

## **THE RESURGENCE OF LARGE-FORMAT PHOTOGRAPHY**

*Shutter Release*, September 2006

Rustic large-format cameras frequently feature as picturesque props in television commercials and men's fashion magazines. The quaint imagery sustains a nostalgic view of large-format photography that has nevertheless improved of late. The borderline eccentrics trotting out creaky wooden cameras with cracked leather bellows now tend to be nattily dressed, and include women. Depicting large format as a relic may have reflected reality 15 or 20 years ago, following a half-century of decline. Happily, times have changed. Large format is on the rebound.

The past decade has seen a remarkable resurgence of large-format photography. Improvements in technology, materials and film, together with the introduction of digital backs of up to 39MP resolution, have made the ponderous into an instrument of finesse.



Sinar (Switzerland)

Large-format cameras, commonly called view cameras, allow photographers great creative potential in composition, perspective and focus. The cameras remain large by virtue of the film area, and are entirely manual and slow to set up and operate, but such is the appeal of large-format photography to those who have the calling. In principle, each photograph is treated as if a portrait, to be carefully planned and executed.

## Large Format and What It Offers

Literally defined by the size of the negative or transparency, large format is photography using single sheets of film, most commonly 4x5 inches. Larger models take film sheets of 5x7, 8x10 and even 20x24 inches. Imagine a contact print the size of a huge enlargement! One benefit of large format, though by no means the primary benefit, is the size of the film. A standard 4x5 large-format negative is 14 times larger than 35mm and 3 to 5 times larger than medium formats. An ad for large-format cameras several years ago boasted the film captures, “every nuance of light and shade, tonality and detail.” Suffice to say we are looking at ever more rarified increments of quality.



Shen Hao (China)

Large-format cameras are loaded one film sheet at a time. Initially, composing is done on a ground glass on which the image is focused at the back of the camera. When the photographer is ready to take the picture, a sheet of film contained in a film holder is inserted in front of or in place of the ground glass, and the film is exposed. Often the photographer will first test the composition, focus and exposure using Polaroid film, making iterative adjustments until confident to proceed. For most intents and purposes, a tripod is necessary to assure a fine photograph, but three manufacturers produce semi-portable large-format cameras that may be hand-held, albeit with some loss of control.

The characteristic feature of the view camera is the bellows and monorail or flatbed design that allows the lens and film to be moved separately in relation to each other, in three directions—up-and-down, sideways, and tilted. Technically called “movements of the lens plane and film plane,” this feature provides the major benefit of large-format photography: ultimate flexibility to compose, shift perspective and focus selectively—if time is not a problem. Three effects commonly applied are:



Ebony (Japan)

- (1) Lens shift: When the lens rises or falls or is shifted sideways in relation to the film, the perspective or view of the camera is moved accordingly. Lens shift not only repositions the field of view, but also enables the photographer to aim the lens up to capture the height of a building without slanting lines. The same technique can be applied to adjust horizontal perspective. (A ruse of interior photography through horizontal shift allows mirrors to be photographed as if straight on without a reflection.) Both 35mm and medium-format cameras offer shift lenses, but the capacity for shift is far short of a view camera. Largely for this reason, professional architectural photographers typically use a view camera in much of their work.
- (2) Front tilt: In many situations, the skilled photographer can tilt the lens in various ways to focus or bring out of focus individual objects or fields of view in the photograph. The most common application is tilting the lens forward to put the immediate foreground into focus together with the background, frequently in landscape photography. Whereas a fine 35mm or medium-format lens and camera can depict towering peaks and foreground flowers together in sharp focus, the view camera will also focus and clearly show the little twigs under the flowers, even in shadow.
- (3) Back tilt: The size of selected objects or views in the photograph can often be made larger or smaller by tilting the film plane in relation to the lens. For example, in photographing interiors with a wide-angle lens, objects in the close foreground will appear larger than scale if no adjustment is made. By tilting the bottom of the back forward, foreground objects (typically dinner plates and silverware, judging by examples in photography textbooks!) are reduced to more reasonable appearance. As such, large format is commonly used in commercial product photography (and for such purposes, large format continued as the paramount tool even during its extended decline in the latter decades of the 20<sup>th</sup> century.)

The design of large-format cameras is particularly amenable to nearly distortion-free panoramic photography in a landscape setting, in comparison to 35mm and medium-format film and digital cameras with reflex mirrors. Panoramic medium-format (viewfinder) cameras operate similarly to large format in this respect.

A limitation of large format is telephoto capability. Due to the long focal lengths and large glass required, telephoto in large format is normally limited to the equivalent of the 135mm lens in 35mm photography.

### Traditional Problems of Large-Format Photography

Large-format photography began to lose popularity about 40-50 years ago with the advent of quality medium-format and 35mm cameras with features that for many photographers offset the advantages of large format, and dispensed with its disadvantages as well. Specifically, large-format photography suffered from:

- (1) Weight and bulk: Cameras were heavy and cumbersome, typically weighing 10-15 pounds; in addition, the photographer had to (and still has to) carry a large stock of accessories.
- (2) Lack of durability: Similar to automobile engines and seat covers of the 1950s, view camera bodies and bellows would rapidly wear, and require major repair or replacement by year 3 or 4.
- (3) Film: Prior to about a decade ago, large-format film sheets had to be manually loaded into film holders by the photographer in a darkroom or dark tent.
- (4) Costly hit-or-miss photography: Even the most experienced photographers using a ground glass could benefit from some trial or sample shots on-scene to ensure their photographs would be consistent with visualization.

### Solutions

In the mid-1980s, a number of new view camera manufacturers entered the field, mostly expert photographers and camera aficionados who had a better idea and started their own companies. By 1997, a wide range of modernized large-format equipment and accessories had entered the market, featuring:

- (1) Lighter weight: Using metal alloys for some cameras, and titanium-reinforced or other hardwood and metal combinations for others, the weight and bulk of large-format equipment were substantially reduced. Contemporary view cameras typically weigh 5-9 pounds; a few models are lighter. Gears and other controls have been streamlined.
- (2) Durability: The new materials are far more lasting and forgiving. Bellows are of synthetic material, or of reinforced or coated leather, such as with Black China Silk, to help assure many years of light-tight use.
- (3) Better film loading: Large-format film sheets are now available in pre-loaded Fuji Quickload or Kodak Readyload canisters; that is, it is no longer necessary to load the film in a darkroom or tent (yet many photographers continue to do so.)
- (4) Polaroid backs: With the advent of Polaroid film backs fitting large-format cameras, the time and expense of trial photography has been substantially reduced. Digital backs are beginning to take on this role as well.

Currently some 17 manufacturers produce large-format cameras, in Britain, China, Germany, Japan, Switzerland and the US.



Gowland (U.K.)

Sales of large-format cameras have substantially increased in recent years for a number of reasons. One factor is the improvements in the ease of large-format photography and quality of equipment. Another is what has been described as a “back-to-basics” movement in reaction to digital photography.

A third reason for the growing popularity of large-format photography is China. Five years ago the Shen Hao manufacturing company of Shanghai began to produce and export high-quality large-format cameras that have brought the medium well within the price range of quality 35mm film and digital photography. Moreover, it's a two-way street. China is importing large numbers of large- and medium-format cameras.

#### Digital Applications for Large Format

Until 2004, digital backs for large-format cameras had to be tethered to a Mac or PC and stationary power source, and sold for \$20,000-30,000. For these reasons, digital photography in large format has been limited almost exclusively to studio applications, mainly commercial product and portrait photography. Portable, self-contained digital backs for large format were introduced in 2004-2005 by Hasselblad and Jenoptik, with capacity for storing hundreds of images, in a price range of about \$9,000-25,000.

Large-format film negatives, transparencies and prints can of course be scanned, making for the most powerful and enlargeable resolution, exceeding existing digital camera capabilities. A 4x5 transparency can be readily digitized, enlarged and printed in sections to form 100+ sq.ft. murals. With 8x10 transparencies, enough resolution is captured to produce genuine photographic images the size of a side of a building.



Canham (U.S.A.)

Notwithstanding its recovery and growth, large-format photography remains a vocation of a relative few. Yet more photographers are discovering the pleasure, quality and romance of photography in its most elemental form—large format—offering maximal precision and control in the more modeled photographic environments including landscape, architectural, portraiture and macro photography.

