Warnings

TeX's infinite glue is projective

Donald Knuth

TEX wizards might be interested in a phenomenon that could be considered an anomaly, but I choose to declare it a "feature." Consider the two boxes

\hbox to 100pt{\hskip Opt plus -100pt} \hbox to 100pt{\hskip Opt plus -1fil}

The first box is considered underfull, with a badness of 10000, because the total stretchability is negative. But the second box is perfectly fine, with a badness of 0, because the total stretchability is infinite. If you are tracing, the boxes are

\hbox(0.0+0.0)x100.0, glue set -1.0
.\glue 0.0 plus -100.0
\hbox(0.0+0.0)x100.0, glue set -100.0fil
.\glue 0.0 plus -1.0fil
within TFX's gullet.

References

- [1] The T_EXbook , page 97, although the case r < 0 isn't explicitly mentioned there.
- [2] TEX: The Program, sections 186, 646, 658, 659, 664, 665, 673, 676, 796, 852, 1007.

♦ Donald Knuth Stanford University