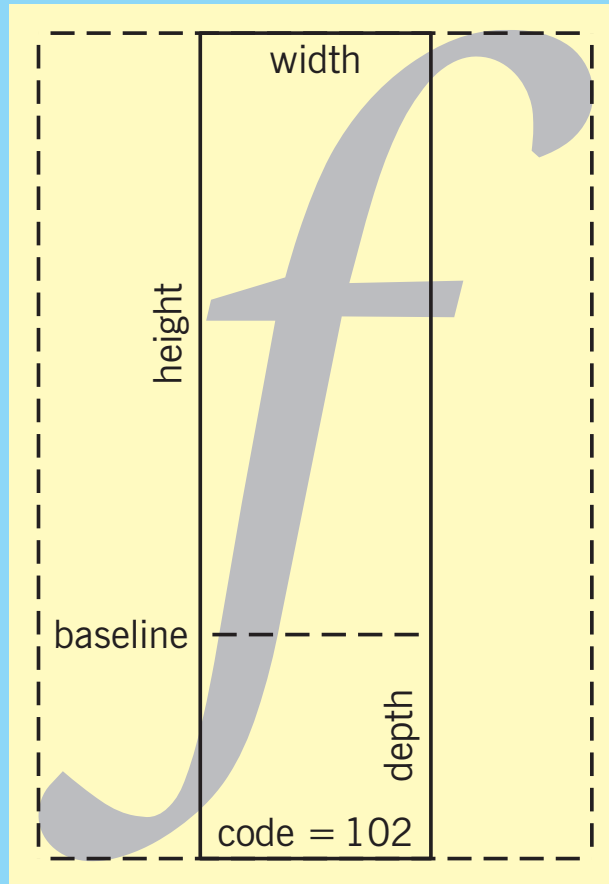


# How to compensate for side bars?

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## Nominal dimensions



**HINDI**

**HALLUCINATION**

**HINDI**

**HALLUCINATION**

Nominal dimensions  
are not necessarily adequate



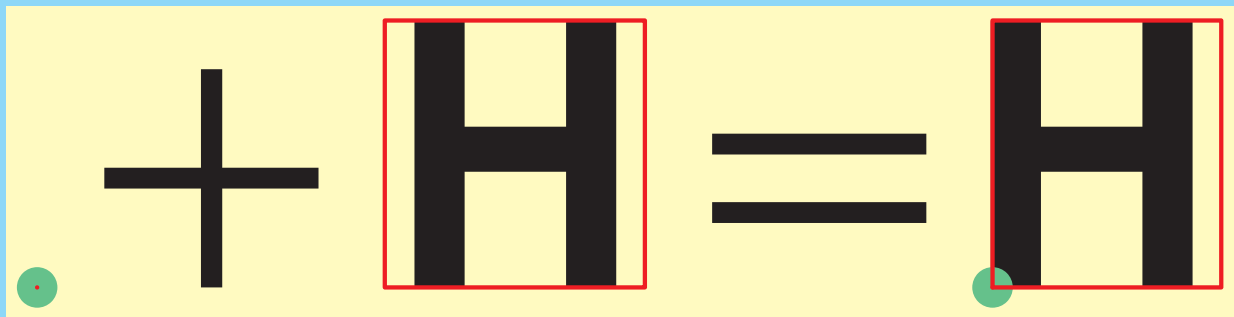
## So, how to compensate for side bars?

The solution has been suggested  
a year ago by Adam Twardoch:  
introduce a dummy character  
and employ the implicit kern mechanism



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**This solution works well with fonts  
created using METAFONT:**

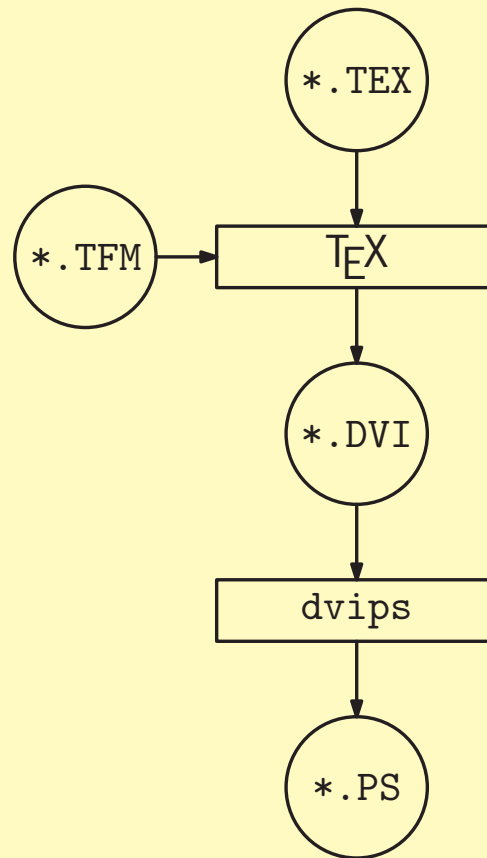
All appropriate kern pairs are  
easy to generate, unless  
the METAFONT program  
is extremely clumsy



## The troubles arise if one tries to apply Twardoch's idea to POSTSCRIPT fonts:

What to do with a dummy character?  
On one hand, it is a bad custom to modify a POSTSCRIPT font in order to extend it by a dummy character;  
on the other hand, it is inconvenient to have a dummy character in a \*.t<sub>f</sub>m file but not in a \*.pfb (\*.pfa) file

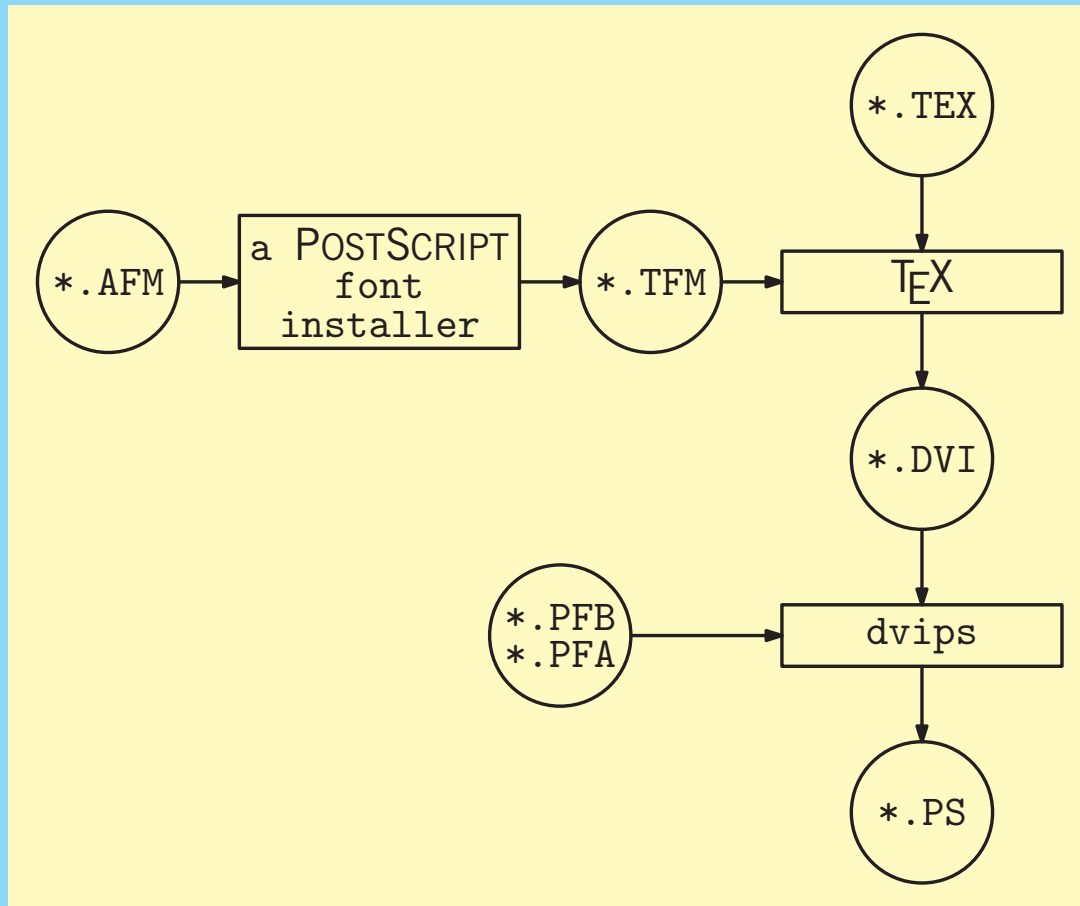




TeX does not consider the shape of a character; only the metric information stored in a \*.tfm file is taken into account

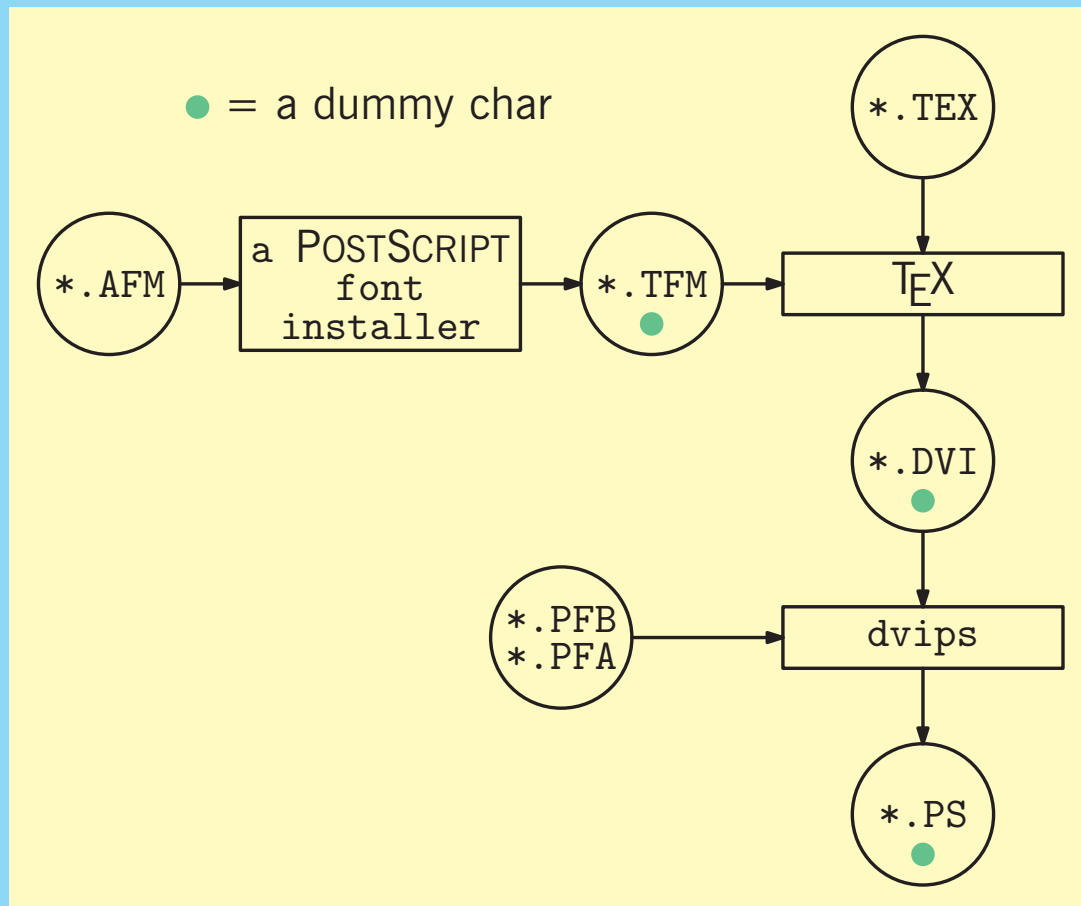






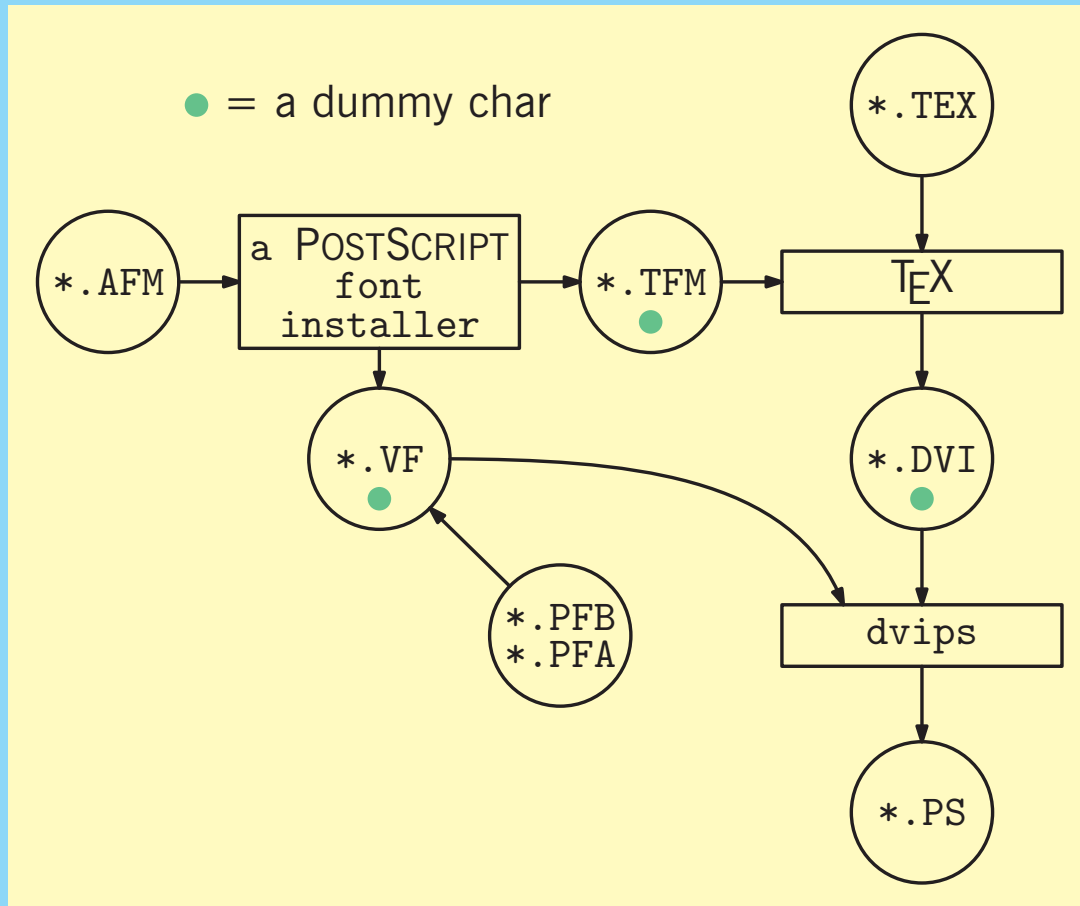
In order to make a POSTSCRIPT font usable with  $\text{\TeX}$ , `*.tfm` files should be generated out of `*.afm` ones





A dummy character added by a font installer migrates to the resulting POSTSCRIPT file, unless the  $\text{T}_{\text{E}}\text{X}$  code is clever enough





The adequate remedy to the “dummy char” problem is to use virtual fonts



## So, again, how to compensate for side bars?

1. Either modify an `*.afm` file (i.e., add a dummy char and appropriate kern pairs) or use the TOIL tool with an option `-b`:

```
a2t ... -b<character code>
```

(add a dummy ‘boundary’ character)

2. Generate an appropriate virtual font either manually or using a simple tool (available from BachoT<sub>E</sub>X archive)
3. Use the following phrase in a T<sub>E</sub>X document:

```
\char128 HINDI\char128
```

where (for example) 128 is the code of a dummy character



