

11 July 2006

Dear Mr Washburn,

To put your question about small caps in context, it might be useful to remember that very few of the world's writing systems have evolved a bicameral system (upper and lower case), and fewer still have evolved the additional complication of small caps. The classical languages which underpin European scribal and literate culture – Greek, Latin, Hebrew – were all unicameral (one case only), so they supply no models of usage. Writing with caps and lower case is a Romanesque invention; small caps are a Renaissance addition. So if you want a historical answer to the question “how to use small caps,” Renaissance Italy is the first place to look.

It's also good to keep in mind that there are many inconsistencies in the use of caps, never mind small caps, in the cultures where they occur. You can make any rules you like, but you shouldn't expect that people will follow them. The “rules” – i.e., shared habits – of capitalization in English have changed considerably over the past two centuries and may of course change further.

I have no objection myself to starting a sentence with small caps. The reasons for this are (1) I think it looks better than any of the alternatives, and (2) the best typographers of the Cinquecento did it. If I could improve on their practice in this respect, I would happily do so, but I can't.

I also don't object to capitalizing a word in small caps at the beginning of a sentence, if it is *indeed a word* instead of an acronym. (NATO, for this purpose is a word, because we pronounce it as such; IBM is not, because we pronounce it as a string of letters. If you want to begin a sentence with NATO rather than nato, I won't complain; but I would complain if your sentence began with IBM instead of iBM or with OECD instead of oECD. Under these conditions, the only obvious reason to prefer NATO to nato at

the beginning of a sentence is consistency between verbal and literal acronyms.)

EULER, *etc*

Zapf's Euler is a wonderful piece of design, but the fonts are badly manufactured. Text figures do indeed exist (1234567890), but they are packaged with the Fraktur, not with the normal Latin letters. There are no kerning tables. Some of the basic character slots are inexplicably empty. The Greek character set is unfinished. The width values assigned to some characters are wrong. Making a good set of Euler fonts from the raw materials issued by the AMS requires considerable patience. It would be highly beneficial, it seems to me, for the AMS to sponsor someone like John Hudson to make a well-kerned and complete OpenType version of Euler.

SEMANTIC USE OF TYPEFACES

For certain classes of texts, I'm entirely in favor. Like any good idea, this one can be carried to ludicrous extremes, but it remains a perfectly good idea in principle. In novels and narrative histories, it is frequently desirable to stick with a single typeface, or at least with a single family. In critical and technical writing, typographic coding of different classes of information is usually a boon. Whether, in a computer science text, program fragments should be set in a monospaced font or in a proportional sanserif is of course a design issue, to be decided case by case, not by blanket caveat, but distinguishing them from the ambient text is probably always useful. In some kinds of writing, this is doubtless also true for mathematical expressions. But there are other texts in which the math is really part of the narrative, and typographic continuity would be preferred.

GUILLEMETS & LIGATURES

In my opinion, if you like guillemets you should use them. As you know, there is no shortage of people who will tell you otherwise. I don't feel the

same enthusiasm for concocted ligatures – nor even for revivals of earlier scribal ligatures. Where they are actually needed (as in meticulous bibliographical transcriptions) unfamiliar ligatures should certainly be used. And the playful ligatures available in faces such as Mrs Eaves should be used when play is the object. Isolated inventions such as the Andralis *qu* ligature, on the other hand, serve no purpose that I know of except to slow down reading.

If you spend some time with a script such as Arabic, or chancery Greek, in which ligatures play a more complex, crucial role than they do in any surviving form of Latin script, you'll get a feel for their value and function. They originate in scribal practice, and they survive in the typographic domain when they meet a continuing need. Monotype "Garamond" (Jannon) italic needs, and therefore has, a *gy* ligature, which other faces do not, because of the way these particular letters are formed in this particular face. It would have *gf* and *gfi* ligatures too, if Jean Jannon, or his Monotype understudies, had foreseen a need to set names such as *Youngfox* and words such as *dogfish*. And there may be a typeface that actually needs a *qu* ligature, but if so, I have not seen it.

One ligature that has become ubiquitous lately is the *Th* lig found in all the Adobe Original fonts. This is visually digestible enough to cause no problems in reading, but I object to it's being included in the default ligature set, especially in such faces as Adobe Jenson and Adobe Garamond, because it is an anachronistic intrusion. There are no *Th* ligatures in Renaissance typography – so what does it accomplish to add such a ligature to a Renaissance revival typeface?

OTHER MEDIA

There are medieval manuscripts written in gold on indigo vellum. The notion of shiny letters on a dark field goes back at least that far. But those manuscripts were not made to be read; they were made to be admired.

Short texts are useful media for experiment. If you like 35 mm slides or Powerpoint frames with white or transparent text on a black background, fine; use them. No one, to my knowledge, has found it productive to print

book-length texts that way, nor have I ever met a person with good eyesight who prefers reading a screen to reading good black type on off-white paper.

IBM now makes a 22-inch monitor with a resolution of 204 dpi – but makes almost no attempt to sell it. At the same time, serious marketing campaigns are waged on behalf of 46-inch screens with a resolution as low as 34 dpi, costing half again as much as the smaller screen with six-times better resolution. Evidently our corporate godfathers think size, not refinement, is what we'll buy. But whatever the resolution, a radiant page remains more tiring to read than a reflective page of similar precision. Maybe one day soon someone will build a monitor on which it is comfortable to read the full text of *Ulysses* and *Finnegans Wake*. My guess is that the letters on that display will be more or less black and the background will be more or less off-white – but I could be wrong. We'll see.

It's true, as you say, that an unplugged monitor is nearly black. But why take that as a standard? Text never appears on the monitor until the power is turned on – and there's the problem, isn't it? With existing monitors, we have to power *the whole screen*, not just the letters.

Best wishes,
Robert Bringhurst