

## Bernd Raichle

Plain TeX's accent macros revisited

### Sample output using Plain TeX's accent macros.

Here is the output when Plain TeX's accent macros `\AA`, `\c`, and `\b` are used with various glyphs from different upright and slanted fonts.

```
cmr:  Å  ç Ç ı T g G , j p y  o g O j q p y
cmcsc: Å  ç Ç T T G G , J P Y  O G O J Q P Y
cmit: Å  ç Ç ı T g G , j p y  o g O j q p y
cmsl: Å  ç Ç ı T g G , j p y  o g O j q p y
```

### Revised macros using the `\accent` primitive.

The following re-implementation does not use `\halign` but the `\accent` primitive to position the accent glyph.

```
\def\AA{{\dimen@ 1ex%
  {\setbox\z@\hbox{A}\dimen@\ht\z@ \advance\dimen@-.35ex%
  \fontdimen5\font\dimen@}\accent'27\fontdimen5\font\dimen@ A}}

\def\c#1{{\dimen@ 1ex%
  {\setbox\z@\hbox{#1}\dimen@\ht\z@ \advance\dimen@\dp\z@
  \fontdimen5\font\dimen@}\accent24\fontdimen5\font\dimen@ #1}}

\def\b#1{{\dimen@ 1ex\setbox\z@\hbox
  {\setbox\z@\hbox{\char22}\dimen@\ht\z@ \advance\dimen@ .25ex%
  \setbox\z@\hbox{#1}\advance\dimen@\ht\z@ \advance\dimen@\dp\z@
  \global\dimen@i\dp\z@ \global\advance\dimen@i .45ex%
  \fontdimen5\font\dimen@}\accent22\fontdimen5\font\dimen@ #1}%
  \dp\z@\dimen@i \box\z@}}
```

### Sample output using the revised macros.

Here is the output using the new definitions.

```
cmr:  Å  ç Ç ı T g G , j p y  o g O j q p y
cmcsc: Å  ç Ç T T G G , J P Y  O G O J Q P Y
cmit: Å  ç Ç ı T g G , j p y  o g O j q p y
cmsl: Å  ç Ç ı T g G , j p y  o g O j q p y
```

Do you see the differences? How is `\accent` used to achieve this effect?