Transliteration Map

DEVNAC font

(Hindi, Marathi, Sanskrit)

itrans

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1 Fonts Available

1.1 TEX Interface

The devanagari font is called *devnac*, and its PostScript description resides in the file *devnac.ps*. It is a user-defined type III PostScript font. Four fonts, variations on the basic devnac font, are bundled with the itrans package. Their names (in the TEX interface) are dnh, dnho, dnhrc, and dnhre.

dnh This is the basic devanagari font. There are some other fonts available, derived by transforming this font.

dnho This is the slanted version of *dnh*.

dnhrc Both *dnho* and *dnh* look extremely heavy. A scaled down, compressed version (along the x-axis) of the basic font is available as *dnhrc*.

dnhre This is heavier than *dnh*, to be used as a bold version.

Since these are PostScript fonts, you can use them at any font size in your document. In fact, the font size must be specified when loading in the font. In this document (and in idoc.itx), the following line was used for loading the font:
`\newfont{\devnf}{dnh at 15pt}`.

Even though this document has been typeset using a 11 point size, the devanagari font is loaded in at 15 point size. This is just to emphasize the devanagari characters. Normally, I would suggest loading in the font at 15-20% greater size than the other text in the document. So, if your document is being typeset at 11 point, load in the devanagari fonts using a 13 point size. Of course, this relation of size is important only if you wish to mix english and devanagari in the same document. In any case, go wild, experiment with various font sizes. Since the characters are described as outlines in bezier curve form, smaller point sizes do not look too good on a 300dpi output device, the larger the font size, the better the shapes look.

1.2 Dumb Textual Interface

This interface does not offer any wordprocessing capabilities other than that of checking when a page is complete, and then resetting the current point to the top of the next page. Thus, all spaces, lines, etc from the input text appear in the output too.

The user may also directly invoke PostScript commands to create various versions of the font, as required. Refer to PostScript language manuals for specific help regarding the PostScript font manipulation commands. If you decide to go this route, take a look at the file *itrans.pro*, it is the prologue that gets sent to the printer. It contains definitions of various commands such as *normalfont*, *slantfont*, *compressedfont*, etc, which may be used to change the font being used. These PostScript functions take a single argument: the font size to use. All this and more information can be obtained from the prologue file, *itrans.pro*, and PostScript users should take a look at it. For example usage, look through the sample input files provided. Files ending in *.ips* are the direct PostScript input files, itrans (with the -P option) directly produces PostScript output for these files.

The file *devnac.ps* may also be useful, it contains the PostScript language definitions of this devanagari font.

2 Sanskrit (or Hindi) and Marathi

Two IFM files are provided with with this font. (You can use either with any of the four font variations described above—dnh, dnho, dhnrc, and dnhre).

The first IFM file is called *dvnc.ifm*, and is meant to be used for text that has to be printed out in Sanskrit or Hindi.

The second IFM file is called *mdvnc.ifm*, and is meant to be used for text that has to be printed out in marathi.

The only difference between mdvnc.ifm and dvnc.ifm is in the treatment of *ra-<consonant>* ligatures. The marathi file uses the marathi form of ra-half, while the dvnc.ifm file uses the hindi form.

Note that both the IFM files may be referenced in one input file, as is done in theis file (*devn.itx*).

Examples using dvnc.ifm: `rka`→**र्क**, `rki`→**र्कि**, `rgii`→**र्गी**.

Examples using mdvnc.ifm: `rka`→**र्क**, `rki`→**र्कि**, `rgii`→**र्गी**.

3 Known Problems

In the TEX interface, characters with any non-zero Y offset are not correctly printed in some cases, when the PostScript font Devnac is used. One such case is the da-ra ligature, words such as *draaviiDa* (द्रावीड). Note that it is only in certain cases that the word is printed incorrectly, in most cases it is handled correctly. Usually, when the word appears near the end of the line, TEX (or dvips, I'm inclined to think it is dvips) inserts a negative kern just before the character with a non-zero Y offset, and the word appears squashed up at that point. Have no remedy for this, only workaround is to force a line break before the problem word, it usually sets everything right.

I have never encountered this problem when using Frans Velthuis's Devnag font with the itrans package, therefore this problem is probably related to the use of PostScript fonts in TEX.

4 Font Developer

This font has been created by Avinash Chopde.


```
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```

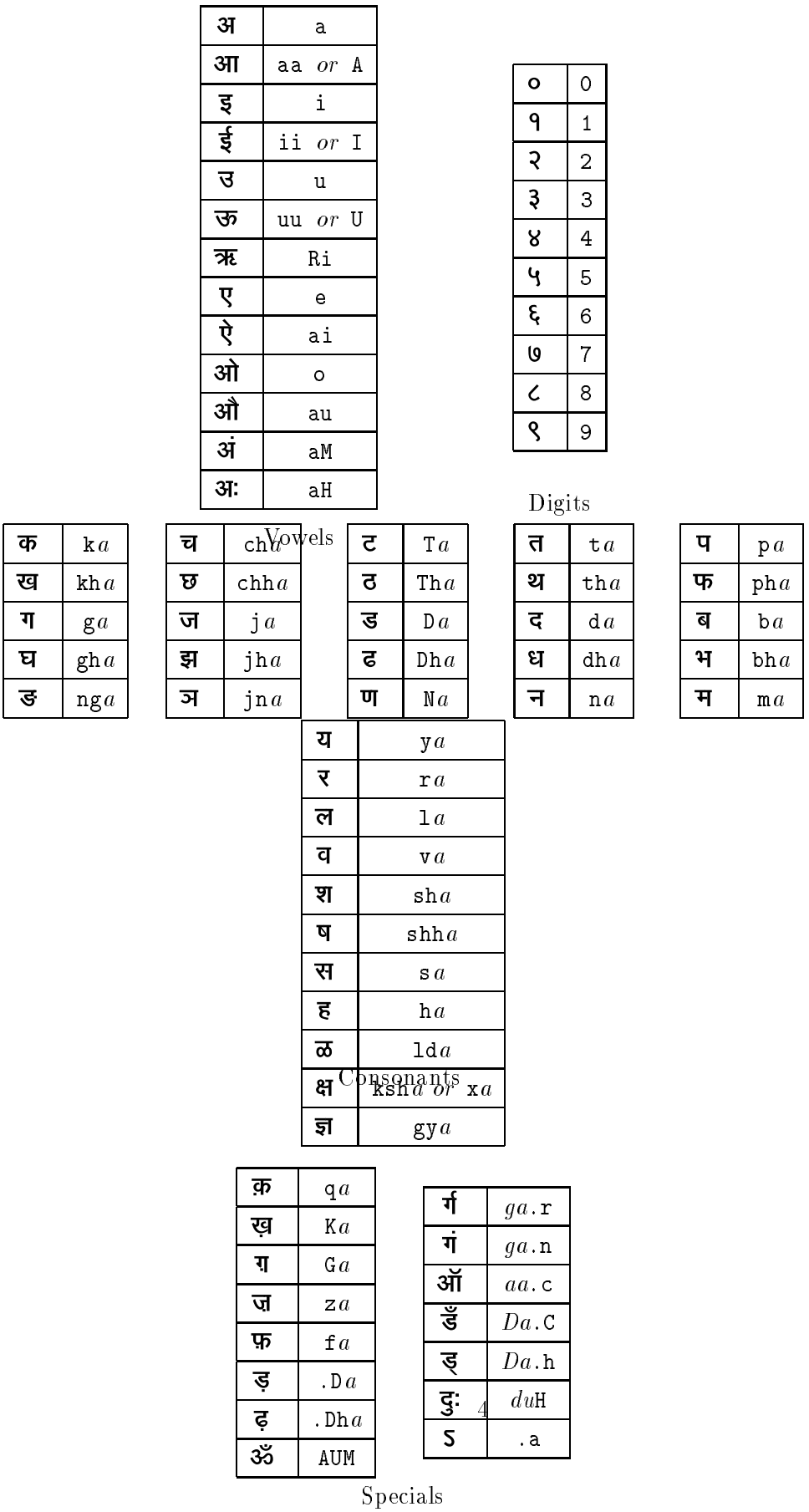

Figure 1: **Marathi to English Transliteration Table.**

क का कि की कु कू	ka kaa ki kii ku kuu
स सा सि सी सु सू	sa saa si sii su suu
खृ खे खै खं खः खॅ खँ	khRi khe khai khaM khaH kha.c kha.C
डे डै डं डः डॅ डँ	De Dai DaM DaH Da.c Da.C

Sample Letters

भाग्य	bhaa{g}ya
राज्य	raajya
विद्या	vidyaa
शिष्य	shishhya
मुख्य	mukhya
गाड्या	gaaDyaa
त्याग	tyaaga
ध्यान	dhyaana
न्याय	nyaaya
श्याम	shyaama
ज्योत	jyota
मनुष्य	manushhya
चांदण्या	chaa.ndaNyaa
अभ्यास	abhyaasa
कल्याण	kalyaaNa
घड्याळ	ghaDyaalda
कच्चा	kachchaa
खड्डा	khaDa.hDaa
गठ्ठा	gaTha.hThaa
धक्का	dhakkaa
पत्ता	pattaa
तिप्पत	tippata
पन्नास	pannaasa
सज्जन	sajjana
पुस्तक	pustaka

कस्तुरी	kasturii
नास्तिक	naastika
प्राप्त	praapta
स्वतंत्र	svata.ntra
स्वातंत्र्य	svaata.ntrya
ध्वनी	dhvanii
गोष्ट	goshhTa
युद्ध	yuda.hdha
युद्ध	yuddha
पश्चिम	pashchima
फक्त	phakta
तर्हा	tarhaa
अर्थ	atha.r
कर्ता	kataa.r
गर्दी	gadii.r
निर्णय	niNa.rya
पत्र	patra
त्रिकोण	trikoNa
श्रावण	shraavaNa
आश्रम	aashrama
शुश्रूषा	shushruushhaa
ग्रंथ	gra.ntha
प्रजा	prajaa
द्राक्षे	draakshe
गृहस्थ	gRihastha
प्रकृती	prakRitii

Sample Words

Figure 2: **Examples**

नैर्ऋत्य	naiRi{\kern-0.25em}.r{\kern0.25em}tya
शुभ्र	shubhra
सहस्त्र	sahastra
क्रीडा	kriiDaa
स्वच्छ	svachchha
स्वरूप	svaruupa
ट्रक	Traka
आम्ही	aamhii
चतुर्थी	chatuthii.r
ऋतू	Rituu
ऑक्तोबर	aa.cktobara
नोव्हेंबर	novhe.nbara
ग्रॅम	gra.cma
ऊँचा	uu.Cchaa
बैलगाडी	bailagaaDii
गुरुद्वारा	guruda.hvaaraa
गुरुद्वारा	gurudvaaraa
निराळ्या	niraaldyaa
ज्ञान	gyaana
मेकॅनिक	meka.cnika
म्हैस	mhaisa
देणार्या	deNaaryaa
प्रतिष्ठा	pratishhThaa
इतिहास	itihaasa
आस्थाबद्ध	aasthaabaddha
अंतर्राष्ट्रीय	a.ntaraa.rshhTriiya

Figure 3: **Examples**