i.e. Garuda) buje kabamāṁvarana buja suha.

1 The roll is in a very soiled condition, and has not come out in the photograph as clearly as one could wish.
2 Bracketed letters are badly written and cancelled.
The term *vaijilaka* (l. 13), the probable meaning of which has been referred to previously (p. 453), occurs also among the disorderly lines, in the statement in the upper right-hand corner, which runs as follows:—

1. 1, dañ vaja(la)laka
2. 2, sidhama a u k kh g
3. 3, gh c ch j jh n

The same, or a very similar, coarse handwriting appears on the back of Roll 002, immediately below the remark, above referred to (p. 453), with which the three syllabaries conclude. It consists of an exceedingly ill-executed and incomplete *siddham-chang* (Pl. II, ll. 42–6), which runs as follows:—

1. 1, sidhama a a k (kh)¹ kh g gh c ch j jh
2. 2, t th nd dh n nt th d dh n p ph b bh
3. 3, m y r l v s s h ks ii sadhama
4. 4, ka kā (ka)¹ ki kí ku kū ke kai ko kau kān kā kha khā
5. 5, khi kī (kha) khu khu khe khai kho khau (kha)¹
6. 6, khañ kha ga gā gi gi gu gā go gau gām ga gha ghā
7. 7, ghi ghī ghū pu ghe (gha)¹ ghai gho gha gha gha
8. 8, gha nā nā ne nū nū nū nū nā nām (nā) nā ca cā
9. 9, ci ci cu ce cai co² cau cañ ca cha chā chi chī chū
10. 10, chu cho chau che chāi cha jā jī ji jū jū je
11. 11, jai jo jau jañ ja jha (jha) jhā jhi jhī jhu jhū
12. 12, jhe jhai jho jhan jhām pa sa(l) dha dham a

That this statement was written by an illiterate person is shown not only by its coarse execution, but also by its numerous errors; *ge gai* is omitted in l. 6, *cho chau* and *che chāi* are misplaced in l. 10, *khu, nā, and jha* are superfluously repeated in ll. 5, 8, and 11; *khu khu, nu nu, cu cu, chu chu, jū jū* stand for *khu khū, nu nū*, etc., in ll. 5, 8–10; *pu* and *pa* are wrongly written for *ghū* and *jha* in ll. 7 and 12; the *virāma* is omitted in *sidhama* in ll. 1 and 12. Occasionally *i* is hardly distinguishable from *e*, as in *khi*, l. 5; it is better in *chī*, l. 9, *jhi*, l. 11.³

¹ See n. 2 on p. 456.
² *co* had originally been written *cu*; afterwards *u* was crossed through, and *o* substituted.
³ After the *siddham-chang* there comes a short text, in twelve lines, at present not intelligible, which, however, is written again in fairly good cursive Gupta characters.
There is still another roll, Ch. 0046, which deserves notice on account of the striking peculiarities in its scheme of the alphabet and syllabary. It is a mere fragment of a roll, measuring 15 by 10 inches. The inscription on its back has the unusual arrangement that it commences with the simple syllabary, and then proceeds, in the concluding three lines, to the alphabet. The latter (Pl. IV, ll. 17–19) runs as follows:—

1. 1, Sidham a ā e ā e va ai au va au a a k kh g g-h ē c ch
1. 2, j j-h ē nt th d dh n p ph b bh m y r l va ś s ś h
1. 3, kṣ

Here the following points are noticeable: (1) The entire omission of the group of cerebral radicals; (2) the dissociation of the aspiration in g-h for gh, and in j-h for jh; (3) the identity, or practical identity, of ē with j, and of d with s. Turning to the syllabary (ll. 1–16), the most striking point is that the radical elements of the several syllabic series are arranged in a very unusual and apparently fanciful way,¹ and that some of them apparently are wanting. This may best be seen from the subjoined table, in which the radicals are placed in their normal order, while the raised numbers indicate their actual order on Roll 0046. The missing radicals are within brackets.

\[
\begin{align*}
\text{a} & \quad \text{kh}^4 \quad \text{g}^{13} (\text{gh}) (\text{ṅ}) & | & \text{c}^5 \quad \text{ch}^8 \quad \text{j}^9 (\text{jh}) \quad \text{n}^{15} & | & (\text{ṭ} \text{ṭh} \text{ḍ} \text{ṭh \ḥa}) & | \\
\text{nt}^{23} \quad \text{ṭh}^{21} \quad \text{ḍ}^{24} \quad \text{ṭh}^{19} \quad \text{n}^{26} & | & \text{p}^{12} \quad \text{ph}^{20} \quad \text{b}^8 \quad \text{bh}^{23} (\text{m}) & | & \text{y}^3 \quad \text{ṛ}^{16} \quad \text{i}^6 \quad \text{v}^2 & | \\
\text{s}^{11} \quad \text{s}^{14} (\text{s}) & | & \text{ḥ}^{17} & | & \text{kṣ}^{16} & | & \text{y}s^{7} & | \\
\end{align*}
\]

It will be noticed that (1) the cerebrals are entirely omitted, (2) the aspirates gh and jh are omitted; but they are so only in appearance, for owing to the dissociation of their aspiration in the table of radicals there was no need of showing gh and jh in the syllabary, seeing that their dissociated elements, g, j, and h, were already exhibited; moreover, as we shall see (p. 464), the

¹ On a still smaller fragment of the same roll, measuring only 6 by 4 inches, the commencement of a syllabary in precisely the same peculiar order is repeated, viz., ka, ra, ya, kha, ca, la.
existence of gh and jh seems doubtful in the "southern unknown" language, which appears to have an aversion to aspirates. (3) For a similar reason, ū, m, and s are omitted, for their forms are practically not distinguishable from those of j, b, and d respectively. (4) bh has the same peculiar form as in the table of radicals; and (5) c, ā, and au are substituted for i, u, and o respectively in the alphabet; but in the syllabary u and e are omitted altogether. Thus, e.g., in l. 2, we have ya yā ye yi yū yai yau yau yam ya instead of ya yū yi yū yū ye yai yo yau yam ya. Substantially therefore in all the five points the syllabary agrees with, and confirms, the evidence of the alphabet. The only striking point of difference is that the syllabary adds a series of vowel notations for the conjunct ys (ll. 4 and 5), apparently treating that conjunct as a radical exactly as the conjunct ks.

What precisely the significance of the substitution of c, ā, au, and a, for i, u, o, and ah may be, remains to be discovered. The full tale of radicals is shown only in Rolls 007 and 0046. The others apparently omit the vowels entirely, for their mention of a u may have reference to the mystic syllable om. The substitution of a for ah is probably a mere formality: for the Sanskrit visarga, in all probability, did not exist in the vernacular languages of Eastern Turkestan, as little as it does in the languages of India; thus we have, e.g., nama savaca for namah savaca, in l. 10 of the Dhāraṇī on Roll 0041 (p. 462). The omission of the u-syllables from the syllabary of Roll 0046, and the substitution of e and au for i and o respectively, would seem to indicate that the southern unknown language of Eastern Turkestan did not distinguish particularly between the sounds of u and ā, e and i, o and au: and this explanation would seem to be confirmed by the fact that in their proper places the e-syllables are omitted in the syllabary, so that in it the single e
represents both \( i \) and \( e \). Somewhat similar phenomena may be observed in the vernaculars of India. Numerous illustrations, on all these points, are furnished by the Dhārāṇī on Roll 0041. The curious interpolation of \( va \) (or \( v ? \)) in the vocalic series of radicals on Roll 0046 is also a point, the explanation of which remains to be discovered.

The most striking point in all the alphabetic and syllabic tables is that they uniformly write \( ud \) and \( ut \) in the place of the simple cerebral \( d \) and dental \( t \) respectively. It seems to me probable that the intention is not so much to indicate a nasal conjunct consonant, as a simple consonant nasalized, or in some other way modified; but I must leave it to experts in phonetics to determine what the precise significance of the graphic notation may be.\(^1\) All with which I am now concerned is to show that those tables really represent a truth, namely, that the people who spoke the language which is now under discussion always spoke \( ud \) and \( ut \), where others (e.g. Sanskrit speakers) pronounced \( d \) and \( t \). Among Dr. Stein's rolls there is one, Ch. 0041, measuring 10 ft. 10 in. by 10\( \frac{1}{2} \) inches, the back of which is covered, from top to bottom, with a long Buddhist Dhārāṇī, or rather with a pair of Dhārāṇis, or mystical litanies for protection from evils, which extend to 151 lines. The first ends in the middle of the tenth line, and bears no name. It is, however, the well-known \( Usṇīṣa-viṣṇu-dhāraṇi \), the Sanskrit text of which has been published by Max Müller in the *Anecdota Oxoniensia*, vol. i, pt. iii, pp. 9, 22, 35, 36; and a copy of which exists also in the Hodgson Collection of the Royal Asiatic Society, No. 79, pt. iv. The second comprises the

\(^1\) In this connection it may be worth noting that, as Dr. Waddell points out in his *Buddhism in Tibet*, p. 353, in Japanese Skt. raṇḍārya becomes binzura. The southern unknown language has rāṇḍārya (see pl. v, l. 23 of the Dhārāṇī on Roll Ch. 0041).
remainder of the Dhāraṇi, from the middle of l. 10 to the end of l. 151. Its name occurs repeatedly in the body of Dhāraṇi, e.g. on ll. 105 and 126, where it reads ntathā-gantausṇisa-saintāntapantra-nāmāparājanta-mahāprantya-garā, i.e. Skt. tathāgat-osṇisa-sitātapatra-nāmā Aparījitā mahāpratyayaṅgirā. A Sanskrit copy of this Dhāraṇi exists in the same Hodgson Collection, No. 77, as well as in the gigantic roll of Dr. Stein's collection, which will be noticed in the sequel (p. 471). The Eastern Turkestaní text, however, appears to be mutilated in two places, and in some others it differs not considerably from the Sanskrit text of the Hodgson MS. Both the Dhāraṇis were originally written in Sanskrit (of a kind), but on Roll Ch. 0041 they appear in the form in which their Sanskrit was “transnografted” in the mouth of the natives of Eastern Turkestan. It is this transmogrification which constitutes their interest, for they are written, one might say, phonetically, and thus illustrate the phonetics of the language. Plate V shows the initial twenty-three lines, which give the whole of the Uṣṇīsa-vijaya and the commencement of the Aparājita-mahāpratyayāṅgirā Dhāraṇi. I give the Eastern Turkestaní text from the roll, and below it, in italics, the Sanskrit text from the Anecdota Ovoniensia and the Hodgson MS., No. 77.

[l. 1] Sadahama Namau rahna-utriyāya namau bagavante utraile-
(Namo rāna-treyāya) namas (bhagavate) traile-
kyanta prāntaviśaistāya ṛādhā[1. 2]ya bagavante nātyathā auma
kya pratirīṣṭāya buddhāya bhagavate tadyathā om
viśauḍiyā viśauḍiyā sama sama samantāvabāsa [l. 3] (spa) spharana
viśodhaya viśodhaya sama sama samantārabbāsa spharana
ganta gahana svabāva viśūḍhe abāṣaiciantu mā suganta vara vante
yati-gahana svabhāva-riśudde abhiśiṣcayāt māṁ sugata-rava-vacana

1 Anec. Oxon. om. bracketed words.
2 See n. 2 on p. 456.
3 Apparently wrong for vara-vacanā.
The double dot and single dot appear to be marks of punctuation; they do not signify the visarga and anusvāra respectively.

Note the peculiar serpentine mark under 7, 11, 13. It seems to correspond to the semicircular mark which is found in the upright Gupta script.

Wrong for usñīṣa.

See n. 2 on p. 456.

The bracketed passage is not found in the Hodgson MS., No. 77. Instead, it has the usual conventional opening: evam mayā śrutāṁ kāśmiriṁ saṁaye bhagavāṁ deśeṣu-trayastriśeṣu viharati sma | sadharmāyāṁ deśa-salabāyāṁ mahātā bhikṣu-saṁghena mahatā bodhiśattra-saṁghena Śākṛa devināṁ Indreṣa sārdham ||

na is inserted below the line; and the insertion is marked by a cross above the line.

The Hodgson MS., No. 77, has sāpāyūdhānāṁ namo sāyāmygraṁ.
vidyādhara raśīṇā namau brāhma[1.15]ṇā namau Aidrāyi namau
vidyādhara-(raśīṇā)^1 namo brāhmaṇebhyāh namo Indrāya namo
bagavante Rau(dra)^2 drāya Umāpanta-siḥ^3 āya namau bagavante [1.16]
bhagavate Rudrāya Umāpanta-sahitāya namo bhagavate

Nārāyaṇāya ⁴ ca mahāmādra namaskrantāya namau bagavante
Nārāyaṇāya ca mahāmādra-namaskrātya namo bhagavate
mahākālāya ntra[1.17] pura vekṣaṇaṇā karāya adhimūhy^3 anta sāmasāma-
mahākālāya tripura-(vikṣepanā)^3 karāya adhimuktikā^6 sāmasāma-
vāsane māntra gana nama(skra)^2 skrantā[1.18]ya namau bhagavante
rāśine mātr-gaṇa-(namaskṛtya)^7 namo bhagavate
ntathāganta kūlāya namau padma kūlāya namau vajra kūlāya [1.19]
tathāgata-kulasya namo padma-kulasya namo vajra-kulasya
namau maṇā kūlāya namau gaja kūlāya namau kūmāra kūlāya namau
namo maṇi-kulasya namo rāja-kulasya namo kūmāra-kulasya namo
nāga kūlāya [1.20] namau bagavante draṇīḍī sūrasena praharana rājāya
nāya-kulasya namo bhagavate dhīka-sūrasena-praharana-rājāya
ntathāgantāyāraḥente samya [1.21] sabaudhāya namau bagavante
ntathāgatāyārhatē samyak-saṃbuddhāya namo bhagavate

Amintābāya ntathāgantāya rahente samya sabādhā[1.22]ya namau
(Amitābha) tathāgatāya arhate samyak-saṃbuddhāya namo
bagavante Akṣubhāya ntathāgantāyāraḥente samya sabā(dha)^3 dhāya
bhagavate Akṣubhāya tathāgatāyārhatē samyak-saṃbuddhāya
namau ba[1.23] gavante baisaṇa gūrū vaiṇḍarya praba rājāya ntathā-
namo bhagavate bhaiṣaja-guru-vaiṣyāra-prabha-rājāya tathā-
gantāyāraḥente samya sabaudhā[1.24]ya, etc.
gatāyārhatē samyak-saṃbuddhāya, etc.)^8

It will be seen from the preceding extract that every
Sanskrit t becomes nt in Eastern Turkestan. Either
singly or in ligature, t occurs upwards of 400 times in
the Dhāraṇī, and with two exceptions it is in every case

^1 Hodgson MS., No. 77, om. the bracketed words.
^2 See n. 2 on p. 456.
^3 See n. 2, p. 462.
^4 Wrong for Nārāyaṇāya.
^5 Hodgson MS. reads vidrāgama for vikṣepaṇa.
^6 The full reading of the Hodgson MS., No. 77, is: adhimuktikā
kāśmirā-mahā-sāmaṇā." The Eastern Turkestanī adhimūhya = Skt.
adhimukta, with "ḥanta for kāta = kta.
^7 The Hodgson MS., No. 77, reads rambita-sahitāya for namaskṛtyāya.
^8 The Hodgson MS., No. 77, omits the bracketed final three clauses.
Dr. Stein’s gigantic roll omits the first and second clauses, but it has the
third clause referring to bhaiṣaja-guru.
spelled nt. The two exceptional cases are the conjuncts tv and st. In these the simple t appears to be preserved regularly; thus we have—

**Fig. II.**

![Diagram]

1. 11 (Plate V), baudhasatvebya = bodhisatvebhyaḥ.
2. 101 (Fig. II, 1), namas z tathāganta° = namas; tathāyata°.
3. 114 (Fig. II, 2), vasta-śūla° = vasti-śūla.

The cerebral ķ does not occur so often, but whenever it does occur it appears as ṇd. Thus we have—

1. 23 (Plate V), vaiṇḍarya = vaiṇḍarya.
2. 52 (Fig. II, 3), garuḍa-grahā = garuḍa-graha.
3. 102, vaiṃṭambuṇāḍākani = vaiṭiḍi-ḍākani.

Another example, garoṇḍa = garuḍa, occurs in the passage quoted above (p. 456) from Roll 0042.

Another striking point, which however is not so prominently indicated in the alphabetic and syllabic tables, is the loss of aspiration in b for bh; e.g. in Plate V,

1. 1, bagavane = bhagavate.
2. 3, svabāva = svabhāra.
3. 8, būnta-kāuṭi = bhūta-koṭi, etc.

This loss of aspiration is practically absolute in the Dhāraṇī, for in a total of about 150 cases there are only two exceptions; these are—

1. 18 (Plate V), bhagavante = bhagavate.
2. 118, bhayaupadravebya = bhayopadravebhyaḥ.

In this connexion it may perhaps be not without significance that in the syllabary on Roll 002 (as noticed on p. 453) the line referring to the vowel notations of the conjunct bhr is entirely omitted, though, of course, the omission may be due to an error.

In the case of gh and jh, probably disaspiration was equally regular; still, those two aspirates are of infrequent occurrence, and hence examples are rare; but we have, e.g.,

1. 6 (Plate V), saṅgūntana = saṁghatana.
2. 11 (Plate V), saṅgāya = saṁghāya.
3. 130, vaṅga-vaṅya = vighna-vinaya.
The case of \( dh \) is peculiar. It is often disaspirated, as in

1. 2 (Plate V), viśāudiya = viśodhayā,
1. 4 (Plate V), sadārane = sandhāraṇī;

but equally often aspiration is retained, as in

1. 6, 9, 10 (Plate V), adheṣṭhāna = adhīṣṭhāna,
1. 11 (Plate V), dharmāya = dharmāya,
1. 14 (Plate V), vaidyādhara = vidyādhara,

specially when \( dh \) stands for Skt. \( dīdh \), as in

1. 3, 5, 7 (Plate V), viśūdhe = viśuddhe.
1. 9 (Plate V), būdha . . . sūdhe = buddhi . . . suddhi.
1. 10 (Plate V), sadhama = siddham.

On the other hand, occasionally \( dh \) is introduced in the place of \( d \), e.g.,

![Fig. III.](image)

1. 50 (Fig. III, 1), udhaka-bayā = udaka-bhaya.
1. 51 (Fig. III, 3), rāja-dhaṇḍi-bayā = rāja-danda-bhaya.
1. 134 (Fig. III, 5), gagā-nadhi-vālakā = gaṅgā-nādi-vālakā.

Altogether the treatment of aspiration in the case of \( d \) and \( dh \) appears to be very capricious; thus we have, e.g.,

1. 73 (Fig. III, 6), vaidyādaraibya = vidyādharebhyāḥ.
1. 85 (Fig. III, 4), kāla-danḍīye = kāla-dandaṁe.
1. 104 (Fig. III, 2), udaka = udaka.

Of the dissociation of aspiration we have an example in
1. 1, sadhahama for siddham, where one would rather expect sadaham, to represent the usual spelling sadham.

The Dhāraṇī illustrates also some other curiosities of spelling in the southern unknown language of Eastern Turkestan previously noticed, such as the substitution of \( e, ā, \) and \( au \) for \( i, u, \) and \( o \) respectively. Thus, \( i \) occurs eight times in the 23 lines shown in Pl. V, viz.,
l. 5, uṣṇi and raṇi; l. 7, viśūḍhi and samayāḍhi; l. 8, paraśūḍhi and būdha-śūḍhi; l. 10, hṛdayāḍhi; l. 17, adhimūḥanta. In some cases the writing is not sufficiently distinct; e.g., l. 8, kauṭi or kauṭi; l. 20, draṇḍi or draṇḍi, etc. Generally long ṭ takes its place, as in l. 5, vijaya-viśūḍhe (= vijaya-viśuddhe), etc.; but occasionally e, as in ll. 6, 9, 10, adheṣṭhānādheṣṭhānta (= adiṣṭhānādhiṣṭhīta), or ai, as in l. 1, viśaiṣṭāya (= viśiṣṭāya); l. 3, abasaicaantu (= abhisimcetu); l. 8, vaisphuṭinta (= visphuṭita); l. 14, saidha-vaidyādhara (= siddha-vidyādhara); l. 15, Aindrāyī (= Indrāya). Not uncommonly it is represented by a, as in ll. 1, 7, pranṭa (= prati); l. 15, Umāpanta (= Umāpati), etc.; exceptionally also by ā or au, as in l. 6, adheṣṭhānta, and l. 10, adheṣṭhaunta (= adhiṣṭhīta). Again, o never occurs at all; we have, e.g., regularly namau and auma (= namo and om); l. 8, kauṭi (= koti), etc.; and in l. 1 even ntrailekyanta apparently represents a barbarous Sanskrit trailokita (for trailokya). Again, ā takes the place of u in ll. 11, 21, 22, būdhāya (= buddhāya), and occasionally of o, as in ll. 4, 5, śādiya (= śodhaya), and, as above noted, even of i. But occasionally u is represented also by ū or au, as in ll. 8, 9, būḍha (= buddha), ll. 18, 19, kūḷāya (= kulaṇya); or ll. 11, 21, baudhāya (= buddhāya), l. 15, Raudrāya (Rudrāya).

A noticeable curiosity is the spelling ṣu for Skt. jīn, as shown below.

![Figure IV]

l. 83, vaidyā-rāgūye = vidyā-rājñyai.

This may be compared with the pronunciation of Skt. jīn in the vernaculars of India, e.g. ṣy in Hindi and ṣny in Gujarāṭi.

Finally, attention may be drawn to the peculiar form of kḥ in all the rolls, and of ḫ in Roll 0046. The more
original form of \( kh \) may still be seen in the syllables \( khu \) and \( khū \). Both forms of \( kh \) occur in the Dhāraṇī, but \( bh \), as already observed, never occurs but twice, and in those cases it is the ordinary form of \( bh \) (Fig. I, l. 2, as in Pl. V, l. 18, bhagavante).

When I published, in the October number of the Journal for 1910, the extracts from the two "bilingual" texts, I had not yet seen the rolls. The information of the latter on the phonetics of the southern unknown language of Eastern Turkestan is borne out to a considerable extent, though not altogether, by those two texts. Thus the pronunciation \( nt \) for \( t \) is illustrated by the pronouns \( ntu, ntye, ntiña \), etc., the nouns \( ntiña-jśa, pāntārū, biśāpirmānta \); the verbs \( paraṃnta, untaipastīsa \), etc. Per contra, the spelling of the conjuncts \( tv \) and \( st \) (without the nasal) is illustrated by the words \( baudhisatva, gyasta, mista, dasta \), etc. On the other hand, in certain words, \( t \) is preserved, where one would expect \( nt \), as e.g. in \( napātata \) (for \( napantānta \)?). The nasalization of \( d \) (as \( nd \)) is entirely absent, e.g., in \( yudāi, mandā-
\( dana, bedamī, etc. What the true explanation of this discrepancy may be has yet to be ascertained. Further research among the manuscript treasures, brought back by Dr. Stein from his recent tour of exploration, may furnish us with the answer. In the meanwhile I suspect that the discrepancy may be due to the fact that the rolls were inscribed by natives of Eastern Turkestan, who wrote exactly as they spoke, while the translations from the Sanskrit which we have in the "bilingual" texts were written by "pandits", men from India, who wrote under the spell of Sanskrit phonetics rather than Eastern Turkestani, a suggestion which is supported by the fact that the Eastern Turkestani "bilingual" texts are written in the upright Indian Gupta characters, while the rolls are inscribed in the peculiar Eastern Turkestani "cursive" script. There is also another possibility, viz. that of clerical
errors. For example, the word (above referred to) which I have transcribed *napatata* (JRAS., 1910, p. 1286, l. 5), is transcribed *napanatā* from another manuscript by Professor Leumann (JGOS., lxii, p. 107, l. 32). Both transcriptions, as such, are undoubtedly correct, but obviously the original spellings cannot both be correct: there must be a scribal error in one of the two manuscripts. The graphic signs for *n* and *t*, in the upright Gupta script as current in Eastern Turkestan, are, in some manuscripts, rather difficult to distinguish. They are so in the manuscript fragment (Dr. Stein's *Ancient Khotan*, vol. ii, pl. cx, D. iii, 1, obv. of fol. 8, l. 2) from which Professor Leumann transcribed. His transcription I believe to be correct; yet the *n* and *t* are so nearly alike that the real reading might be *napananā*. In the *Vajracchedikā* manuscripts, from which my transcription was made, the signs for *n* and *t* are easily distinguishable, for *t* is written with a very elongated left limb, while *n* has two short and equal limbs.¹ There can be no doubt, therefore, that the reading of the *Vajracchedikā* manuscript, as it now stands, is correctly represented by *napatata*. Yet, after all, there might be a clerical error, and the true form of the word might be *napanana*; and if that were so, there would be no violation of the rule that *t* becomes *nt* in Eastern Turkestan.

Some confirmation of the view above expressed is afforded by the fact that the two folios 7 and 8 of the *Aparimitāyuh Śūtra*, which are written in “cursive” character (of a rather slovenly kind), absolutely agree with the Dhāraṇī and alphabetic and syllabic tables of the rolls with respect to the spelling *nt*. There is also much agreement with reference to the treatment of the vowels. The main difference from the Dhāraṇī is in

¹ Compare, e.g., *tū* and *nū*, sixth and third letters from the right, on l. 3 of fol. 3 rev. on the accompanying plate; or *tī* and *nī*, third and fourth letters from the left, on l. 2 of fol. 32 obv.
respect of the aspirate bh, which is regularly preserved, as in the tables. All the other folios of the manuscript are written in well-formed Indian Gupta characters, and exhibit all the peculiarities of the Vajracchedikā manuscript. The two folios 7 and 8 were evidently added subsequently by a native of Eastern Turkestan in order to supply a lacuna. They are shown in Plate VI, and read as follows, Sanskrit equivalents being added occasionally in bracketed italics:

[Fol. 7a, l. 1] samāṇḍaganta (samudgate) · sūbhāva vaṁśāde mahāniyam pariṇivare svāhā: nūt vā pā nca spam ra (nca)¹ caī ṣna na yū [l. 2] nta ja sna ṭe ysa haṁ mye a-ysmūn-jaśa ha mye bi jā ṣṇa ntu Aparāmiṁtiṇyāṁ sūntra (Aparāmiṁtiṇyāṁ sūtra) ṣvāṁda: namau bhagavante aparāṁ[1. 3]mintyā jāṁnāna sūvanaiscinta ntejāṁ (surviniścitejo) rājāyaṁ ntathāgintyāyaṁ (tathāgataya) rahente samyaṁ-sabaudhāyam-ntadyethā [l. 4] auma sarva saskāri paśūnde (sarva-saṁskāra-parisuddhe) darmante gaganime (gaganā) samāṇḍagamintā sūbhāva śude mahāniya parvare

[Fol. 7b, l. 1] svāhā: nūt vā pā nca gaganāyaṁ gri nece sye jsa haṁ ma gi na yū nta ja sna ṭe ysaṁ ha mye a-ysmūn-jaśa ha [l. 2] ha mye bi jā ṣṇa ntu aparāmiṁtiṇyāṁ sūntra ṣvāṁda nama u² bhagavante aparāmiṁtyājāṁ nāṁna sūvanai[1. 3]scinta ntejāyaṁ ntathāgantyāyaṁ rahenta samyaṁ sabaudhāyam ntadyethā auma savā skāra paśūde: [l. 4] dharmanī gaganā saṁmaṇḍagamantāṁ sūbhāva vaśūde mahāniya parvare svāhā:

[Fol. 8a, l. 1] kāṁ ma ṣa haṁ ma ve caṁ ntu aparāmiṁtiṇyāyaṁ sūntra pī ri ntye ja staṁh na jsi na saṁsūliṁ pa skyā ṣta u kha [l. 2] ysa: nāma u² bhagavante aparāmiṁtyāyanā jāṁnāna sūvanaiscintas ntejāyaṁ rājāayaṁ ntathāgantyāyaṁ [l. 3] rahente samyaṁ sabaudhāyam ntadyethā auma saskāre paśūde darmante gaganā sarumāṇaṁ dagaganā sūbhāva [l. 4] vaśūde mahāniyam parvare svāhā

[Fol. 8b, l. 1] kau ma ṣa haṁ ma ve nca ntu aparāmantyāyaṁ sūntra pī ye: ntu na dūjā sā u na brī yvā [l. 2] naṁ ntraisū u na ha stā aha kṣa:

* * * * *

In order to complete the present preliminary account of the rolls, I may add a few interesting particulars of a different kind.

I. Four of the rolls contain dated statements. Thus at the bottom of the back of Roll Ch. 0042 there are six

¹ Apparently cancelled.
² The original text seems to read namāṁ, but the apparent ām is merely a very crudely formed cursive an.

JRAS. 1910.
or seven very brief entries, one of which gives the following date, three times repeated:

\[ \text{iši silya (so twice, but once as a salya) ḫadyaja māste kṣausimya haḍe (rabīci)} \]

i.e. "in the first year, in the ḫadyaja month, on the sixth (or sixteenth?) day". Signature in oval.

Again, the back of Roll. Ch. 0048 is inscribed with a Buddhist text in seventy-one lines, which begins with the following date:

\[ \text{ssa salya cūvija māste nāmai haḍa} \]

i.e. "in the sixth year, the cūvija month, the ninth day".

Again, on the back of Roll. Ch. cvi, 001, there is some text, which begins with the following date:

\[ \text{maḍala (?) salya cvāvaja māsti bīstimye haḍai} \]

i.e. "in the maḍala year, the cvāvaja month, the twentieth day".

Again, among Dr. Stein’s manuscripts there is a gigantic roll, about 70 feet long, entirely covered on one side with 1,108 lines of writing. On it there occur the following four dates:

1. On ll. 196-7, sahaici salya puhye māsti pāḍauyse1 haḍai āḍrä nakṣatřa
   i.e. "in the sahaici year, the fifth month, the first day, the āḍrä lunar asterism".
2. I. 846, svāntri puhye1 māṣti 20 mye haḍai
   i.e. "this sūtra, in the fifth month, the 20th day".
3. I. 1058, sahaici salya naumye māṣti puhye haḍai
   i.e. "in the sahaici year, the ninth month, the fifth day".
4. I. 1102, sahaici salya dasamye māṣte 8 haḍai purva-bhadrivā nakṣatri
   i.e. "in the sahaici year, the tenth month, the 8th day, the pūrva-bhādrapeṇḍa lunar asterism".

In the foregoing series of dates we have the mention of the following two months, (1) ḫadyaja, (2) Cvāvaja or Cūvija. The names of other nine months are quoted in my "Report on the British Collection of Antiquities from Central Asia", pt. ii, p. 35 (Extra Number 1 to JASB., vol. lxx, pt. i, 1901), and shown there in pls. ii, vi; vi;

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1 See Professor Leumann’s remarks in JGOS., vol. lxii, p. 87, footnote 1.
The names of three months are mutilated, viz., (10) .. khaja or .. caja, (11). i .. ija, (12). vāraja. As the names ḫadyaja and hamdyaja, and the names cvāvaja (or cūvija) and cvābhaja (cvābhaja) are evidently identical respectively, we thus have the names of twelve months, nine complete and three mutilated. The months in the four dates of the gigantic roll are not named, but numbered, viz., pūhya or pūhya, fifth; naumya, ninth; and dasamya, tenth. Among the names Skarhvāri is clearly identical with the old Persian Kṣatrarāya, and the modern Persian Shahrivār; but none of the others has as yet been equated. The days (hāḍa) in the dates are always indicated by numbers; so also the years (salya, modern Persian sāl). The term iši, or aša, in the date of Roll. Ch. 0042 I take to be connected with šau, one (see JRAS. for 1910, p. 1297, note 10), and ssu to be six; but sahaicā and maḍala (the reading is not quite certain) I cannot explain for the present. Two nakṣatras, or lunar asterisms, are mentioned in the date of the gigantic roll, viz. ārdrā and pūrva-bhādrapāda.

II. The gigantic roll, above referred to, is one of the proceeds from the Temple library of Tun-huang. It is made of tough buff-coloured paper, and measures, in its present condition, 70 ft. 10 in. by 11½ inches, but about 3 or 4 inches are torn off at the top. The interior side is entirely covered with 1,108 lines of writing; the exterior side is blank with the exception of a parti-coloured figure at the top. This figure consists of two geese, standing on two open lotuses, facing each other, and holding in their bills flowering tendrils. The whole of the writing is in fair upright Gupta script, excepting three interspersed

1 My readings of the names in JASB. have to be amended as above.
paragraphs which are written in "cursive" Gupta characters. The contents are as follows:——

ll. 1–197 are a long Dhāraṇī, in corrupt Sanskrit, named, in ll. 193–4, tathāgatauṣṇīṣa sidhāṃṭapatram nāmāparājita mahāpratyagīrā, i.e. Skt. tathāgatauṣṇīṣa-sitātapatram nāma aparājīta mahāpratyagīrā. A manuscript of this Dhāraṇī is in the possession of the Royal Asiatic Society, No. 77 in its Catalogue. Another is described in R. Mitra's Catalogue of Sanskrit Buddhist Literature, No. B, 46, p. 227. It is practically identical with the long Dhāraṇī, in "cursive" Gupta script, on the back of Roll Ch. 0041, but the opening passage, down to the middle of l. 5 (uṣṇi vijaya viśūdhe), is torn away. It ends with the first of the four dates above quoted. Its name is spelled variously sitātapatra, or white umbrella, in l. 178, or sitāntapatra in ll. 91, 158, 169, or setāntapatra in l. 190, or satāntapatra in l. 136, or sidhāntapatra (apparently Skt. sīddh-ātapatra) in ll. 58, 72, 193, or sūdhāntapantrī (Skt. sūddh-ātapatra) in l. 841.

ll. 198–220 are a story of the communication of the 1,000 names of Buddha, in the southern unknown language, and in upright Guptă script.

ll. 221–728 contain the enumeration of the 1,000 names, in corrupt Sanskrit and upright Guptă script. At the end, however, in l. 728, there are the numeral figures for 1,000 and 5 (i.e. 1,005), though the names actually enumerated are only 1,000.

ll. 728–754 give the text of the Buddha piṭāi bhadra-kalpa-sūtra, i.e. Skt. bhadra-kalpa-sūtra, followed in

ll. 755–840 by an enumeration of classes of superhuman beings (such as 12 koṭi of Ratnottama, 18 koṭi of Ratnāvabhasa, etc.); the whole in the southern unknown language and in upright Guptă script.

ll. 841–8 contain a short statement with reference to the preceding two texts (the sitātapatra and the bhadra-kalpa with its enumeration), including the second date
previously mentioned; the whole in the southern unknown language and in cursive Gupta script.

ll. 848–1058 give the text of Sumukha-nāma-mahāyānasūtra, in the southern unknown language and in upright Gupta script.

ll. 1058–60 contain a statement referring to the preceding (third) text, with the third, above-quoted date, in the southern unknown language and cursive Gupta script.

ll. 1060–1100 practically repeat the enumeration of classes of superhuman beings which was given in ll. 755–840, in the same language and script.

ll. 1100–5 contain a statement referring to the preceding enumeration, nearly alike to that in ll. 841 ff., with the fourth above-quoted date, also in the southern unknown language and cursive script.

ll. 1106–8 conclude with a few salutations to Ratnatraya, etc., in corrupt Sanskrit language and in upright Gupta script.

As a curiosity it may be noted that the frequently occurring term gyasta is once (l. 841) spelt justa, while in other places it has the usual spelling gyasta.

III. On the upper portion (about 5 feet) of the back of Roll Ch. 0044, which measures 23 ft. 10 in. by 10 inches, there are seventy lines of writing in cursive Gupta script and in corrupt Sanskrit language. They contain the text of the Kausāki Prajñāpāramitā, the end of which may be compared with the ending of the Prajñāpāramitā-hṛdaya-sūtra, printed in the Anecdota Ovoncensia, vol. i. pt. iii, pp. 50, 54, and in R. Mitra’s Catalogue of Sanskrit Buddhist Literature, No. A, 15, p. 192. It runs as follows, the Sanskrit version being in italics:—

Namah prajñāpāramitāyai tadyathā gante gate pāragante
Namah prajñāpāramitāyai tadyathā gate gate pāragate
pārasagante baudhī svāhā [l. 66] idam avaucant bhagavāmin āntamanā
pārasāngate bodhī svāhā | idam avocat bhagavān ātmamanā
ayūṣmā Śārapūtra Śakrau devāṁ[1.68]nām idra nte ca baudhisatvā
ayuṣmān Śāriputraḥ Śakro derāṁ ā indraḥ te ca bodhisattvā
mahāsatvā sā ca sarvāvantī pairṣa sa-de[1.69]va-gaṇḍharvā-mānūṣ-
mahāsatvā sā ca sarvāvatī parṣat sa-deva-gaṇḍharvā-mānūṣy-
āśūṁraś ca lokau bhagavantau bhūṣṭant abhyananāda | kansāki [1.70]
āsuraś ca loko bhagavato bhūṣśītam abhyananandu | kansāki
nāṁmā prañāpāramīṁtā samāpta ||
nāṁmā prañāpāramītā samāptā ||

Notice the invariable substitution of nt for t.

IV. Roll Ch. 0048 is one of the smallest. It measures
only 7 ft. 11 in. by 12\(\frac{3}{4}\) inches. Its back bears seventy-one
lines of writing in the southern unknown language and
in exceedingly crude cursive Gupta script. The initial
thirteen lines are introductory prose, and are followed on
II. 14–71 by a Buddhist story which opens in the con-
ventional way, except that here the opening statement is
not in the usual prose, but in verses (one and a half), as
follows:—

[l. 14] Siddham Nta pūṣṭi śau bāṁ de ṭaysi • Śrāvasti kṣiri ṣa
mūṁ de • jintirispūri udāṁhā • pharāṅkhye[1.15] pārśijša
hansa • 1 Dharmī sai nāva misti • Śāripūtra sthīrī ntū
kāṁ la •

After these verses the story proceeds in prose. In the
prose portion the word ṭaysi appears several times spelled
biysi. Perhaps the versified opening may hereafter lead to
the identification of the Sanskrit version of the story.

V. Roll Ch. cvi, 001, which is only a sheet of thick,
tough, dun-coloured paper, measuring 24\(\frac{1}{2}\) × 13 inches, is
remarkable also on account of being inscribed, not in
Chinese, but in Tibetan. The obverse, or what appears
to be the principal side, is covered entirely with thirty-one
lines of writing in extremely crude cursive Gupta script,
and in the southern unknown language. It opens with the
date, above quoted, and is continued on the reverse side
with eight lines of similar writing. This is followed by
fifteen lines of fair writing in Tibetan script and
apparently Tibetan language, which runs, in the
opposite direction to the cursive Gupta inscribed above it. Below this again, and finishing the reverse side, there is another Tibetan inscription of nine lines, which again runs in the opposite direction to the Tibetan above it, and therefore in the same direction as the cursive Gupta inscription at the top of the reverse side.

On the obverse side, on the eighth and ninth lines from the bottom, there is a cancelment of eleven syllables (aksara) of the cursive writing (crossed through), and below is written interlinearly, in Tibetan script, manana with an unintelligible mark after it. On the same side, on the ninth line from the top, there is what looks like the indication of a fresh paragraph in the cursive writing which here begins with um, and below it is written, interlinearly, am (or ama) in Tibetan. The corrections in Tibetan seem to indicate that the Tibetan inscription on the sheet was made at a date subsequent to the inscription in cursive script. If that be so, and if the Tibetan inscription contain a date (which I have not been able to make out), it may furnish a key to the identification of the era and the system of dating of the documents in cursive script.

VI. Towards the end of the Aparâjitâ Pratyângirâ Dhâranî there occurs a curious clause enumerating the different kinds of writing material which was in use at that period of time. The clause runs as follows:—

(1) Roll Ch. 0041, ll. 125 ff., ya imâ utâthâgântâuṣñiṣa-saṁtagântapântara- 
(2) Gigantic Roll, ll. 158 ff., ya imâṁ tathâgâtauṣñiṣam sitântapatramâ 
(3) Hodgson, No. 77, fol. 17b, — imâṁ tathâgatoṣñiṣa-sitatapatrâ 
(4) Sanskrit: ya imâṁ tathâgatoṣñiṣa-sitatapatrâ-
(1) nāma-parâjanta pratyângarâ lâkhâtvâ buvyâ-pantraî vâ vâstre vâ 
(2) nâmâparâjitaṁ pratyângirâ likhitvâ bhûja-patre vâ vâstre vâ 
(3) nâmâparâjita pratyângirâ likhitvâ bhûrja-patre vâ vâstre vâ 
(4) nâmâṁ aparâjitaṁ pratyângirâṁ likhitvâ bhûrja-patre vâ vâstre vâ 
(1) kalke vâ kāyatânte vâ karyâgante vâ likhatvâ dhâiryasyante | 
(2) kalke vâ kâyagate vâ kaññhagate vâ likhitvâ dhârayasyate | 
(3) bhûvatkare vâ kâyagatâṁ vâ kathagatâ vâ krtvâ dhârayisyaṇî | 
(4) kalke vâ kâyagate vâ kaññha-gatâṁ vâ krtvâ dhârayisyaṇî |
i.e. "who, having written this powerful Pratyañgīra (Dhāraṇī), named the white sunshade of the Tathāgata's crown, either on birch-bark, or on cloth, or on paste, or on paper, or having committed it to memory, makes use of it; him throughout life no poison will injure", etc.

This clause names four kinds of writing material—(1) bhūrja-patra or birch-bark, (2) vastra or cloth, (3) kalka or paste, and (4) kāyagata or paper. There can be no question about the identity of the words for birch-bark and cloth. The form buvyā, if the reading is correct, would seem to be the name of the birch in the southern unknown language. As to kāyagata or kāyaganta, it is clearly identical with the Arabic word kāghadh, or, as it is pronounced in India, kāğhaz (Urdu) or kāgud (Hindi). This word, as I have shown in this Journal for 1903, p. 669, on the authority of Professor Karabacak, is a mere loan-word in Arabic, into which it was introduced from the Chinese kok-dz' through Eastern Turkestan in the middle of the eighth century. Dr. Stein's rolls would show that, by the natives of Eastern Turkestan, the Chinese word was pronounced kāyaganta (or kāganta, p. 477); and in that case the Arabic pronunciation of it, as kāghadh, might throw light on how the Eastern Turkestanis pronounced their kāyaganta. Of kalka I am unable to make anything, unless it may be an error for valka, and unless the latter may signify skin or parchment. The ordinary meaning of the word is "paste" (e.g., made of powdered dry, or crushed fresh drugs, in medicine). Might it here refer to mortar, or beton, which when plastered on a wall would make an inscribable surface? The reading bhāvatkare (bhāvalkale?) of the Hodgson MS. is equally puzzling. The reference of the fifth alternative to memorizing seems clear from its version in the gigantic roll and the Hodgson MS. That version, however, is the
_lectio facilior_, and the version in Roll 0041 seems to point rather to a fifth kind of writing material, but what that material might be I am unable to suggest. It seems possible that the name of paper should be _kāganta_ or _kāgata_, the existing reading _kāya-ganta_, or _kāya-gata_, lit. "gone into the body", being erroneously due to the following phrase _kānta-gata_, or "gone into the throat", the well-known Sanskrit idiom for "committed to memory".