Little Big Camera: The Fuji F30

Every once in a while, I come across a camera that's somehow more than the sum of its parts. The Minolta Dimage 7i, the Konica-Minolta Dimage Xg, the Canon AE-1, and the Canon EOS-5D all impressed me in this way, while highly regarded cameras like the Rollei AF-M 35, Sony DSC-V3, Canon A-1, and Olympus XA didn't. They may not be perfect, but there's something about them that jells; they ask to be picked up and handled, and really start to shine when going into action. The characteristic all these cameras share is a feeling that they've been designed around some particular, fairly well-defined mission, with real attention paid to the way they're going to be used. Many also have some single killer feature that puts them above the competition -- the lens on the D7i, the sensor on the 5D. The Fujifilm FinePix F30 is one of these cameras.

The Fuji F30's main claim to fame is its SuperCCD HR sensor, which pushes the ISO envelope for small-sensor digicams. The F30 is entirely capable of handheld shooting in conditions usually reserved for dSLR's with bright lenses.

The F30 is the third iteration of Fujifilm's high-end ultra-compact incorporating the six-megapixel "SuperCCD HR" sensor. It shows: the F30 is a very refined little camera, and more to the point, most of the refinements are highly useful rather than just chrome. The battery seems to last forever, the LCD is bright, sharp, clear, and usable even in direct bright sunlight, lag times are short, and the automation (auto-exposure, auto-white balance, auto-focus) works like magic. The camera is designed to be a fast, fluid, and simple take-anywhere camera, designed to get results in as wide a range of conditions as possible. It feels streamlined and simple and consequently very fluid and fast to use -- even if a some of this fluidity comes at the cost of a somewhat reduced feature set.
Passage avec Cuisto et Vélo. The F30 is the first compact digital camera with which I would've even bothered to try to shoot this one.

**Build**

The F30 is built very nicely indeed, with an all-metal outer shell, smooth, quick action on the lens mechanics, tight, positive feel on the switches and dials, clean fit and finish, and an overall solid, brick-like feel. The mix of different materials and finishes -- aluminum and stainless steel, brushed, machined, polished, matte, or anodized -- give it visual and tactile texture that makes it pleasing both to the eye and the touch. The camera is reasonably free of ugly text, and the typography is actually rather nice. All in all, a very pleasant camera both to look at and to handle, and clearly improved in this respect from the somewhat more utilitarian F10 and F11.

Unfortunately the clean finish doesn't quite extend to the underside of the camera -- there are a bunch of screws and some untidy looking holes for the speaker there, and both the tripod socket and battery compartment lid are plastic. I also once accidentally opened the battery compartment while shooting, thereby switching off the camera. (No disaster, since both the battery and the xD card are held in place by a latch and a spring, respectively. Something to watch out for, though.)

Fuji clearly designed the camera for the hand-held point-and-shoot mission, so the plastic tripod socket is understandable, even if it unnecessarily cheapens the look of the camera -- and does mean that you have to be careful with the threads should you stick it on a tripod some day. Other than the niggly details on the
bottom of the camera, the F30 loses nothing in the look and feel department to the likes of "accessory" cameras like the Canon IXUS series. It reminds me of the tiny and very nice APS Fuji FOTONEX 1010ix I briefly owned, although actually the resemblance is only cosmetic.

The kit I bought in France was quite complete -- it came with a nice enough wrist strap and solid semi-rigid faux-leather case with a belt strap, and even a 256 MB xD card. I hear the case isn't included in some parts of the world, though, which is a shame since the camera isn't designed to knock around a bag or a pocket without protection, unlike the weatherproofed Olympus compacts, for example.

**LCD**

The LCD on the F30 is without a doubt the best I've used, and in an entirely different class than the one on the camera it's replacing, the Sony DSC-V3. It's clear, sharp, bright, treated with an anti-glare coating, and (when set to refresh at 60 fps, which comes at the cost of shortened battery life and the inability to use "fast AF" mode) very fluid. It's quite usable even in bright sunlight, although in such conditions it's virtually impossible to evaluate either exposure or color either pre- or post-exposure. In fact, the F30 is the first camera I'm using where I'm not either missing the optical viewfinder or cursing its inadequacy -- the LCD is just that good. It also works impeccably down to light levels far below hand-holdability, although it does become somewhat stuttery (and, of course, noisier) once it gets dark enough. Too bad
that "fast AF" and high refresh rate are mutually exclusive; this makes action photography somewhat trickier than "just point and shoot." I'm sure there were good technical reasons for it, but a shame nevertheless.

Control layout

Ultra-compact cameras are usually at least somewhat fiddly to use -- there's simply so little real estate to put controls on that something has got to give. The F30 manages to make the best of the limited room on the body, and is in fact quite fluid and straightforward in use; certainly more so than the bigger and more button-laden Sony it's replacing. The shutter button is big and just in the right place, there are design hints for the fingers to go when holding the camera, and the thumb falls rather naturally on the most important controls -- the F-button and the four-way dial -- which means that it's possible to set the most important shooting parameters without changing grip. The less-used functionality is buried deeper in the menu system, but the menus are pretty logically laid out; generally everything is where you'd expect it to be, even if, like me, you've never owned Fuji digital cameras before.

The main control dial, on the top of the camera, is mercifully uncluttered: it contains two "manual" modes (combined aperture/shutter priority, the misnamed M mode, which is really sort of like the P mode in Canon cameras, full-auto mode, analogous to the "green square" mode on Canons, scene mode, "anti-shake" mode, and movie mode. Each of these modes can be configured almost separately, which makes it possible for the more experienced shooter to set up the camera for quick situational changes just by nudging the main dial. Unfortunately, not all of the settings stick to the modes: in particular, ISO is a
bit confusing, since the different modes allow different ranges of settings for it, but any setting changes affect some or all of the modes. So, for example, setting ISO to AUTO(400) in M mode will set it to 200 in A/S mode (which doesn't allow AUTO ISO modes). I would have preferred ISO modes to stick to each of the main dial set points; this way, I could've set up A/S mode for daylight shooting and M mode for indoors shooting, and switch between the two very easily. No big deal, but a niggle nevertheless.

Art Appreciation. Shot at ISO 800, in the Nice museum of modern and contemporary art.

The rest of the camera functions are controlled primarily by the four-way dial and two menu buttons: MENU and F, with the most critical settings collected in the F menu. Splitting up the menus behind two buttons like this is innovative and gives a huge usability boost to the camera -- it's much quicker to change a setting if you only have three menu items to look at than if you have three screenfuls (or more). The main menu system is two-tiered, with rarely-used setup functions (unfortunately including FORMAT, which is not really that rarely used) buried in the second level. Finally, exposure adjustments are behind a separate +/- button: this works great for auto-exposure compensation, but gets a bit fiddly for A/S mode, when the same button toggles between AEC and aperture or shutter settings. On something this small, a separate control for controlling aperture or shutter would probably have cluttered up the camera so much that it might have actually degraded shootability rather than enhanced it -- this is a pocket camera, after all.
Features

Compared to some of the competition, the F30 is somewhat lean on features. While it's far from a "pure" point-and-shoot inasmuch as it provides features like manual white balance, aperture or shutter priority AE, a couple of continuous shooting modes (last three being my favorite), and a few different metering and AF modes, it has few frills beyond that. The lens is a modest 35-105 equivalent (or thereabouts), there is no RAW mode, fully manual exposure control is only provided in one of the scene modes and then only for very slow shutter speeds, and there's no control over image processing parameters such as sharpening, contrast, or saturation. The advantage of this approach is that it keeps the camera fluid and reasonably uncluttered: the features that are there are actually meant to be used and are easily accessible. The disadvantage is that if one of the missing features happens to be a critical requirement for what you're doing, well, tough. Image stabilization, for example, would be super-nice, and would put the camera in a class of its own for available-light hand-held work. In fact, I almost passed on the camera myself due to the lack of buffered RAW; had there been an alternative available that provided it, it could very well have been a deal-maker. But that's life.

Accidental Fashion. Shots like this are gone if the camera doesn't let you shoot them fast. I never had any trouble with timing using the F30.
The F30’s feature set is geared around fast, hand-held snapshooting using any of a number of techniques, from pre-focus and shoot to pure snapshot to anticipate and shoot a series. They work very well for this. For example, somewhat to my surprise I found that the not-terribly-wide end of the lens actually works to the camera's advantage: while I enjoy wide-angle a great deal, I do most of my shooting at "wide normal" focal lengths, and having the lens start around 35 mm means that it's ready to go the minute it starts up over 90% of the time. On balance, for my needs and the "second camera” mission, it's actually better this way.

I've learned to really like shooting around 35 mm (equivalent) -- wide enough to take in stuff, but not so wide it yells "look at me, I'm wide!"

**Performance**

The F30 is fast in every sense of the word, as well as being highly predictable. This contributes greatly to making it such a fun little machine to use.

**Startup time** is short: hit the power button, and by the time you've turned over the camera to look at the LCD (or almost), it's ready to shoot.

**Auto-focus** is reasonably fast in the regular-speed mode and good light, and there's not much variability in lag between shots, which makes it possible to learn to time your shooting to the camera's lag; in high-speed mode it's very fast (but unfortunately this means the LCD only refreshes at the usual 30 fps, which is visibly less fluid than the high-speed 60 fps mode). High-speed AF is noticeably faster, and well suited for snapshooting without pre-focusing. The camera's wide-area focus takes a guess about your intended subject and locks on it. It guesses extremely well: I started by setting the camera to center focus, but when I found that wide-area focus does the job at least as well with less fuss, I switched to it and never went back. The camera works equally well by pre-focusing as by snapshooting; the former gives more control, the latter shortens reaction times. However, unsurprisingly the AF can't keep up with really fast action, in which case pre-focusing is the way to go; luckily the enormous depth of field of the small sensor means that focus accuracy is less than critical, and pretty good results can be had even with slight misses. In a nutshell, auto-focus is more than good enough for situational or street shooting, but a sports/action camera this isn’t (no big surprise there). The maximum shutter speed of 1/1000 limits action shooting capability somewhat anyway -- but hey, what's wrong with blur every once in a while?
Take-off. OK, I could've gotten it sharp by using shutter-priority set to 1/1000, but I didn't want to, so there.

**Metering** works very well indeed; I only managed to tease a handful of shots out of the camera that were off enough for it to matter, and these were obviously problematic lighting situations. Most of the time you can just expect the metering to do its job, just like it's supposed to on a point-and-shoot camera. However, given the trouble a small sensor like the one in the F30 has in holding on to highlights in bright sunlight, I like to dial in -1/3 to -2/3 stops AEC when shooting in sunny conditions, and pull up the midtones a bit in post-processing, if necessary.
I think I used about -2/3 stops on this one, since the tarmac is pretty dark.

Flash metering works very well as well: I haven't shot with the flash much, but the few shots I have taken turned out pretty nice; in particular, the F30 does a pretty good job of mixing ambient and flash, and doesn't overexpose close-up faces easily at all.
Direct on-camera flash is never really pretty, but the F30 does make the best of what it has.

**Auto white balance** is likewise very good -- Fuji is justifiably known for its good skin tones, and the F30 gets the job done in almost any lighting... when set to STANDARD color, that is. Like the funky color modes on the 5D, I get the feeling that Fuji put in the CHROME color mode as some kind of twisted inside joke, since it really screws up the pictures, both in terms of color and contrast. Or perhaps there really are people around who want their pictures to look like a bad trip in a dye factory?

**Battery life** is nothing short of amazing: it just seems to go on and on and on. I think the manual promises about 600 frames per charge, and I have no reason to doubt it. I haven't gotten close to draining the battery yet. Very nice indeed, and makes it easy to "forget" the camera in the satchel or the pocket where it'll be found when needed, as long as it's recharged every once in a while.

All in all, the F30 is a solid all-around performer: everything works fast, predictably, and as advertised. Perfect it isn't, and I'm sure there are cameras out there that'll beat it in any individual respect, but it has no glaring defects in the performance department, as long as you keep in mind what it is -- a pocket camera.

**Image quality**

Hoo boy, is it fun to get to this bit. The F30's image quality is incredibly good on every level (again, for what it is)... except for one moderately significant wart, namely, purple fringing. To get that out of the way: it's there, and while it's certainly not a major (or even noticeable) problem on most shots, the worst-case scenario is bad enough that it'll leave black-and-white as your only viable post-processing option. To put it into perspective, the pictures I shot specifically to test for it turned out pretty horrible, but I haven't lost a single real-life frame to it yet, although I have had to do a bit of clean-up work on a small handful. For my type of shooting, purple fringing is bad enough to need moderately aggressive post-processing for about 5% of my shots. It's up to you to decide whether you can live with this or not; I had done a quite a bit of homework before buying so I knew what to expect (and in fact the practical impact of the problem is less than I feared), but if you're particularly allergic to this image quality flaw, you might want to consider some other camera. But that really is all the bad news when it comes to image quality -- in every other respect, the F30 does a really good job.
The worst case of purple fringing I could find in my test shots: branches, sky, CHROME color mode. I strongly suspect it's related to chromatic aberration in the short wavelengths, since it only really raises hell in "branches against the sky" shots -- high-contrast pictures of black on blue. Now, this is bad enough that it doesn't clean up easily. Fortunately I haven't seen it anywhere near as badly as this in my real-life shots.

At low ISO, the pictures are crisp, very very detailed, and as clean of processing artifacts as any I've seen. I haven't done any controlled tests, but I'm quite confident that the 6 MP on the F30 holds more information than the 7 MP on the DSC-V3 -- and gives the dSLR's I owned before the 5D a good run for their money. They're a pleasure to look at and a pleasure to work with. Naturally, on a small sensor like this, dynamic range is somewhat limited; my feeling is that there's just a bit less of it than on the slightly larger sensor on the V3, and of course a fair bit less than on dSLR's (and let's not even get started with RAW).

Unfortunately my V3 had an accident and broke, which means I can't do a side-by-side test of the two. However, here's the next best thing -- a few shots of similar subjects that demonstrate the pertinent differences between the two cameras.
First, a harbor scene. The V3 one has been shot later in the day, giving it warmer colors. The F30 shot has been taken at -1/3 stop AEC to retain the highlights. The Sony has kept the highlights with no user intervention and tonality is pretty nice out of the box; the F30's midtones need to be brought up a bit. I don't know for a fact that the F30 would've lost the highlights with this shot; however, I wanted to keep the detail in the foreground boats so I played it safe.
The F30 shot after correcting for the exposure compensation. I did it by duplicating the image into a second layer in the Screen mode, and applying a graduated layer mask to apply it to top right more than bottom left, so I could keep the rich high-key tones in the boats.
Details from the background wall. Look in particular at the roof. To my eye, even at the lowest ISO the Sony has a fair bit of the "Nutella look" -- noise reduction or image processing flattening out texture detail, while on the F30, the textures look much more "alive" and three-dimensional. The F30's detail is far less "blobby" and there are virtually no sharpening artifacts to be seen. Pixel-peeping it is, but at that level, and at this day and age, this counts for a pretty dramatic difference in my book.
Another pair of similar subjects, where the "Nutella effect" is even more dramatic in my opinion: the Fuji renders the texture of the wall very nicely indeed, while the Sony has turned it into mush. If you can't tell which is which without my having to tell you, you have no soul.

At high ISO... let me put it this way: the amazing thing about high ISO on the F30 is where it starts. Basically, ISO100-400 counts as low ISO on this camera; in this range, it's very hard to tell what ISO a picture was shot at. High ISO really starts at 800, which starts showing significant loss of detail due to noise reduction and significantly higher noise, especially "blotching" in the low midtones and shadows; however, it's still good enough for medium-sized prints let alone web use. ISO1600-3200 should be considered for emergency use only; it is possible to get usable quality from the especially with some post-processing, but overall quality does take a nose-dive once past 800, and they're only really well suited for web display and standard 10 x 15 cm prints -- which is certainly a lot better than nothing. But a dSLR it isn't, even if the ISO range is the same as on my 5D.
At ISO400, image quality is for most practical purposes as good as at ISO100-200. Therefore, the AUTO(400) ISO mode is highly useful.
If you look closely enough, some noise reduction artifacts do become apparent at ISO400. However, they're still too small to matter in all but the largest prints -- and considerably better than the Sony at its lowest ISO.

An after-dark street scene, shot at ISO800.
Significant loss of detail is apparent at ISO800. However, interestingly enough, the pictures print and scale down extremely nicely; I have a feeling that Fujifilm may have optimized their noise-reduction specifically for these purposes rather than to produce the prettiest results when viewed at actual pixels. If so, more power to them.

The highest ISO settings on the F30 are still perfectly usable for web display and small prints...
...but at actual pixels they don't look so hot. This is at ISO3200. Chrome mode, too -- incidentally, it gives better extreme-ISO results out of the camera because it appears to use a higher black point, which gets rid of a lot of the shadow noise (sort of like the guillotine cures headaches).

The lens on the F30 is very good in most respects -- has reasonable distortion, is very resistant to flare, evenly sharp from corner to corner at all apertures and focal lengths. You can basically ignore its existence when shooting, which is what a good lens is supposed to do. However, that one significant wart, purple fringing, is almost certainly at least partly lens-related -- probably some interaction between the lens and the sensor that their computer modeling didn't predict.
Crop from the corner of the frame. This is more or less what they always look like, unless they're out of focus. Note the touch of purple fringing lurking in there -- not bad enough on this one to really do any damage.

But in the end, when working within its limitations, which are surprisingly wide for something this small, the 150-gram F30 can produce 20 x 30 cm prints that look just about as good as the ones from my 1500-gram (with lens) Canon EOS-5D, which is pretty remarkable when you think about it.

**Niggles**

Apart from the purple fringing and few minor issues described above, I've really had very few complaints with the camera. The choice of memory format -- xD as opposed to SD/MMC -- is mildly annoying, and in-camera charging for the battery can be either a curse or a blessing, depending on how you look at it. The CHROME color mode is just plain silly and only gets in the way; if they had to include it, they really should've done a better and more subtle job of it. I would've liked the ISO setting stick to the main dial modes, I would've liked buffered RAW, I would've liked optical image stabilization, I would've liked a faster lens, never mind the zoom... but I have to concede that many or most of these features would've tried to turn the F30 into something that it isn't and doesn't try to be. As any good camera, the F30 is designed around a specific purpose; use it for that purpose and it'll fight for you, but use it for something else and it'll fight against you. So in fact most of the things I'd like to see changed in the F30 aren't as much deficiencies in the camera as mismatches between the camera's intended mission and the mission I had in mind for my second camera. To look at this from the "glass is half full" perspective, by exploring the mission for which the camera was designed, I can just perhaps open up some new photographic
Fujifilm F30

territory -- which is one nice side effect camera purchases have.

Chrome mode. Yikes, I think my retina just peeled off.

What's it good for?

So, what is the F30's intended mission? Apart from the obvious -- pocketable, good-looking point-and-shoot for the family album, digital or paper -- there's the one I'm most interested in; the "second camera" mission. There's a lot of control in the deceptively simple menu and control system, and the characteristics that work so well to make it such a nice point-and-shoot also lend themselves to this mission. It's not ideal for it -- no compact digital currently on the market is -- but it's about as close as you're likely to get. It's fast, fluid, powerful, produces beautiful quality out of the box or for post-processing, and has an almost uniquely wide operating envelope, from bright sunlight street shots (at ISO100 and -1/3 to -2/3 stops AEC) to indoors and after-dark handheld situationals (wide-open at the wide end, ISO800 and above). Everything in the camera has been designed to make it work in all of this envelope -- the LCD is usable in direct sunlight and in very poor light, and beautifully crisp and fluid in-between; auto-focus, auto-exposure, and auto-white balance just work, and the camera works like a champ at doing its thing and letting you do yours. It's also a super-nice street camera -- light, small, discreet, yet reliable and capable of great quality: if Cartier-Bresson was starting out now, I have a feeling he'd be toting something rather like this, perhaps wrapped up in black electrician's tape.
I'm not Bresson, but I like shooting in the street anyway, and the F30 is an able camera to do it with.

Is it the camera for you? As always, only you can decide. If you do most of your shooting towards the wider end of normal, can put up with a touch (OK, sometimes more than just a touch) of purple fringing every once in a while, and need something that'll get the job done as close to "everywhere" as is humanly possible in this small a package, give the F30 a very hard look. On the other hand, if you absolutely have to have RAW, do most of your shooting at wide angles or telephoto, or are allergic to PF, consider something else -- it's not like we're short of choice. It's very rare that an "ideal" camera comes along -- that is, something that fits your way of doing things like a well-worn glove. The Fuji F30 feels like the ideal camera for someone, and even if it's not quite ideal for you, some of that feel does rub off -- much like driving a little two-seater sports car is fun even if it's not really ideal for your driving needs. Even with the few warts left in its third-generation design, the F30 is really, really good for what it is -- which is, really, the best compliment you can give any device.

The street scenes used to illustrate this article were taken in Nice, France, in July, 2006.

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