

Digital Printing Insights #5: Evaluating and Choosing a Paper

© 2009 Michael E. Gordon

Here is installment #5 of my Digital Printing Insights. This column (so far) has been written from actual questions from my custom printer profile clients as well as questions from fellow photographers.

“Does the tone of the paper have that much effect on print color or is the problem due more to bad manufacturers profiles?”

You bet! The tone of a paper (warm, cool, or neutral) has great effect on overall print color. This should be easy enough to deduce, but all things being equal, a warm paper will produce a warmer print while a cool paper will produce a cooler print.

“Similarly, when blacks aren’t deep, is the problem more likely to be with the paper or with the manufacturers profile?”

It can be both. Some papers may not produce the Dmax (a measurement of the deepest black than an inkset/paper combination is capable of producing) that you’d like, and substandard “canned” profiles (free profiles supplied by paper manufacturers) can exacerbate this problem.

“If the latter, how do you pick a paper without a good profile? Besides color rendition, what else do you look for when picking a paper? I realize the choice of paper is largely a visceral response, but I’m interested in technical aspects I should check, for example, metamerism or bronzing.”

Nearly all name-brand papers available today are of high quality: wide color gamut, good Dmax, and good surface finishes. When used with Epson’s K3 inksets, for example, you’ll get good results with almost any paper. For this reason, I generally disregard color rendition and Dmax and instead choose a paper based almost exclusively on surface qualities. For me this means low reflectance (I’m not a big fan of smooth, glossy papers); some tooth but not too much (tooth= surface texture/roughness), and definitely no visible bronzing (the visible “bronze” appearance of pigments on paper) or gloss differential (the visible gloss difference of pure white paper adjacent to inked paper). Once you’ve selected a paper for its surface characteristics, a custom printer profile (visit www.greatprinterprofiles.com) will optimize the paper to your printer and get you the best results possible.



What are my favorite papers? I use only two: [Museo Silver Rag](#), and [Hahnemühle Photo Rag 308gsm](#). I use Silver Rag exclusively for my Epson K3 prints, and Photo Rag 308gsm for my Piezography carbon pigment prints. I have consistently used Photo Rag 308gsm for about seven years now.

If you have any questions or comments about this topic, or suggestions for future Printing Insights, I would love to hear them! Thanks for reading.