

Because of Covid19, the U3A Camera Club will not be meeting in class for the remainder of 2020. Email: u3acanberracameraclub@gmail.com.

Vale Olympus?

For 84 years, Olympus has been making some of the world's best and most innovative cameras. Now, thanks to Covid19, the huge slump in demand for conventional cameras caused by the rise of the smartphone, and several scandals and corruption in the company's executive ranks, Olympus is selling off its camera division. The proposed buyer is an equity firm Japan Industrial Partners, previously well-known for buying failing companies and reinvigorating them, although not always as successfully as Olympus would like to suggest (An example is JIP's purchase of the Sony *Vario* laptop computer now disappearing from shop shelves). Olympus is of course, the largest manufacturer of precision medical and scientific optical equipment, the camera division only ever a small adjunct.



The first Olympus camera, called the *Semi-Olympus 1*, was released in 1936. Since then, Olympus has been responsible for many ground-breaking developments in cameras and accompanying lenses. In the 1960s, for example, the company introduced the first half-frame camera, the *Pen-F* and in 1972, the M1 (later renamed OM1 after Leica argued they had prior right to the "M" logo). This camera, designed by the genius Yoshihisa Maitani (whose name is enshrined in the "M" of the "OMD" badge of modern cameras) was lighter and more compact than the market

leaders, Canon and Nikon, which then as now, commanded the field for professional photographers. Olympus was also an early entrant into the digital world and more recently, has developed the 4/3 format.

Furthermore, as might be expected from such a great optical manufacturer, their *Zuiko* lenses are among the very best in the world and will continue to be in demand even if, as might well happen, they have to be used on other brands of camera. Even at this critical point, Olympus have just announced a raft of new lenses, including a 150-400mm (35mm equivalent = 300-800mm) super zoom with a built-in 1.25x teleconverter. There are also two other new lenses, an extra-wide-angle and a new macro, in the pipeline while a forthcoming firmware update for the OMD EM1X will include "bird recognition" (a development of "face recognition"?). And a sign of the times, Olympus is also releasing their *OM-D Webcam Beta* which allows certain models of their cameras to be used as webcams with programs such as the now ubiquitous *Zoom*.

Olympus says that their cameras will continue to be available and that R&D will still go on, but one cannot help but wonder if, in a digital world where full-frame mirrorless cameras have become fairly common and affordable, whether the 4/3 format will survive. Furthermore, faced with the remarkable onslaught of smartphones and their associated Artificial Intelligence and Computational Photography technologies, we might also question if even giants like Nikon and Canon will continue to sell dSLRs except for very specialised and high-resolution work? It looks as though the smartphone is already the "new normal"?

Depth of Field and Bokeh

Only a very small part of our retinas sees things in sharp focus, all else



being blurred. So it seems perfectly normal for us, as photographers, to blur out unwanted backgrounds, especially in genres such as portraiture, macro and close-up and even in landscape, when we wish to draw attention to a particular part of an image. Isolating a section of an image can involve many different techniques but all in some way or another rely on large aperture and differential focussing. It is of course possible to blur the background so much that nothing is identifiable, but often the most successful is where the background seems as blurred or out of focus as it does in real life when the eye is focussed only on the subject. Known as *plasticity*, this gives the impression to

the viewer that the subject stands out from the background in a 3-D effect.

Free *Photography Life* Courses

Among the very best educators on photography on-line resources are Nasim Mansurov and Spencer Cox and colleagues writing for *Photography Life*. They are "the very best" because they not only know their stuff but are able to explain it in a pleasing style and in clear, plain English. Science writers of this calibre are rare in journalism. Now, *Photography Life* is making available all its courses, now on YouTube, for free (they would normally cost US\$150 each). After that introduction, you can also go to the playlist and select those courses you would like to follow.

Tripods



Tripods are a kind of necessary evil in photography: they are a nuisance to carry around, easy to trip over and yet absolutely essential in some situations. It is not only in low light situations that we need a tripod: anywhere that camera shake is unavoidable is when

we need a tripod to come to our aid. However, tripods are legion and finding one which suits your personal needs can be a difficult job. There are tripods for just about every occasion – ultra-light for hikers, rock steady and heavy for videographers, tiny ones for table-top photographers... The list goes on. They also come in a variety of materials, carbon fibre being perhaps the lightest and strongest but the most expensive and perhaps a bit light-weight in some situations. ... It pays to do the research before you go out and buy, or of course, these days, shop on-line.

Low-Tech Landscapes

Sometimes you come across an article on one of the on-line photography resources which is just a simple explanation of what is involved in taking a good photo. Andrew Goodall is as Australian nature photographer who, in his *Better Landscape Photos: the Low Tech Way* makes some simple suggestions which will benefit not only beginners.....

What is Computational Photography?

Did you know that from the moment your smartphone is switched on, it starts taking photos and stores them in a buffer? When you "take" a photo (i.e., press the button), the brain inside the smartphone selects the last of the photos it has already taken, plus a few earlier ones, chooses the best bits from them all, merges them into the jpeg you then see on your screen

and, of course, saves it for posterity. Furthermore, did you know that your smartphone automatically and without telling you, does focus stacking and HDR₁, all as part of its normal operation? These and many other operations are all done using *computational photography*.

Marc Levoy, a Stanford University expert, explains that computational photography is about *imaging techniques that enhance or extend the capabilities of digital photography in which the output is an ordinary photograph, but one that could not have been taken by a traditional camera.* That means, according to Vasily Zubarev, that *right now, just in front of our eyes and inside our pockets, there's a new field of knowledge and technology is rising, that never existed before.*

In a long and well-illustrated article, Zubarev explores this complex and exciting field which, whether we like it or not, has changed photography forever. Without computational photography, the smartphone would not have become so smart and convenient that it is already replacing all but the most specialised conventional cameras. There is an old adage in photography that the best camera is the one you have with you: the smartphone, so it seems, is always with us, no matter where we go.

To understand "how" and "why" the operations of computational photography work would require several higher degrees in both physics and mathematics, but fortunately Vasily Zubarev in a rather long but most readable article2 is able to explain in simple terms "what" is happening within these small bundles of joy that fascinate us all so much.

Bob Hay Presenter

¹ You can choose such options – for example, HDR – but then the camera takes more images on which to base its selections. So, for example, the camera normally takes 3 images (normal, under- and over-exposed) but when you select HDR, it takes 5 or more to provide wider tonal range.

² There are actually 3 articles but Parts II and III simply repeat what is already published in Part I.