AroSgaon (More SGAON) 2.1

Muhammad Masroor Ali (masroor@human.is.kyushu-u.ac.jp)

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1 Introduction

The bangla font *sgaon* was developed by Anisur Rahman and it has found application in various packages including itrans (©Avinash Chopde). Perhaps it was the first and only bangla font in public domain. But the sgaon font lacks some essential characters. The absent members comprise of notable ones like ঔ, ্য, ৎ *etc* plus some not so notable ones.

I created font arosgn out of personal need. The name arosgn roughly translates to more sonargaon.

Before you proceed further, please be warned that we presume that you have itrans installed in your system. This font set was created merely as a complement of the sgaon font. You need to use the itrans package for transliteration of Roman characters. But again, if you want to see what is in arosgn without using itrans, go ahead. Itrans is not necessary for arosgn. Simply restrict yourself to the macros defined in arosgn.sty (described in section 3).

Itrans is available from `ftp://chandra.cis.brown.edu/pub/itrans-4.0` plus a number of FTP sites.

Recently, a commercial version of the sgaon font has been released, with all the characters present in various sizes and styles. The original free version is still available at a considerable number of sites, simply ask archie to look for `sgaon.zip`. The latest version of itrans comes equipped with the necessary `bn*.???pk` files, so if you have successfully installed itrans, you do not need `sgaon.zip`.

All the font files and other necessary files are present in the arosgn2.1 archive. You can get it from the CTAN sites. Ask archie for details. If you do not have ftp access, please send me a note, I will be happy to mail you a uuencoded version of the tar file.

`\e`	এ
`\au`	ঔ
`\gu`	গু
`\hu`	হু
`\ru`	রু
`\shu`	শু
`\th`	ৎ
`\ya`	্য
`\yA` *or* `\yaa`	্যা
`\cb`	ঁ
`\kta`	ক্ত
`|`	।

Table 1: Table showing the commands defined and respective outputs in style file `arosgn.sty`.

2 Fonts Available

The package contains a total of three .tfm font files and nine corresponding `.pk` font files of three DPI values. `arosgnr` files are for the basic bangla font, while the `arosgnc` and `arosgns` ones are the compressed and slanted versions respectively. These `.pk` files were generated for a OKI Microline printer. So if they do not fit your printer, please generate new pk files using METAFONT from the `.mf` files in the `mf`

`\e\gu lo ki axar`	এগুলো কি অক্ষর
`{\bngls\e\gu lo ki axar}`	*এগুলো কি অক্ষর*
`\cb chaadera haasira \cb baadha bhengechhe`	চাঁদের হাসির বাঁধ ভেঙ্গেছে
`kahe sandh\yaa rabi`	কহে সন্ধ্যারবি
`\shu nifaa jaga\th\ rahe ni\ru ttara chhabi`	শুনিয়া জগৎ রহে নিরুত্তর ছবি
`\gu\ru mashaa_i taahale \shu\ru\ karaa yaaka`	গুরুমশাই তাহলে শুরু করা যাক
`\au rangajiiba ki pada\ya likhatena`	ঔরঙ্গজীব কি পদ্য লিখতেন
`{\bnglc\au rangajiiba ki pada\ya likhatena}`	ঔরঙ্গজীব কি পদ্য লিখতেন

`\hu jurera \hu kuma, \hu juga tulabena`
`naa, aara \gu jabe kaan deben naa,`
`kokilera ku\hu taana \shu nuna`
	হুজুরের হুকুম, হুজুগ তুলবেন
	না, আর গুজবে কান দেবেন না,
	কোকিলের কুহুতান শুনুন

`\e i baake\ya ra sheshhe \cb daaRi aachhe|`	এই বাক্যের শেষে দাঁড়ি আছে।
`{\bngls\e i baake\ya ra sheshheo aachhe|}`	*এই বাক্যের শেষেও আছে।*

Table 2: Examples of bangla texts using intermixture of sgaon and arosgn font.

subdirectory.

3 TeX Interface

Style files `sgaon.sty` and `arosgn.sty` has been developed for using the characters in arosgn. Please refer to Table 1 for commands available. You don't need to worry about the font style (normal, slanted *etc*) chosen by these commands. They are intelligent enough to detect the current style being used for sgaon and use the same for arosgn. When these commands are used outside the range of `#bengali`–`#endbengali`, normal style is used as a default.

4 Installation

Installation of arosgn is fairly simple,

1. Copy files `sgaon.sty, arosgn.sty` to any directory searched by LaTeX for input files.

   For Unix users, displaying the value of environment variable TEXINPUTS will be helpful.

2. Copy files `arosgn*.tfm` to any directory searched by LaTeX for font files. (Environment variable, TEXFONTS).

3. Copy files `arosgn.*pk` to any directory searched by xdvi (environment variable, TEXFONTS) or the previewer you use. DOS users need to change the files extensions from `nnnpk` to `pk`.

4. If you are going to use dvips/dvi2ps, copy the pk files to any directory searched by them for font files. There is a very high probability that this step will not be required, since usually the search path are the same as that for the previewer.

If you are not sure of all these jargon, simply copy all the above files to the directory where you put the .itx file, and issue the LaTeX compile, xdvi/preview *etc* from that directory.

Most of the applications are always taught to search the current directory for necessary files.

5 Usage

If you have sgaon fonts and itrans installed in your system, use `sgaon` and `arosgn` as the optional arguments of `\documentstyle` or `\usepackage` (for LaTeXϵ) in the `.itx` source file. Please remember that the suggested order (`sgaon` first and then `arosgn`) is important. Then use itrans and LaTeX as usual.

If you are yet to install sgaon fonts and itrans and want use arosgn on a stand alone basis, use `arosgn` as the optional argument of `\documentstyle` or `\usepackage` (for LaTeXϵ) in the `.tex` source file. Then use LaTeX as usual.

Sample files can be found in the `samples` subdirectory. Please follow instructions given in the header comment lines to use these files.

Table 2 shows a number of bangla text lines using both the fonts sgaon and arosgn. When you use the macros for arosgn, please keep in mind that a TeX command gobbles any space following it. So if you really need a space after, say যা, either put the command `\yaa` inside braces followed by a space, or put a slash followed by a space after the command.

6 Legal Matters

The arosgn fontset and accompanying style files and introductory document file, hereafter called the package, are being distributed free for public use with the express understanding that,

1. The developer of the package in no way can be held responsible for any resulting mistakes, expenditure, or outcome of any form.
2. You may copy and re-distribute the package so long as you do not charge any fee, and re-distribute the package as a whole without any portion removed or added or modified.
3. You may bundle the package with any other software you like, so long as that software is distributed free for public use, and so long as the package is not changed or mutilated in any way, and so long as whole the package is included, and so long as the name of the package and its developer is clearly mentioned in an introductory article accompanying the aforementioned software.
4. No permission will be required for including the package to a software, but a mail informing the matter will be appreciated.

7 Final Words

The fontset was developed in haste solely out of personal needs. In no way it is a *polished* product. Sometimes extra spaces may appear between character between a sgaon character and a arosgn character (the original sgaon font is not free from this defect). You may notice that with respect to appearance, matching between the 300 DPI font supplied with the itrans package and 300 DPI arosgn fonts is the best. So while using xdvi, dvips or dvi2ps resolution selection options may become useful. Fonts at other DPI values can also be fine tuned for proper matching, but I am too busy for carrying out such a huge matchmaking task. Hope I can find some free-time in near future.

Please direct all comments, suggestions and reports to masroor@human.is.kyushu-u.ac.jp.