

Cartographic Techniques for GIS Users

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Think for print.

Planning saves paper.

How to “unlearn” the limitations of the medium?

Imitate pre-GIS techniques.

Avoid the default styles.

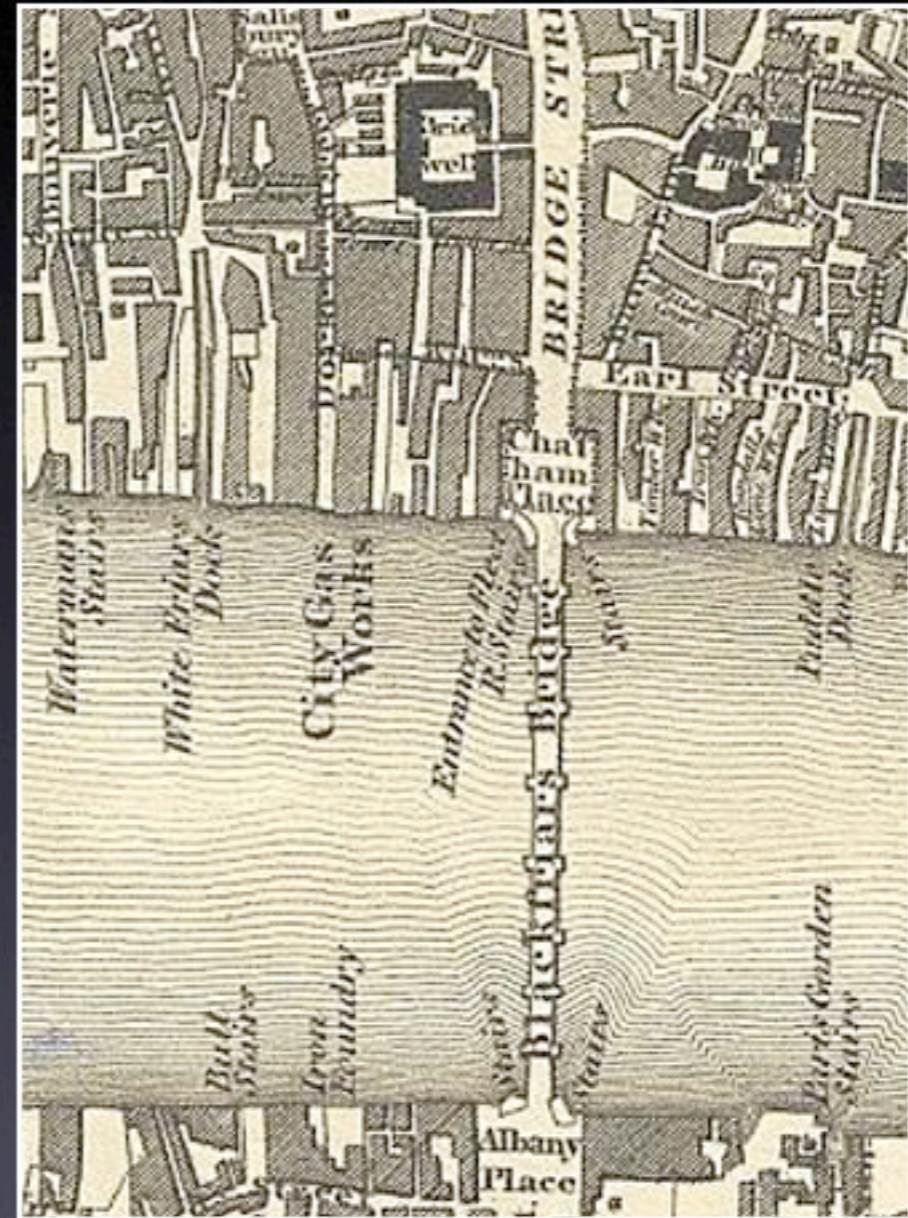
Account for difference in printed version.

Use a style library.

It's much easier to avoid the defaults when you have your own styles defined.

Old tricks are good ones.

GIS tools can reproduce effects like river hatching and 2-sided shading.

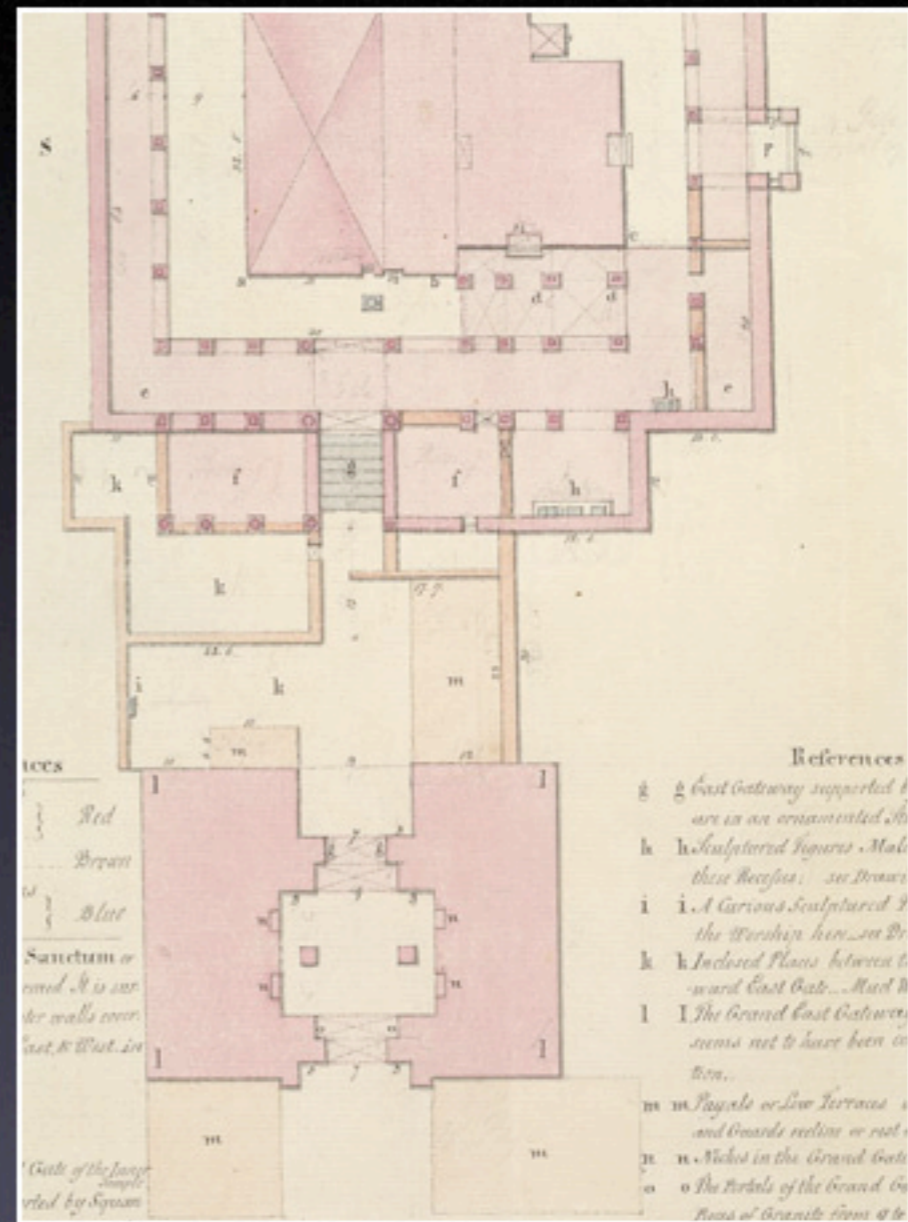


Source: Greenwood's map of London

Graphic hacks:

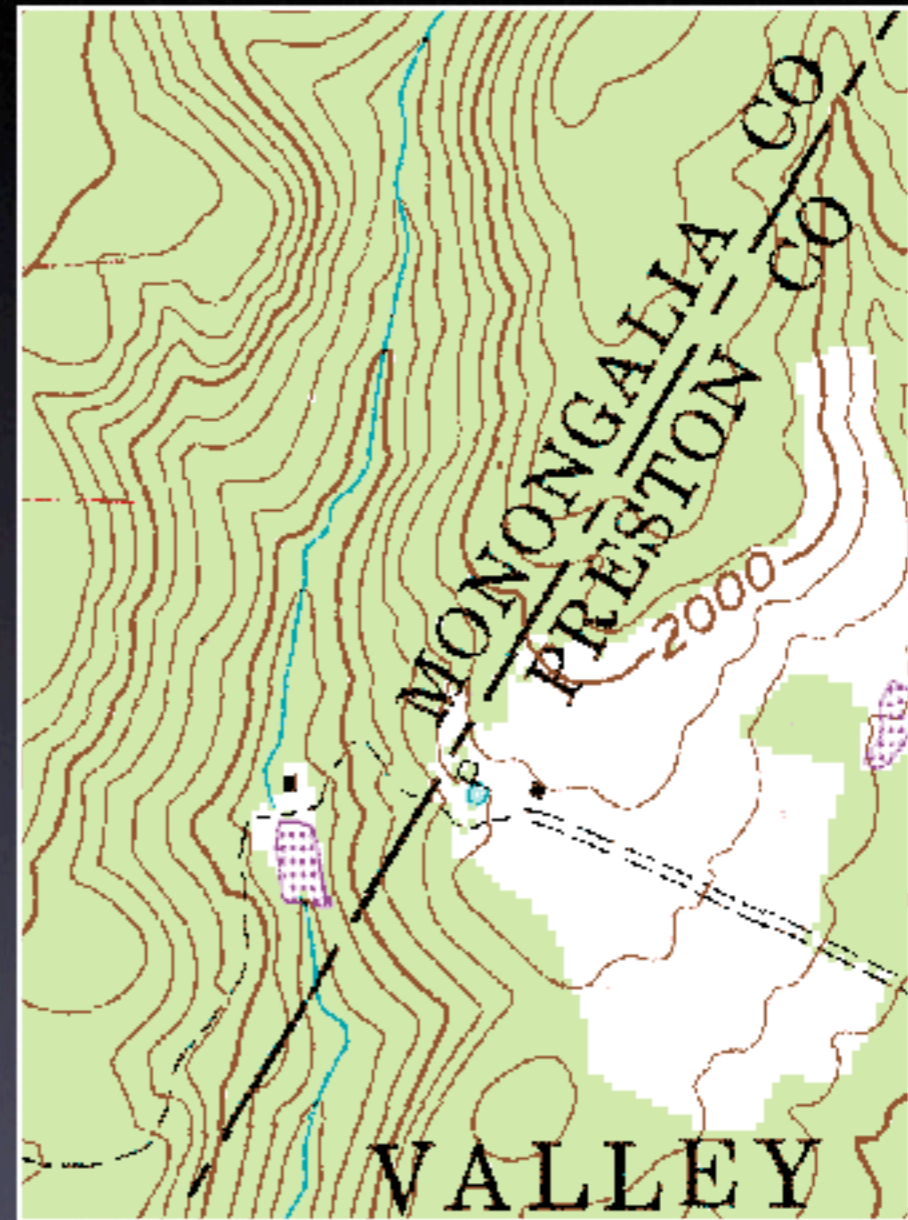
Buffer shorelines to create river engraving lines.

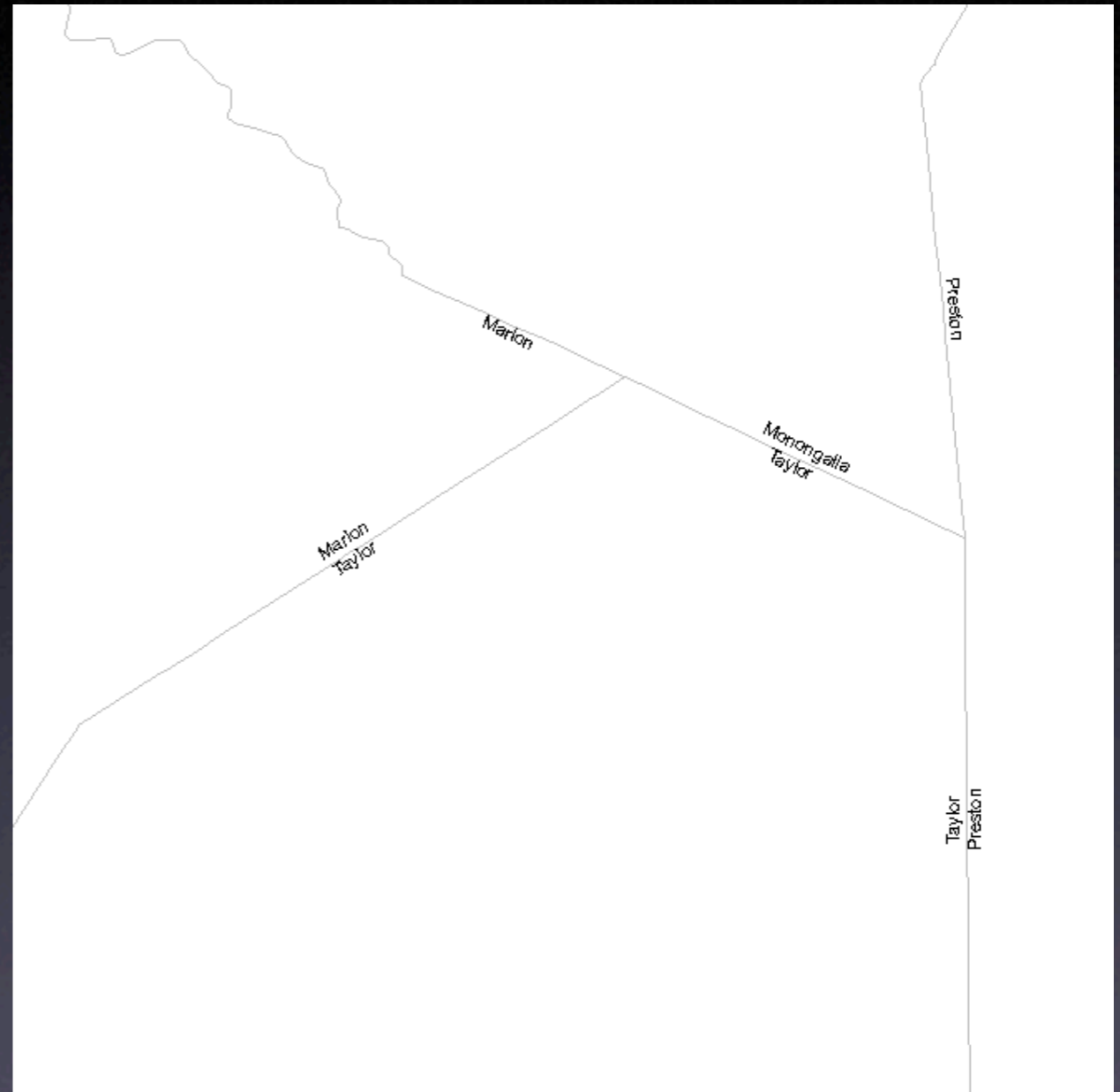
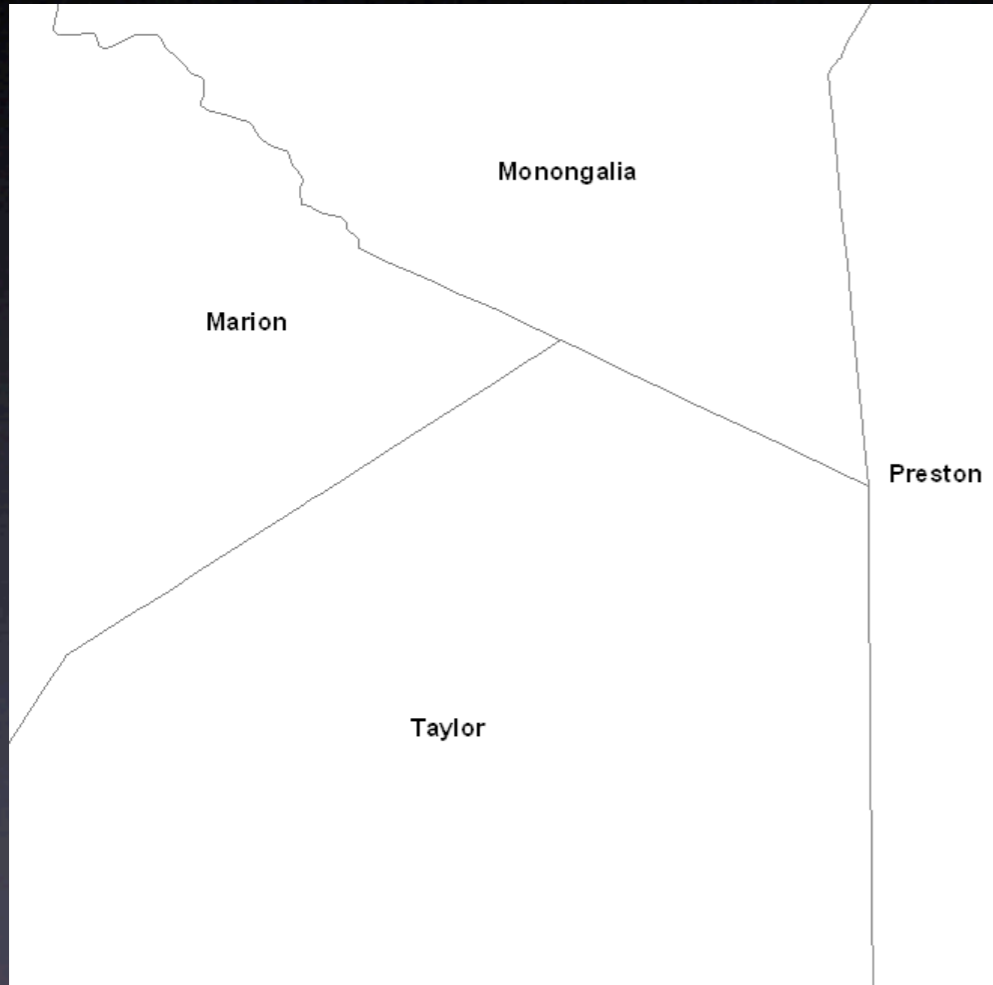
Copy and offset polygons to create the effect shown here.



Label boundary lines, not areas.

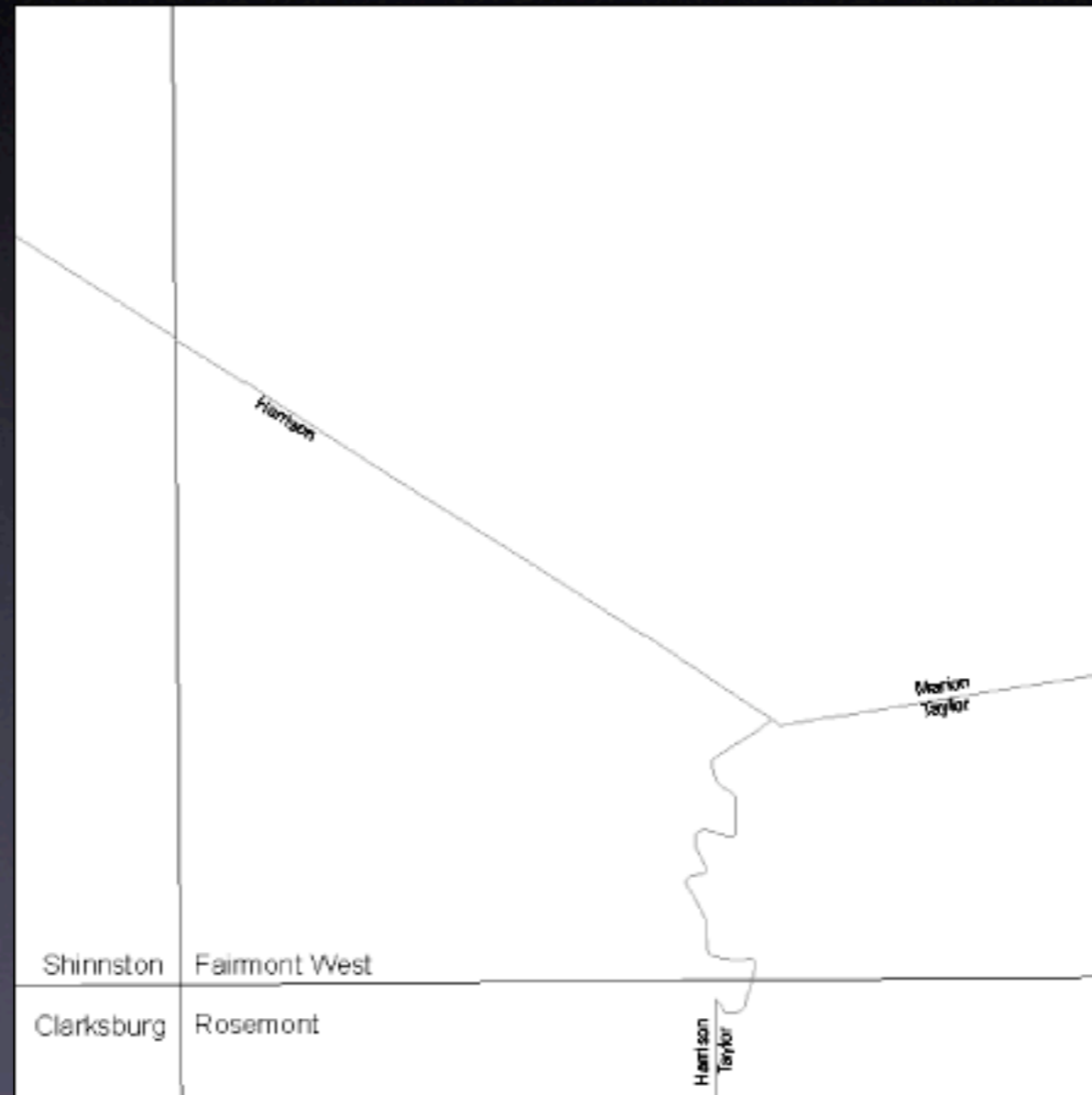
Example: USGS quads label state
and county boundary lines, but
tax districts are labeled as areas.





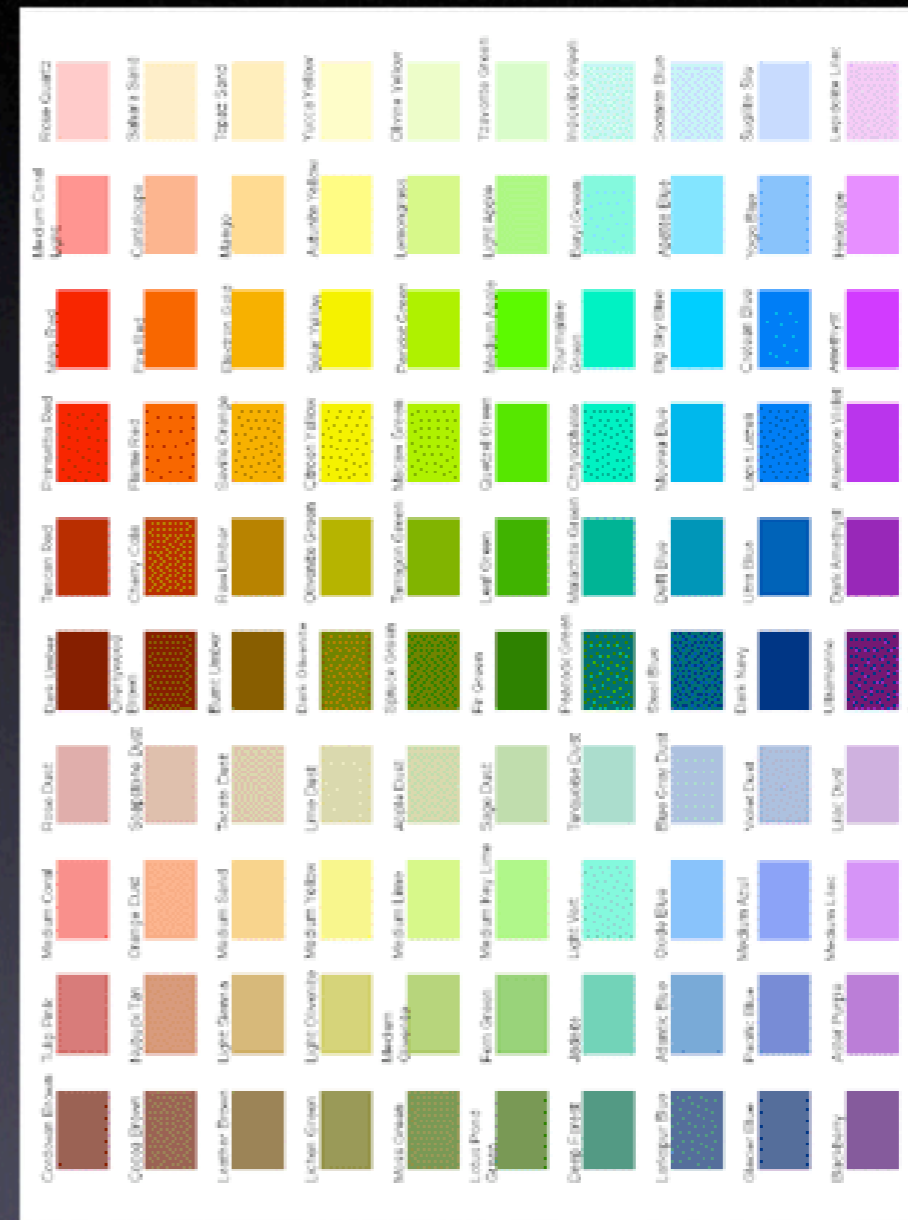
You can download line features and layers from mwfrost.com.

Label quad corners instead of areas.



Colors will always print differently.

Plot a color chart for each
plotter.



Generated using Style Dump developer sample

Test different type sizes for readability.

Make an “eye chart” or use
mine.

AaBbYyZz TNR

AaBbYyZz TNR 12pt

AaBbYyZz Arial 12pt

AaBbYyZz Arial 6pt

AaBbYyZz Arial 10pt

AaBbYyZz Ari

Color

Subtlety is more than just a matter of taste.



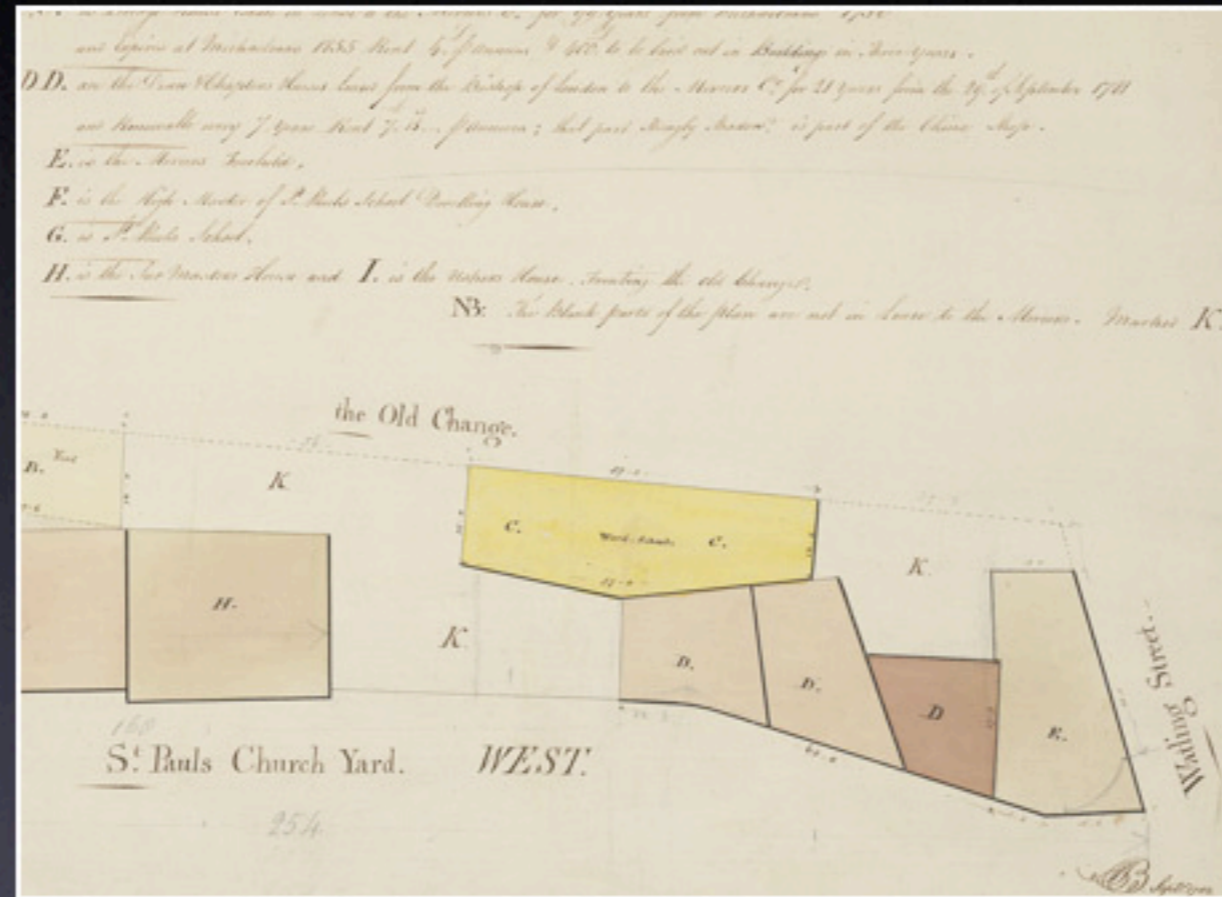
Source: Cross's New Plan of London, 1850
provided by David Hale/MAPCO

Restraint allows detailed callout.

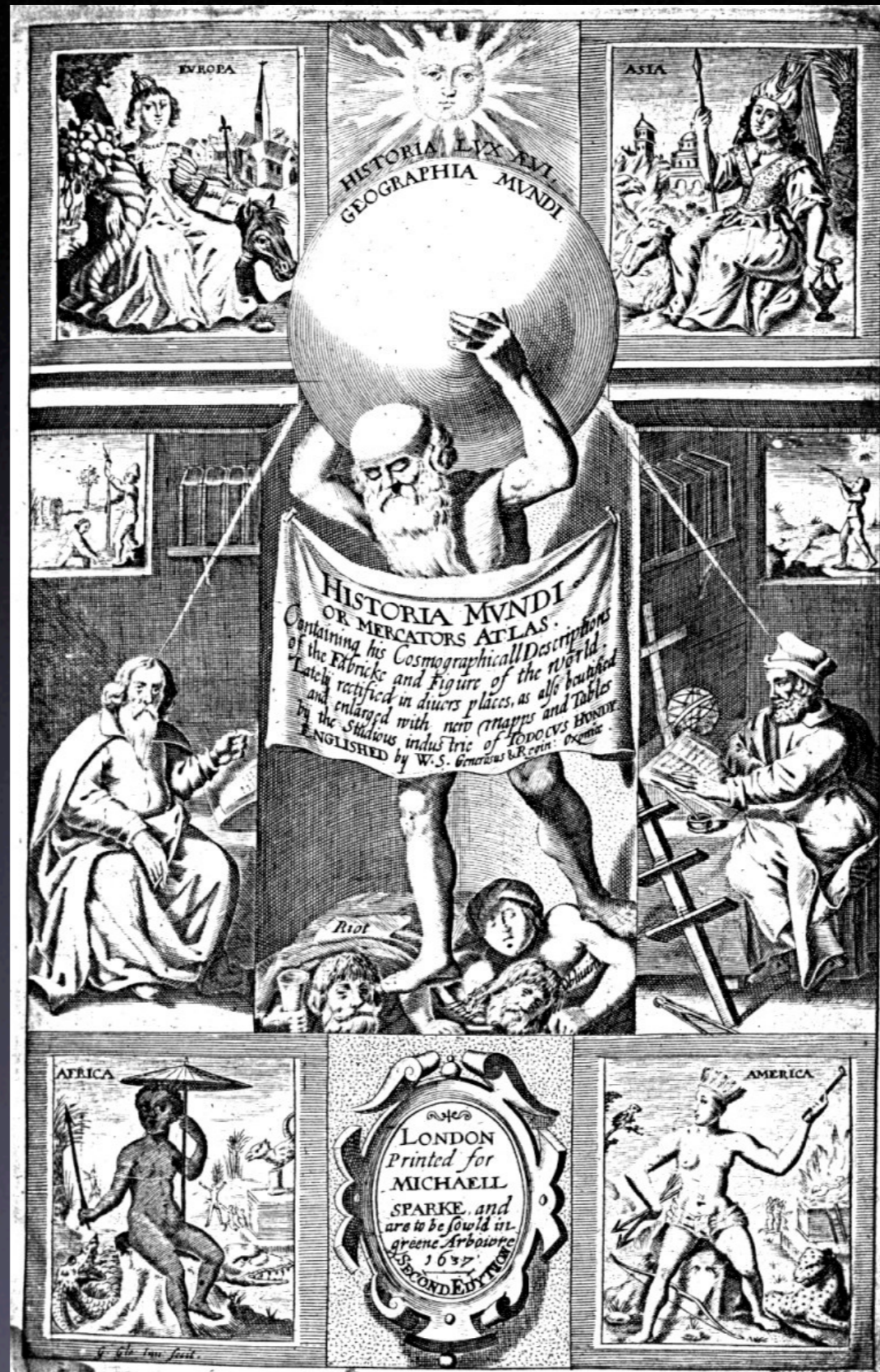
The red details are effectively highlighted because the rest of the map is muted in color.

When everything is emphasized,
nothing is.





A watercolor wash.



Resources are available for download at mwfrost.com.



<http://mma1.com>