

FWIW - film, sensors and glass  
James Colwell ,  
Posted on photo.net EOS forum Jun 02, 2005; 06:10 p.m.

This is free advice and it's worth exactly what it cost - nothing (well, it cost me considerably more to start my journey into digital photography, but that's a different story).

I believe that full size 35mm digital sensors (24x36mm) will become common and affordable in the next 3 to 5 years, and so I will not be buying any APS-C sized image circle lenses. Of course, I will probably eat these words, as the EF-S 10-22/3.5-4.5 USM is developing some kind of strange allure, I only hope that I can resist long enough...

In the short term (2 to 3 years) I will continue to use 35mm colour transparency (slide) film for (i) ultra-wide angles, (ii) situations where the digital sensor can cause flare inside the lens, (iii) images with both really dark and really bright parts, and (iv) when I'm in my sea kayak on salt water. I expect that the full-frame 35mm dSLR which I plan to buy in about 3 years will solve the first three of these problems, and it will not cost as much as the 20D that I bought last fall. I will probably continue shooting B&W and IR film for as long as I can lift a camera (the SuperProgram and SMC Pentax 35/3.5 is a great combo), but I have stopped using colour negative (print) film. I will also continue shooting slides, B&W and IR on 120 roll film with my 6x7 Fuji GW670ii, for as long as these films are available. BTW, I know that colour print film is better than slides for handling problem (iii) above, but I just can't scan any more colour negs - it's killing me.

I also think that the image sensors in your typical dSLR body will not last for nearly as long as the glass in your lenses. Some day in the not-so-distant future, current dSLR users will find that their cameras need to be replaced because of aging effects on the image sensor. I don't know when it will happen, but it will (I'm guessing 10 to 15 years); and when it does, I'm pretty sure that full-frame 35mm image sensors will still be here - I'm not so sure about APS-C. Of course, many users will need new dSLR bodies before this time because of cumulative damage to the image sensor from dirt and stuff, and from trying to clean off the dirt and stuff.

We are still in the early years of digital photography. The capability of current prosumer dSLRs is good enough that droves of serious photographers are making the switch. The capability of current pro dSLRs is already amazing (see the EOS D1s MkII), and it will be astonishing in a few years. Some of the current technical problems with dSLR technology (such as sensor flare, no off-the-sensor flash metering, and saturation) are just that: technical problems for which engineering solutions are being developed. The science part was done a long time ago.

For the next 5 to 10 years (at the most), digital photography technology will continue to follow Moore's Law. Then it will take a big jump when quantum processors and holographic memory hit the shelves, right next to the computer games for which they are being developed. I expect that I will buy my first 100MPx1 full frame 35mm format camera about 20 minutes before that technology is made truly obsolete by whatever comes next...

Out of breath for now, Jim.  
[www.jcolwell.ca](http://www.jcolwell.ca)

[this posting stirred up a lot of dust, especially the parts about slide film & Moore's Law, you'll have to register at photo.net to read it...]

[if you scan a 4x5 transparency at 3200 dpi it is equivalent to a 205 MPx1 camera]