

THE **RPS**
ROYAL
PHOTOGRAPHIC
SOCIETY

20TH
ANNIVERSARY
ISSUE

DIGIT

THE MAGAZINE OF THE ROYAL PHOTOGRAPHIC SOCIETY
DIGITAL IMAGING GROUP NO. 69: 2016 Issue

UPCOMING DIG GROUP EVENTS



Details of all DIG events are available on the Group's website at:
www.rps.org/special-interest-groups/digital-imaging/events



ET's Friend by Nancy MacArthur ARPS



"Of Sea and Shore"
Margaret Campbell

Digital Imaging Group
Scotland Centre

19th June 2016 Bridge of Allan Parish Church FK9 4NW



Gavin Hoey
Live
Demonstration

Digital Imaging Group
Midlands Centre

28th August 2016 - The Old Schoolhouse - B69 2AS



Buscot by Neil McCoubrey ARPS



"Luminosity Masking"
Neil McCoubrey ARPS

Digital Imaging Group
Scotland Centre

18th September 2016 Bridge of Allan Parish Church FK9 4NW



8



12



22

DIGIT

No 69: (2016 ISSUE 2)

DIG COMMITTEE:

Janet Haines ARPS (Chair)
digchair@rps.org

Janet Davies ARPS (Secretary)
digsecretary@rps.org

Lynda Simpson LRPS (Treasurer)
digtreasurer@rps.org

Andy Beel FRPS (National events)
andy@andybeelfrps.co.uk

Chas Hockin LRPS (Website)
digweb@rps.org

Marilyn Taylor ARPS (Exhibitions)
digexhibitions@rps.org

Rex Waygood (Photo Editor and New membership)
01425 673216
rex_waygood@mac.com

Maurice Ford LRPS (General)
digcom1@rps.org

David Taylor LRPS (Digital Competitions Organiser)
DIGPI@rps.org

Dr Barry Senior Hon FRPS (RPS Regions and Centres)
01425 471489
barry@littlepics.freemove.co.uk

CO-OPTED:

Margaret Preston (DIGIT Editor)
digiteditor@rps.org

DIG CENTRE ORGANISERS:

Eastern
John Margetts ARPS
01223 700147
admin@rpseasterndigital.org.uk

Scotland
Doug Berndt ARPS
01314 453 004
digscotland@rps.org

Southern
Dr Barry Senior Hon FRPS
01425 471489
digsouthern@rps.org

Thames Valley
Laurie Pate, 01494 764 975
digthamesvalley@rps.org

Western
Sheila Haycox ARPS
sah2@live.co.uk

North West
Malcolm Blackburn (01298 812233)
mblackburn@redseats.net

Midlands
01608 663 394
Ian Bailey LRPS,
ian.bailey@btinternet.com

Centre Websites can be found on the DIG Website at:
<http://www.rps.org/dig>

CONTENTS

- 2 GROUP EVENTS
- 4 EDITORIAL
Margaret Preston
- 4 FROM THE CHAIR
Janet Haines ARPS
- 5 ANNIVERSARY ISSUE INTRODUCTION
- 6 PRESIDENTIAL PERSPECTIVE
Bob Moore Hon FRPS
- 7 REVOLUTIONARIES
Clive Haynes FRPS
- 8 I HAVE A DREAM
Janet Haines ARPS
- 9 MIND CONTROL
Rex Waygood
- 10 IS DIGITAL MEANT TO BE?
Adrian Lines ARPS
- 11 ALL PHOTOGRAPHY IS DIGITAL
Mike McNamee FRPS
- 12 THE FUTURE OF IMAGING
Nikon
- 19 LOVING THE GUIDED TOUR
Mark Sisson
- 22 STORY TELLING
Asher Svidensky
- 28 BEAUTY IN BANNER REST FALLS
Joe Houghton
- 31 THE DIGIT CHALLENGE
 - 31 Scene Inside a Seashell by Lilian Lingwood
 - 32 Cupid by Marilyn Taylor ARPS
 - 34 Rooftops by Mike Cowdrey ARPS
- 35 IN PREVIOUS ISSUES

© 2016 All rights reserved on behalf of the authors. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the written permission of the copyright holder. Requests for such permission must be addressed to the Editor.

The Royal Photographic Society, The Digital Imaging Group and the Editor accept no liability for any misuse or breach of copyright by a contributor.

DIGIT is the magazine of the RPS Digital Imaging Group and is provided as part of the annual subscription of the group.

The views expressed in this magazine are not necessarily those of the RPS DIG.

COVER IMAGE: **Digital History** by Adrian Lines ARPS

Printed by Henry Ling Ltd, at the Dorset Press, Dorchester, DT1 1HD.



EDITORIAL



It has been very exciting to edit the 20th anniversary edition of DIGIT. As a relative newcomer to DIG, I have been looking forward and have been stunned by the seemingly daily developments in photography-related technology over the past few months.

The rise in popularity of 360-degree video and photography is being supported by Virtual Reality. Augmented Reality is set to enhance our real-world environment through computer-generated sensory input.

Still in development is the exciting future of holoportation; there are durable 4K action cams; and high-performance iPhone attachments bring professional optic camera quality to your smartphone.

And we cannot ignore the impact of the drone. No longer the preserve of the occasionally reckless amateur, they can now, independently, fly a previously defined route with absolute precision, return to

their owner on command, avoid obstacles and even perform artistic tricks.

I have merely scratched the surface of new developments here. How many will become mainstream and how many will be a flash in the pan is something that is seemingly leaving even manufacturers quite anxious.

We contacted several major companies to ask them to share their vision of the next 20 years. The majority failed to provide any comment while one admitted that they did not wish their competitors to know how they were thinking. Nikon was the exception and provided a fascinating independent report that they commissioned a year ago, and which we reproduce in this issue.

In addition, a former RPS President and a former DIG Chairman take a look at the first 20 years of DIG and four of our DIG members indulge in some stargazing and share their hopes for the future with very differing results.

All this research sparked some soul searching: What is it that we enjoy as photographers and what do we want from our equipment? How far do we want to enhance our images or do we wish to remain purists?

Also included in this issue is a novel approach to photography by Israeli photographer, Asher Svidensky, who believes that telling the stories behind the images is the way to provide that.

Wildlife photographer Mark Sisson, provides an insight into choosing the most suitable guided tour for you and Irish resident Joe Houghton shares some spectacular photos of South African waterfalls. I hope you will be inspired to look forward with enthusiasm to the next 20 years.

Margaret Preston

digiteditor@rps.org



FROM THE CHAIR

It is fascinating to look back at the first DIGITs in 1996* and sense the desire of those who got together to set up DIG as a way of exchanging information about this new fangled idea of digital cameras. There were the doubting Thomas's, but here we are today with the RPS setting up an analogue special interest group to cater for the minority – we are now the norm.

So why has DIG survived? There are those who say we have no place in the Society now more or less everyone is a digital worker. My response to that is that we are still highly successful and with the digital evolution marching ever onwards we continue to need to learn new skills.

In this publication of DIGIT we have endeavoured to take a light-hearted peek into what the next 20 years of change might mean for us all. Some of the information we have obtained is genuinely just around

the corner, or even here already if your pockets are deep enough. It is exciting. It is challenging. We need the early adopters in the group to continue to share their experiences and knowledge with us.

There are those who like getting involved with the bleeding edge technology before it is truly stable. It costs them lots and they often get taken down blind alleys (remember Beta Max?) and haemorrhage money as a result of being investors in innovative new ideas and products. . But we need these revolutionaries.

Next stage are the 'leading edge' folks who come in as things stabilise a little, but they are brave enough to learn new skills and become our 'experts' that we can all learn from.

Then along come the masses and it becomes the norm for us all, till we go off

again on the next wave of change. I see no reason for DIG not be as eternal as the seasons and to not still be here in another 20 years time.

I feel very honoured to be the DIG Chair as we come of age and celebrate our 20th Anniversary. I pay my respects to those who had the foresight to start the group; to you, the members, for continuing to embrace and support the DIG, especially those who are willing to share their experiences with the rest of us.

Happy 20th Anniversary DIG – here's to the next 20.

Janet Haines ARPS *digchair@rps.org*

*Note * All back copies of DIGIT can be found on the DIG Forum area for downloading by members after logging in.*



**DIG 20TH
ANNIVERSARY**

**OVER THE NEXT SECTION, WE TAKE A
LOOK AT THE PAST 20 YEARS -- THE
STRUGGLES AND ACHIEVEMENTS;
FOUR DIG MEMBERS STARGAZE AND
SHARE THEIR FANTASIES FOR THE NEXT
TWO DECADES AND WE REPRODUCE AN
INDEPENDENT REPORT ON WHAT THE
DIGITAL WORLD SHOULD EXPECT IN THE
FORESEEABLE FUTURE.**

PRESIDENTIAL PERSPECTIVE

THE DIGITAL IMAGING GROUP WAS FORMED AGAINST THE BACKDROP OF MANY SCEPTICS, WHO CLUNG TIGHTLY TO THEIR FILM CAMERAS DURING WHAT THEY SAW AS A PASSING PHASE. BOB MOORE, HON FRPS, WAS RPS PRESIDENT IN 1996 AND REMINISCES ON THE EXCITING JOURNEY OF THE PAST 20 YEARS, WHILE LOOKING FORWARD TO THE NEXT 20.

It was a notable year in 1966. Important events included the boy band *Take That* splitting up; the birth of Dolly, the cloned sheep; the breakthrough of the Spice Girls and Manchester United winning the League and the FA Cup double. Most important though, that year saw the launch of the RPS Digital Imaging Group.

As President of the RPS in 1996, digital photography was very much in its infancy. Adobe Photoshop was first released with little fanfare only six years previously but was gaining a significant following.

At the time, the RPS Council was aware of the advancement of digital photography and held various meetings and discussions on what the future might be.

Initially, there was a fair amount of scepticism about digital photography and creating a group dedicated to, what seemed at the time, a new technology, was not universally welcomed.

Many photographers saw it as a passing phase. The driving force at the RPS included the charismatic and late Barrie Thomas, Hon. FRPS. He, above all others and certainly within the RPS structure, had the foresight, dedication and enthusiasm to blaze the digital trail. He was convinced digital was the future. How right he was.

We were all asking the question, would this new-fangled method of capturing images last? Surely we would never attain the quality and the convenience of film! I remember (just about) it was also in 1996 that Nikon released their first DSLR camera called appropriately, the D1.

It had a 2.74 megapixel image sensor and weighed nearly 4 lbs. The cost in the UK was over £3000. Sceptics were in agreement, especially around the camera clubs, that it was not the time to throw film cameras and enlargers away just yet! How wrong they were.

In the last 20 years, digital technology has progressed in leaps and bounds and, at times, I've wondered if it's not caught up and overtaken us.

It's not just cameras, but personal computers, storage, monitors, printers, in fact everything to do with Digital Photography is pretty well unrecognisable with the passing of 20 years.

Where did all the time go? Initially, there were many who were not convinced and dare I say, that view is held by a minority even today. It's hard to believe that some camera clubs banned digital capture and digital printing in the late 1990s and early 2000s!

As a compulsive darkroom printer, I had Wilkinson and Cibachrome processors for colour (anyone remember those machines?) and used dishes or deep tanks for black and white printing. All messy and smelly chemical processes.

The Epson Stylus Colour printer with USB connectivity entered the market and it all changed. I can't recall exactly when I abandoned the darkroom, sometime in the early 2000s I think, but it was a pivotal point for me and I don't think I've looked back since.

Probably the most important advancement of the past 2 decades for the home printing enthusiast is the vast improvement in digital printers. Led by Epson and Canon, the quality of prints obtained from modern printers is truly astonishing. And I still don't understand how they work!

An interesting question to ask ourselves: including members of the Digital Imaging Group. Has the content and quality of images being produced today improved over the last 20 years? It's a question, of course, that has no definite answer.

Has there been a down side in photography over the passing 20 years? I don't think so.

It's more exciting and accessible now compared to when I first joined a camera club and the RPS.

If possible, take a look at old catalogues and magazines from the 1980s and 1990s to see how trends and fashions have changed. In my opinion, photography, certainly at club level is far more exciting now than it was 20 years ago.

Question? Has it become more difficult to identify or produce good images? Arguably, the ease and convenience of digital photography has significantly increased the quantity of images being taken.

One statistic I've seen is that in 2017 the world population will capture 1/5 of the total number of images that have EVER been captured - That's approximately 1 trillion pictures out of approximately 5 trillion stored (in some form or other).

Does this make it more difficult to identify the good ones or just more time consuming? Does the proliferation of digital image manipulation filters make us less likely to produce pictures with emotion.

So what does the future hold for the next 20 years? I asked Robin Whetton MD of Permajet Ltd, who is at the forefront of printing advancements. His comments are very interesting although perhaps not surprising.

He feels the general public will increasingly continue to share pictures, photos, art and files. Advancements in technology have seen cameras and sensors decreasing in size and increasing in quality. Instant photography is what the general population requires. This will continue. Robin also feels that the cost of inks and other consumables will decrease, encouraging more people to commit their images to print.

Let's hope so. The past 20 years have been very exciting journey. Perhaps, the next 20 years may be even more exciting. If I make it, I'll be 96 years old!

COMFORT ZONES

WITH A SCHISM IN THE RPS, MEMBERS OF THE DIGITAL IMAGING GROUP WERE HAPPY TO BE SEEN AS REVOLUTIONARIES, EXPLOITING DIGITAL POTENTIAL TO ITS LIMITS. FORMER DI GROUP PRESIDENT, CLIVE HAYNES FRPS, LOOKS BACK FONDLY ON THE DAYS WHEN THEY WERE CONSTANTLY AT THE LIMIT OF THEIR TECHNICAL CAPABILITIES AND WONDERS WHAT NEW TECHNOLOGY WILL DISRUPT OUR COMFORT ZONE.

Twenty years ago, we were the revolutionaries, the adventurers, the upstarts indulging in nefarious digital imaging rather than photography. It was an exciting time, when new and cutting-edge technology vied with traditional methods.

Accusations were made about DI not being real photography (whatever that ever was or is) and a schism developed within the photographic community between supporters and detractors of the new pretender. Thankfully the RPS was swift to recognise the potential of electronic imaging. It was amazing to experience the threshold of a new age. We all desperately wanted knowledge. In seeking this we were part of a huge self-help collective, invigorated by cooperation and experimentation.

I swapped from wet darkroom to digital once I realised the print quality was equivalent to what I could achieve by film and wet print. Initially, I scanned-in my 35mm negatives and colour transparencies then, as soon as possible, I bought a digital camera, a 6.3mpxl Fuji S2 Pro DSLR. 6.3mpxl may not sound much by today's standards but don't forget that it represents 6.3mpxl per channel (RGB), giving some 19mpxl overall and adequate for 180 to 200 ppi to make a respectable A3 print. Improved papers for ink-jet printers were introduced and a range of useful plug-ins and filters evolved. Suddenly we could realise our creative visions to expand our imagination and artistry. Images that were extraordinarily complex in the darkroom became accessible and our world of possibilities expanded at an exponential rate.

Adobe Photoshop was the universal tool. I began with Photoshop version 4, just after layers replaced floating selections. At the time, I was teaching photography, making the transition from wet darkroom to digital. I began to develop my website as a resource for everyone. I was fortunate to have, as friends and colleagues, two outstanding pioneers of this new age, Barry Thomas FRPS and Eddy Sethna FRPS. They were fantastic gurus whose contribution to the growth and popularisation of DI should never be underestimated. When



Welsh Farmhouse, taken recently, is an infrared image from an IR converted camera, processed through Lightroom and Photoshop. with a subtle texture overlay, toning and border to suggest the patina of antiquity.

Eddy stepped down as Organiser of the extremely successful Midlands RPS Digital Centre, I took over. Very soon afterwards I found myself on the committee of the RPS DI Group, later becoming Chairman.

Where are we today? The cutting-edge excitement has dissipated and digital imaging has become the norm. Gadgetry has proliferated, computing power, miniaturisation and cell-phone technology has developed beyond expectations.

Photographers can produce images that are super real and smoothly correct any deficiencies within the frame. Is this leading towards an improved understanding and representation of the world about us? Are we more adventurous or settling into

complacency? Is there a part of us that yearns for those uncertain days when we were constantly at the limit of our technical capabilities? One wonders what new technology will disrupt our comfort zone and thrust us forward into a new era of uncertainty and dangerous methodology? Long may our brave new world continue.



Firepower dates from around 20 years ago (ca 1997). It's an obvious composite constructed from some six or seven images. This is the sort of thing that digital imaging and Photoshop gave us the ability to do and we were happy to exploit it. This would have been exceptionally difficult to do in the darkroom, especially in colour.



Watching the exponential growth in virtual reality, I have long since had the dream of sitting in my mind-controlled robotic chair in my dotage, being able to be part of my family, who are living happily elsewhere. 3D projected images appearing in the corner of my lounge through nothing more than my power of thought.

Imagine – you can retain your independence, be part of the world you love, yet shut it all down for a quiet nap when you feel like it.

As you doze you can walk along the cliff top, gazing at the starry sky, with your perhaps now-deceased partner.

Or sit and watch a golden field, with ears of barley dotted with brilliant red poppies, swaying gently in the breeze.

When the kids wake up on the other side of the world, then you can teleport into their home and interact with them as if you were there.

No need to get out of your chair. For them, you are sitting there but in their house.

Can this be my virtual reality in 20 years time? The answer is 'yes' as, believe it or not, the technology has already been developed to make this a reality.

As I set out to write this article of my 20 year 'Dream of the Future' serendipity took the hand of fate and presented me with a regular newsletter I get on new technologies (Gizmag) and up popped an item that compelled me to ... 'read more'...

The headline reads – 'Microsoft's "holoportation" lets you augment someone else's reality' - fascinating dear Spock. So, if like me, you are excited by this possibility then do go to: <http://www.gizmag.com/microsoft-holoportation-hololens-virtual-reality-hologram/42501/> Scroll down and watch the video.



Microsoft holoportation

This is my dream and in 20 years time I will be spending all my pension on this, even if it is still 'bleeding edge' technology. But I suspect,

by then, we the masses will be living with it just as easily as today we all expect to use digital cameras and have left film behind.

I say "bring it on" – I want this to be my Dream of the Future. I want to be part of the virtual reality if it is going to be as good as this.

WHAT IS HOLOPORTATION ?

Holoportation is a new type of 3D capture technology that allows high-quality 3D models of people to be reconstructed, compressed and transmitted anywhere in the world in real time. When combined with mixed-reality displays such as HoloLens, Microsoft's augmented reality headset, this technology allows users to see, hear and interact with remote participants in 3D as if they are actually present in the same physical space. Communicating and interacting with remote users becomes as natural as face-to-face communication.

Team webpage: <http://research.microsoft.com/en-us/groups/i3d/>



Microsoft holoportation

Star
gazing

MIND CONTROL

Rex was walking round the bird sanctuary at Keyhaven and thought he saw an Icelandic Gull. He thought he would like a closer look and in response his glasses and the artificial lens in his eye altered their focal length to produce a magnified image of the gull. He recognised the bird from a Winterwatch seen 20 years before and a gentle word sounded in his ear and said "This is an Icelandic gull and is a medium sized gull which breeds in the Arctic regions of Canada and Greenland but not Iceland, where it is only seen in the winter. Is more information required?"

Rex thought to himself that he'd heard enough and the voice responded "OK". Then his thoughts turned to his daughter and he decided Carla would like to see the Gull in all its glory.

On the other side of the UK, a holocube lit up in Carla's house and Carla's wrist shook to say a holocube image had arrived but she decided to view the movie on her watch. Carla held the watch to her eye and the watch painted the scene directly on her retina. Carla had a thought about the image and back in Keyhaven a voice in Rex's ear said "What are you playing at Dad? I know you hate bird pictures!"

What developments are needed that would allow this to happen?

Headsets exist to detect "thoughts" (See EMOTIV www.emotiv.com) and some success has already been

achieved. Currently it would require a huge amount of computer power to achieve the scenario described. However, if Moore's Law continues to be obeyed computing power will be about 1000 times higher than it is currently, so our ability to extract signal

a step change in processing would have occurred or small fuel cells would provide "limitless" power. A new computing technique has just been trialed by Krishna Palem whereby the digital accuracy of the computation is reduced in order to save power.

Direct picture writing on the retina exists now.

Currently we are at 4G with our mobile phone system. I recall using an early mobile phone that was best described as luggable and required you to say "Hello, are you still there?" several times in any one attempted call. So a prediction that a small video can be transferred in an instant is not a dramatic prediction. We just need a mobile phone signal at Keyhaven! If that obstacle is overcome then Google Images in 20 years would be quite capable of processing the image and recognising the bird.

The holocube will definitely come about for displaying images. Perhaps the toughest part would be producing the 3D image from the image captured from our eyes.

The watch will possibly have gained acceptance over 20 years and provide facilities that we all want!

One of the difficulties in looking this far ahead is trying not to base it on things that are already in the public domain. In the short period since I first started this item articles have become public that add to the likelihood that these wild fantasies will become a reality.



EMOTIV thought detector

from noise will improve and process the image. The possibility of detecting what your eyes see is therefore feasible.

An alternative approach would be to embed a "camera and display" in your eye and this has just been patented by Samsung. The power consumption would not be a problem as either

(For those who want to know, LSBs run at a voltage that may cause errors)

Multi focal length implanted lenses exist and variable focal length glasses exist.

Development in this area over 20 years might well enable an implanted binocular.

Star gazing IS DIGITAL MEANT TO BE?

So 2016 looks like it could be a pivotal year in the history of photography. It is the 200th anniversary of the birth of the recorded image, the 100th anniversary since the introduction of 35mm film, the 40th Anniversary of the birth of Digital Photography and the 20th Anniversary of the formation of the RPS Digital Imaging Group.

But what of the future ? Even though the technology of video has sped along at the same rate as still photography, the still image has not lost its informational or aesthetic value, so one can assume that this will always be the case.

Some of the technologies currently evolving are VR (Virtual Reality) and AR (Augmented Reality) but how could they affect the creation of the photographic image ?

Personally I think that VR will be just another 'flash in the pan' (excuse the pun). Although it has the ability to immerse you into an environment, it does so by removing you from reality. Although I feel that some people really do need removing, I'm not sure, just like today, it will be everybody's cup of tea.

I am more excited by Augmented Reality. It is currently delivered by the discreet positioning of a tiny screen in front of your eye held in place by futuristic spectacles, fairly discreet but still allowing you to declare to the world what a superior trend setter you really are !

The future AR, like the current, would allow us to see the real world, overlaid with intrusive information and trivia, provided by a really wicked on line encyclopaedia. Brand will always be important, but I can imagine in the future, the delivery device will be provided by a very discreet contact lens or even an iris implant, so perhaps we will have to wear a witty t-shirt to let people know we are still a trend setter and also 'Augmented'.



Photography past, present and future

Perhaps using AR as our viewfinder, we could be directed to the best places to stand. We could be advised whether the potential subject matter would gain us awards and recognition by our peers.

If the AR was supplemented by AI (Artificial Intelligence) perhaps the view finder could also provide us, before we even activated the shutter, a score out of 20 (of course this score would have to be calculated carefully, making sure that it never went below a ten.)

Would it also be calibrated so that the shutter could not be activated if the score went below 15? How many times have I stood in front of an image wondering why the author had bothered.

If the viewfinder is now integrated into our eye, what of the rest of the camera ? So long have we had cameras suspended around our necks, can we really let go ? As it happens, we already have and the future

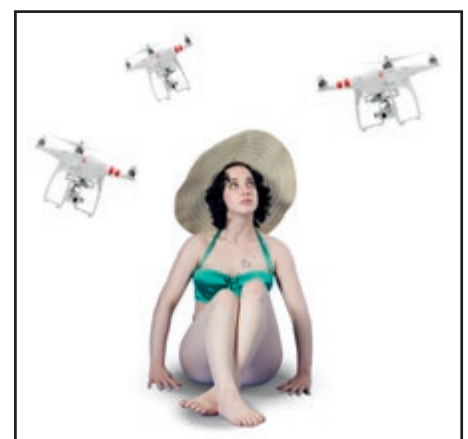
is already here and is quite often found hovering outside Mrs. Jones's bedroom window.

But why stop at one drone camera ? In the future we will have multiple and miniature drones, all programmed to cover our perimeter, complete with their 10mm to 1000mm lenses, covering all light frequencies from infra red to extremely blue.

So what of Photoshop ? Will it return from the cloud and take up residence in our cameras. Will it automatically modify the live image at the stage of capture, following pre-set conditions based on our taste and temerity ? Will it automatically remove lamp posts, officials in fluorescent jackets and obtrusive fellow photographers. Will it remove blemishes, scars, spots and pimples, or will it remove ugly people altogether ?

In the future, with all this power at our disposal, ultimate quality with minimum effort, the perfect picture every time, might we see a celluloid revolution with the re-introduction of Agfachrome, Verichrome, Ektachrome and Givethedogabone ?

Will we finally realise that the art and craft of photography was never meant to be digital?



Hovering outside Mrs Jones' window

Star
gazing

CHANGE THE NAME

The revolutionary part of digital imaging is now complete and we are moving into a slower, longer-term, evolutionary phase.

The short-sighted sceptics who claimed: 'this digital thing will never take off' have mainly departed, retired or moved on, along with Agfa, Kodak and Ilford. They never saw it coming or chose not to look. At each Epson Print Academy I deliver, I show a printed image from Paul Gallagher as an example of how blessed we are today with technology that outperforms analogue on every scientific and emotional parameter with the exception of metamerism (and that only on mono silver-halide).

Anybody who claims that film is still best (and there are a couple) is living in cloud-cuckoo land. Film is demonstrably poorer. Such is the quality of today's output that there is little headroom for improvement in final print quality over the next 20 years. We have already reached the limit of what the eye is capable of detecting when viewing a pictorial print.

Where is there to go, then? On cameras, the physical size will continue to be reduced from that of the standard format DSLR but only so far. The human hand will remain exactly the same size and you need something to get hold of!

Clever pixel engineering will enable today's top resolution to be maintained from physically smaller formats but 12 mega pixels is enough to produce a sparkling A2 print so few extra pixels are actually needed. Using the same chip twice by moving the detector is as old as digital but is now being incorporated into modestly-priced cameras.

Auto-joining panoramas also effectively increases the pixel count across an image. High-speed multiple-exposures can also increase effective dynamic range of the image file. Camera shake should become a thing of the past thanks to clever

stabilisation. ISO speeds will continue to rise and delivering less noise is the prize awaiting here.

The truth is, though, very low light scenes are inherently low contrast and uninteresting. Movie capability will continue to increase and soon really high quality stills will be available from movie 'footage' (there's an old term!). Unlimited depth of field will be provided by multiple shot-stacking in camera.

If we are lucky, the rat's nest of wires that still plague the area under our desks will diminish, probably at the expense of even easier access for the hackers across the airwaves.

What is not going to change?

Poor photographers will continue to delude themselves that pictures can be rescued from fundamentally poor craftsmanship.

The laws of physics will not change – at any given level of technical achievement, bigger pixels will gather more light and therefore outperform smaller pixels.

855,000 smart phones will continue to be flushed down lavatory pans and with them the only copies of significant family moments.

It will remain impossible to flush a shoe box or biscuit tin down the lavatory and prints will remain the only image medium that does not require any technology to view it and will not become obsolescent. Shoe boxes might disappear.

Photoshop will always take 20 seconds to open as a new install and two–three minutes after Windows has aged.

The professional wedding photographer will still find it impossible to take a shot of the couple without intrusion from camera devices held high above the head.

Casual gallery, city and museum browsers will continue to think they have 'done' an attraction when they have taken a selfie with said attraction in the background. They will continue to forget to even look at the Titian on the basilica wall after they have taken and posted that selfie to their friends.

Waiters will continue to wonder why people find it necessary to take a picture of their food and post it to all their friends.

Microsoft will continue to make Windows laden with features we don't want so that we will continue to be enraged by pop-ups, cookies and pedestrian performance.

And finally what will happen to specialist digital image groups?

Apart from the 1.4% of members who are members of the analogue specialist group, the time has arrived when all photography is digital. It is a strange thing therefore that a digital photography specialist group is required in the Royal Photographic Society.

When I met with seven others in a house in Chester to form one of the first digital imaging groups, all those years ago, it was needed as a focal point where people could gather to find out what computer to buy and how to connect a scanner via a SCSIII cable (very few cameras were around at the time). At this meeting, a group sunset clause was discussed but seemed further into the distance than it actually was – perhaps we listened too much to the Kodak and Agfa die-hards who still thought that 'this digital thing' would never take off.

A change of name is perhaps required even if the outlook and intention remain similar; love it or hate it, Photoshop has opened creative possibilities that were previously impossible to execute, regardless of your skills in the dark room.

Mike McNamee FRPS, is editor of *Professional Imagemaker*, and former editor of *Digital Photographer*,

THE FUTURE OF IMAGING

WE ARE LIVING IN A SOCIAL, CULTURAL AND TECHNOLOGICAL LANDSCAPE THAT IS RAPIDLY TRANSFORMING HOW PEOPLE CAPTURE, SHARE AND USE IMAGERY. AGAINST THIS BACKGROUND, NIKON COMMISSIONED THE FUTURE LABORATORY TO PRODUCE AN ANALYSIS OF THE FUTURE OF IMAGING IN THE COMING DECADES.



Image by Brands2Life for Nikon

The experts interviewed were:

Luke Mitchell

Head of Insight at youth-insight firm Voxburner

Kevin Meredith

British Lomo-LCA photographer and author of 'Hotshots'

David D Burstein

Author of 'Fast Future: How the Millennial Generation is Shaping Our World'

Tom Chatfield

Lecturer at The School of Life and author of 'How to Thrive in the Digital Age'

Matt Pyke

Founder and Creative Director of digital art and design studio Universal Everything

Shawn DuBravac

Chief Economist and Director of Research at the Consumer Electronics Association (CEA)

Tad Nakayama

Corporate Vice President of Nikon

Tetsuya Yamamoto

General Manager, Development Headquarters, Nikon

'Humans are always going to be hungry for new, surprising, stimulating content, whether that is moving or audio or visual. That is something that is always going to be a driving force with surprising new ways of stimulating people's senses.'

Matt Pyke, Founder and Creative Director of digital art and design studio Universal Everything

From shopping to dating, sightseeing to meditation and sports, advanced technologies will enhance the way people see the world around them.

'We have started to create visuals where you can reach onto the screen and touch the objects in the image, but they behave in ways that are impossible in real life,' says Matt Pyke, Founder and Creative Director of digital art and design studio Universal Everything. Augmented visual experiences like this will enable people to create images that are otherworldly and truly surprising.

For example, using sophisticated haptic and audio technologies, an image of a black marble surface could feel like cold silk; or a video of a field of long grass could create the sensation of autumnal winds blowing.

Moving into the future, human enhancements such as eye implants (already in production by Google) will also enable augmented vision, enhancing the perception of colors, materials and visual details.

All Sense Imaging

Imaging is evolving from being a simply visual medium into a five-dimensional, multi-sensory experience, including smell, sound, taste and touch.

Imagine an immersive multi-sensory experience where an image's viewer hears what the subject of the image sounds like; feels the materials and textures of the objects shown; smells a perfume emitted from the device that captures the message being conveyed; and then receives tips for what to eat and drink in order to fully immerse themselves in the moment and emotion of the image..

People are used to the novelty and the magic of technology, but I think we're moving more into emotional storytelling that tantalizes the senses,' says Matt Pyke. Indeed, users will increasingly turn to more visceral forms of visual media, testing their expectations, comfort levels and attention spans in search of deeper feeling and emotion.

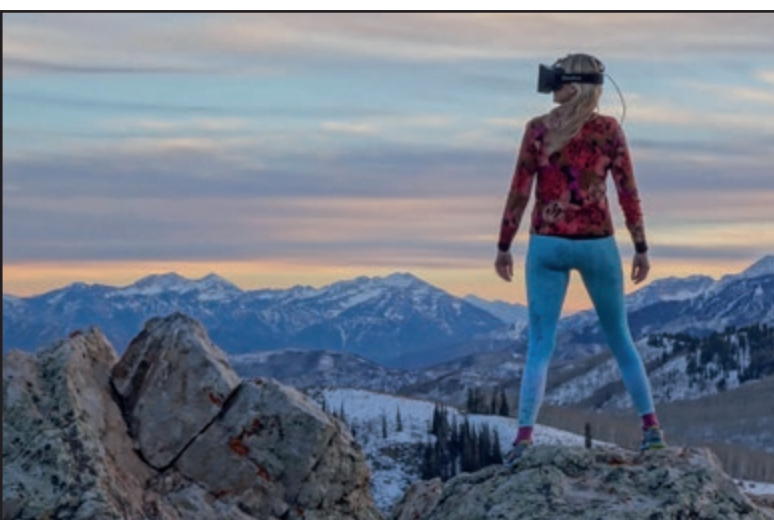
Sensorial, immersive environments using augmenting technologies will become commonplace. According to a report published by Markets and Markets, the augmented reality (AR) and virtual reality (VR) market is expected to grow at a compound annual growth rate (CAGR) of 15.18% from 2013 to 2018 and reach US\$1.06 billion by 2018.

Limited uses of AR and VR will be replaced by real-world content thanks to revolutionary technology such as Oculus Rift, making experiences more personal and intimate, and this will have a major impact.

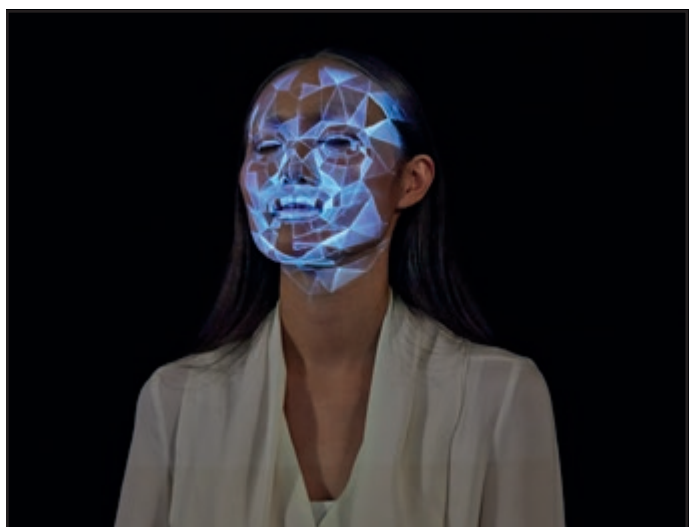
'People are already spending more time staring at a screen than they do looking at the real world,' comments Andy Millns, co-founder and creative director of augmented-reality company Inition, in a recent report for LS:N Global.

'When you have an experience that is 10 times more powerful than that screen, people will be compelled to invest an even more significant amount of their lives in there.'

A team of digital designers, makeup artists and CGI experts, led by Japanese artist Nobumichi Asai, have created Omote, a stunning visual experience that combines real-time face tracking with projection mapping. This 'living makeup' tracks a person's movements while maintaining its visual integrity. This enables performers to project practically anything on a face, creating endless visual possibilities.



Oculus Rift 3D 360 degree film



'Zero Point' by Condition One

'Images on digital screens do not capture the amount of information people want from a shot, and we have forgotten how important time, distance and perspective are in capturing real emotions in a single image'

Kevin Meredith, British Lomo-LCA photographer and author of 'Hotshots'

Social Imaging

Ever-faster technologies are making people question the integrity of images, and to ask 'have I really captured the true spirit of an experience from every possible angle to ensure I really enjoy the memory afterwards?'

In the future we will see the rise of 'social vision'. Currently, crowds are taking pictures of the same moment, which incidentally documents every angle of a situation. A new method of collaging visual data could build up a holistic picture of an event, by knitting all these different perspectives together, producing a single image that captures a thousand users' emotions.

Google is beginning to explore these possibilities via initiatives such as Photo Sphere and Project Tango, where 360 degrees of a moment can be captured. This allows for further mapping and discovery long after the original photo was taken. Google's aim is to 'give mobile devices a human-scale understanding of space and motion'. For his part, Matt Pyke says that, 'In the future, people will hold up their 360-degree video cameras at the front of a gig and stream it in real time to audiences elsewhere. Viewers will be able to pan around like they would do on Street View and see everything in a real-time video performance - it will feel like you're there.'

Visual Wellbeing

In reaction to always being 'on' and connected, the demand is intensifying for anything that helps people switch off again.

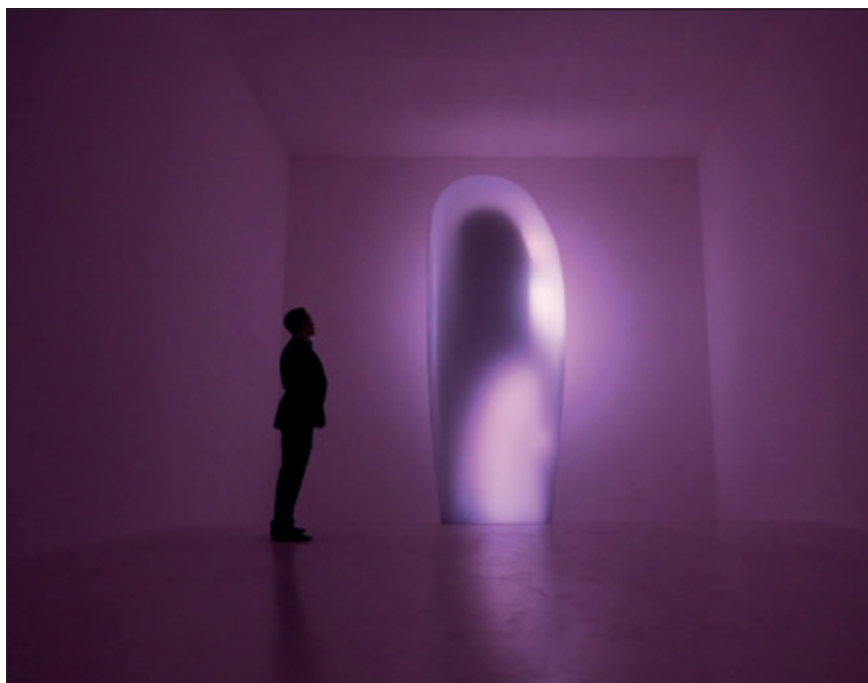
Over the next decade there will be a growing market for escapist environments, and there will be new need for visual stimulus that promotes mindfulness, tranquillity and sanctuary.

Universal Everything's Matt Pyke explains that healthcare providers will be able to use immersive visual technology to help patients cope with anxiety and pain. 'Companies are installing screens on the ceiling of examination rooms so that when patients are lying in bed or being treated they are calm and relaxed and have their minds distracted,' he explains.

'There will be more opportunity for things such as apps to help patients refocus or be distracted,' Pyke continues. 'Visual stimulation can have really positive effect on patients by accelerating the recovery period, reducing the need for prescription drugs such as painkillers and antibiotics.'

Whil.com is a site that encourages people to turn off their brains for 60 seconds by visualizing a dot so they can 'power down, power up and power forward'. Apps like these reinforce the visual stimuli that can help achieve mindfulness.

The health benefits of visual imagery will become increasingly accepted in the home and at work. 'People used to have screensavers,' says Pyke, 'but now the devices can be transformed into a digital canvas when they are not switched on. They can respond to the sound in the room or the presence of people.' In this trend, a visual content revolution is coming, and it's about choosing the visual content mindfully and preparing oneself to engage with it in a more concentrated manner to reflect, relax, and reenergize for the busy times ahead.



Rebirth, Mariko Mori by Peter MacDiarmid

'People are using the capture and sharing of images as an everyday language, and becoming fluent in this new form of expression.'

Tom Chatfield, Lecturer at The School of Life and author of 'How to Thrive in the Digital Age'

We may live in the information age, but that information is taking an increasingly visual form, and visual self-expression is more popular than ever before. Capturing images has long been important in people's lives, but in a digital era this phenomenon has accelerated. This year alone we will take 880 billion photographs, according to Yahoo! And over 20 billion photos have now been uploaded to Instagram alone.

Advanced technologies are rapidly reaching into every corner of people's lives, and users are becoming more and more intimate with them. According to a recent YouthTech report, 85% of British 16-24-year-olds have an above-average interest in technology. Imaging devices such as smartphones, tablets and smart cameras are almost becoming extensions of one's personality, and a part of how we express ourselves.

'The capability of technology has increased enormously,' says Tom Chatfield. 'In the early days of the internet, photographs and videos were big and cumbersome to share, so you used words to exchange information, feelings and reactions.'

Capturing and sharing images will increasingly offer a way to communicate spontaneous moments and emotions. We will capture and share every second of our existence in images. More and more of us will become sophisticated performers, portraying the social nuances of our world.

Tom Chatfield adds, 'On the one hand there is the instant emotional response of snap-and-share and send through Instagram or whatever. On the other hand, people are very sophisticated in their awareness of social nuance, and the art of the 'selfie' has become a highly developed social form of display [in terms of] what you keep in and what you leave out.'

'As far as people continue to be emotional our aim or our goal is to help people to capture their emotional moments and support them from an image capturing perspective. There is no limit to capturing intuitive images.'

Tad Nakayama, Corporate Vice President of Nikon

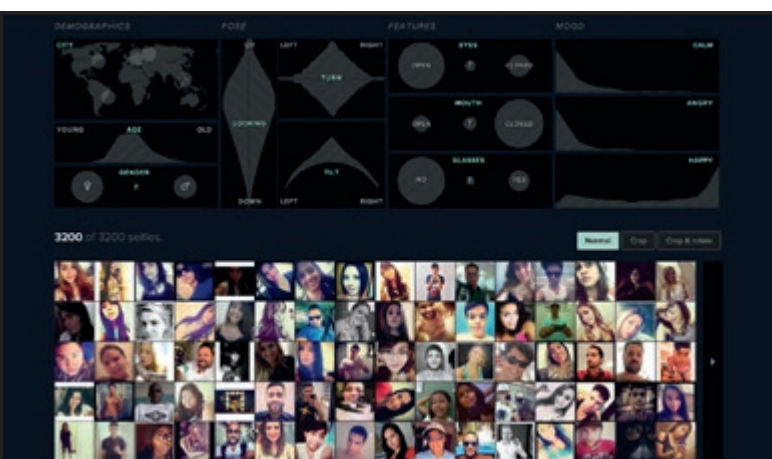
Expressing Emotions

We will soon experience a new era in self-expression, in which people will further open up their lives using imagery. 'There is an expectation that if something important happens to you that you are going to photograph it copiously,' says David D Burstein. 'You are going to share it with other people, and they will want to participate in it and your life.'

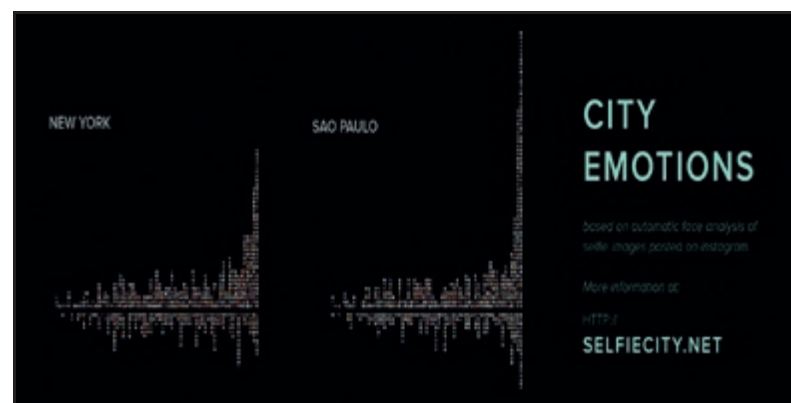
This openness is developing as more of us accept that our presence and standing in social networks depends on us being actively involved and sharing our lives through both still and moving images.

Selficity is an online platform that explores the style of self-portraits ('selfies') in five cities across the world. Users can analyze selfies using a mix of artistic and quantitative methods, including demographics, and also examine poses and expressions.

As this culture of openness develops, people will broadcast ever-more heartfelt emotional moments to the world, encouraging strangers to react to their emotional states. Technologies will enhance how emotions such as happiness, love, anger and surprise are communicated via images to help people express their feelings.



Selfie City



Selfie City.Net

‘Today very few people actually ask, ‘who took this photograph?’ There’s no backstory. As with words, fewer people care where the original quote came from, and fewer care where the picture came from.’

Kevin Meredith, British Lomo-LCA photographer and author of ‘Hotshots’

Visual Storytelling

The success of the visual web is largely based on millions of people sharing images, using networks such as Pinterest and Tumblr, which make it easy to discover and republish visual information. One such network, Vine, had 40 million registered users in August 2013. In its latest update, it claims that every month more than 100 million people watch Vines across the web, and there are more than 1 billion loops every day.’

One likely reaction to this overload of imagery is that the story behind the visual will become more important, along with information about the who, why and what of an image. ‘People deeply crave community,’ says David D Burstein. ‘They want to be connected in everything that they do. They want to have true social interaction and experience.’

A renewed focus on togetherness and community will transform the connection people feel with visual content. This will cause a shift in behaviour, says Tom Chatfield, from ‘share and re-share content to get peer appreciation and following,’ to one that is about ‘building curiosity and understanding the data behind the image - who took it, why they took it, the mood they were in, the ambience of the situation and so on.’

This Place Journal, developed by creative agency Instrument, showcases visual stories for particular locations. As the site explains, ‘everyone has a special place - a spot on earth you hold close to your heart. Like the town where you grew up or met the one you love.’ In one visual story, This Place uses imagery and video from local inhabitants and visitors to describe the Oregon coast, and how it means different things to different people. This Place is a portrait of the coast as seen through the eyes of those who cherish it.



This Place Journal

The Refocused self

‘Photographs used to be scarce and valuable, but now I can inexpensively create billions myself,’ says Tom Chatfield. ‘As traditional notions of scarcity evaporate, new ones are created. Nobody wants there to be no exceptional value or excitement, for everything to be the same and worthless. They want special feelings to be matched by special objects, and they want licence to care deeply.’

In the future, we will see a shift from a ‘snap everything’ culture to a more focused act of image taking and production. With more services to help everyone feel like expert photographers, there will be new opportunities to capture special and heightened visual content.

Kevin Meredith says, ‘Over the coming decade, there will be a growing need to re-educate people and reintroduce traditional mediums of photography for a generation that has never experienced the physical magic of analogue photography. The emphasis will move to creating a one-off image with a sense of ownership, to make images rare again.’

New initiatives champion the one-off and the slow image-capture experience. The Thirty Six app recreates the activity of sorting through photo negatives to pick out a series of pictures to develop. Users scroll through the images on their screen to pick out a narrative - a skill not normally used in digital camera photography.

Meanwhile, projects such as the 1 Hour Photo App requires users to wait one hour before printing out a photo on a black-and-white film emulation, harking back to the time when photographers had to wait patiently before getting to see the fruits of their labour.



Thirty Six App by Developers Conocode

One of the greatest shifts in personal technology will be the growth of the 'quantified self' movement, where people use multiple devices to measure the data of their day-to-day lives. More than 300 million wearable devices, such as the Jawbone UP, Nike FuelBand, Pebble, FitBit and Withings, will be shipped worldwide in 2019, compared with 14 million in 2011, according to research firm Business Insider.

This poses an opportunity in imaging: the vast amount of visual information being accumulated can now be analyzed by both consumers and organizations. This will offer a better understanding of how these wearable devices are being used, and enable users to analyse each and every visual in great detail - everything from sunlight levels, humidity, emotion of the subjects, popularity of an image on social media, who else has captured the same image etc.

Nikon's Tad Nakayama says, 'There is an increasing desire to comprehend and visualize the world in numbers. Everyone has a different perception of emotion, and they will be able to analyse data behind a visual and may be able to find out the philosophy of the person, or their personality behind the image.'

Live visualization

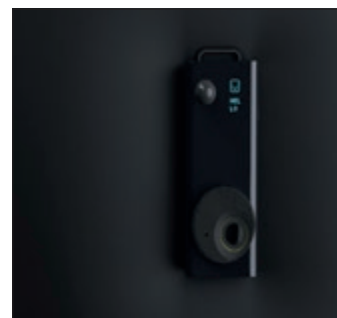
Documenting the information for every visual is a key ingredient in the quantified world. There is a growing market for agile, flexible cameras that offer always-on point-of-view image capture, so that people can effortlessly record their lives. The Consumer Electronic Association's Shawn DuBravac estimates that around 1.4 million point-of-view photography devices will be shipped in the United States in 2014.

The Narrative Clip is a tiny automatic camera and app that lets users capture, store and relive special moments. It weighs just 20 grams, with a storage capacity of 4,000 pictures, and a battery that lasts for two days of use. Similarly, the Autographer is a new type of camera for spontaneous, hands-free image capture. Its world-leading technology includes a custom 136° eye-view lens, an ultra small GPS unit and five in-built sensors. These sensors use a highly calibrated algorithm to directly communicate with the camera at the right moment for capturing.

This 'contextual functionality' could again see cameras and imaging devices adapting to the situation being photographed, by enhancing certain colours, tones, exposure and contrast levels to reflect and enhance the emotion of the image as the photographer intended.



Up 24 by Jawbone



Autographer

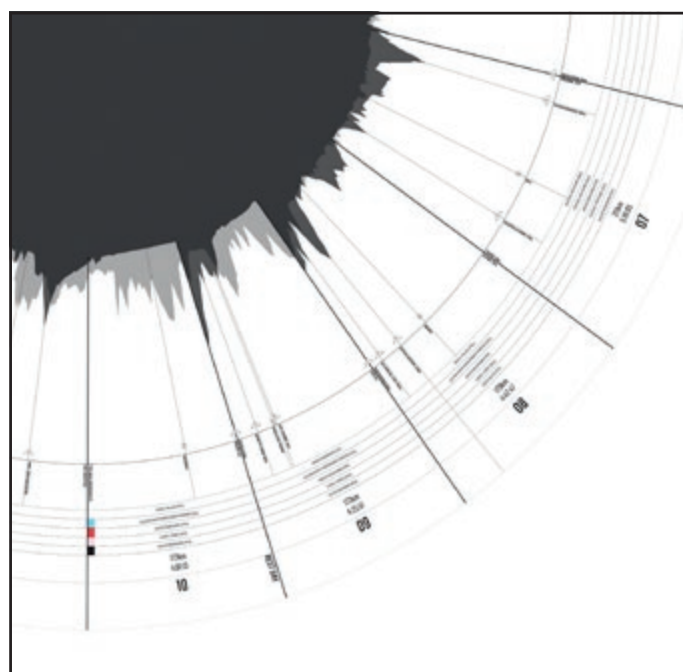
Self visualization

The mass of visual information created by live visualization will drive the creation of new services dedicated to making sense of visual data. 'People are going to be taking millions of photos,' says Matt Pyke. 'The challenge is how to process that data and turn it into something where you can rewind your life and remember the conversations you had.'

Dealing with this information will require new systems to manage the visual narratives of people's lives, and enable users to discern patterns in (and insights into) their lives through imagery. According to infographic design agency Now Sourcing, posts on social media related to these kinds of infographics tend to be much more popular than other posts.

Once organized, data sets can provide insightful profiles and add extra meaning and depth. Users can then use these to connect with each other in a more holistic way. Facebook Graph Search and Google Local combine social networking with search facilities, and enhance the story behind the vast amount of visual content on one's social network profile.

'In the future people will arrange visual data in a way that tells a comprehensible story which is more dynamic and more tactile than currently, organized into moment and days, emotions and contexts,' Tom Chatfield says. People will be able to understand more about the visual narrative of the world around them, and the 'visual journeys' people leave behind throughout their lives in images and videos.



Graphic Illustration of Tour de France and Giro d'Italia (Detail)

Visual analytics

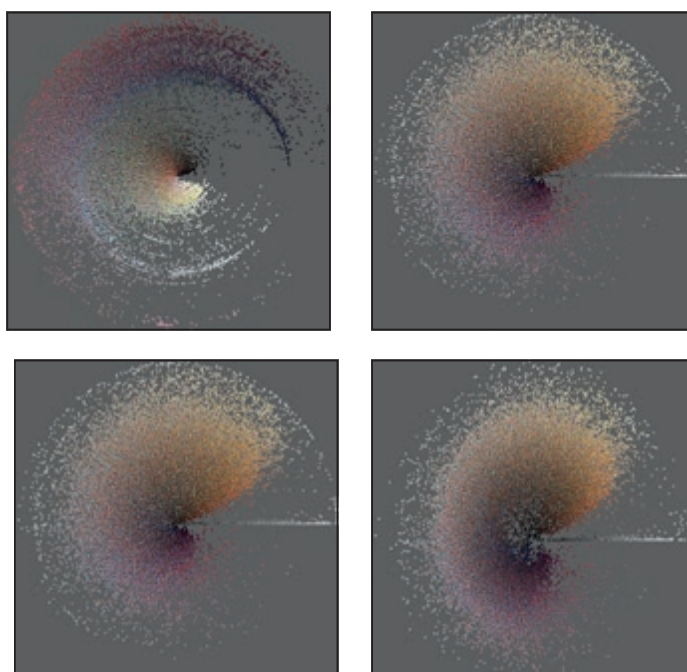
The mass of visual data being captured will also present opportunities for users to analyze the personality and even likely physical experience of being with the people whose images they see.

Indeed, we are entering a Reputation Economy where one's visual identity will be analyzed in many ways. 'The root of the quantified world is the idea of understanding oneself better, of achieving control and comprehension,' says Luke Mitchell, Head of Insight at youth-insight firm Voxburner.

Consumers are increasingly aware of the data game and though many are sceptical about their data being used, more and more people are weighing up the value of being better understood as a result, if that leads to more personalized products and services.

'As you get closer to this idea of a central repository of the most important data in your life, you gain the ability to do analytics, to become smarter about who you are, to live a better, safer, healthier life, and to make smarter decisions,' said Shane Green, CEO of Personal.com in a recent study by LS:N Global.

Companies like Phototrail help people to explore and find patterns in the mass of visual data that surrounds them. The service explores social media's visual data, containing billions of photographs shared by hundreds of millions of contributors. It examines how the types of photos being taken worldwide change over time, as well as looking at the location of specific clusters of visual content. It also offers social, cultural and political insights about people's activity around the world - all from the images people upload to social media on a daily basis.



Global Cities visual Signatures by Nadav Hochman , Lev Manovich and Jay Trow Phototrails.Net

LOVING THE GUIDED TOUR

IF YOU ARE SCEPTICAL ABOUT GUIDED TOURS, THINK AGAIN. MARK SISSON, WILDLIFE PHOTOGRAPHER, TOUR COMPANY DIRECTOR AND JOINT OWNER OF *NATURES IMAGES*, ADDRESSES CONCERNS AND TELLS YOU HOW TO PICK OUT THE BEST.



Giraffes' kiss

At face value, one of the potential ways to try to acquire different images, whilst at the same time acquiring more skills and experience to help your photographic development, is to book on a photographic workshop or holiday. This is an offshoot of the growth in the overall industry that is seeing rapid expansion in recent years but for many, the whole idea of joining a group for their photography is a bit of an anathema. For them photography is a personal experience that they wish to

absorb just themselves in and the idea of going around en masse with no time to do their own thing and simply placing their tripods in well-used holes, holds absolutely no appeal at all.

As someone who has been a professional wildlife photographer for some 15 or so years, alongside running large workshops and a holiday business for nearly 12 of them, let me say that I can completely understand those fears. Many big operations do work

a little like that and try to pass off a general tour as a photographic one by a mere twist to their marketing. There are also a lot of small, inexperienced individuals or setups who are offering trips as a way to get themselves to places they want to visit and photograph too, many also operating in the grey zone of legality.

So is this a minefield that is worth working your way through at all then?



Polar Bear Cub playing

Well although you would expect me to say yes, I genuinely believe it is and I only have to look at the number of clients who have travelled with us over many years now and how they have progressed within the various spheres they share their work. The numbers of them achieving LRPS, ARPS, Camera Club and International Salon successes, major competition recognition and awards is actually now too long to mention in terms of names. When I think back to where many of them were photographically when I first met them, where they are now, and also look at the percentage of images that have been taken when with us, that make up their successes, it tells me all I need to know in terms of the upside of entering the well organised holiday arena. The key though, is finding the right company or individuals to travel with and place your trust in and so I thought a simple checklist of things to look for and questions to ask, might be appropriate.

1. Look for evidence that this is a trip that they have run before. Don't just rely on images on a webpage to do this (it is easy and cheap to buy or borrow images these days). See if they have extensive galleries and maybe even guest galleries from previous trips. This is another great way to see what you might reasonably expect from a trip, rather than a portfolio achieved from many years of going to that location on the company's part. Look too at just what the guest: guide ratio is, not just on this trip but

on others the company run. It'll give you an indication of just how much real input you are likely to get from them when it really matters.

2. Do your homework as far as the guide on the trip is concerned. Is their photographic style and image portfolio one you actually like and aspire to? Are they someone who you think you might learn from in that respect, when photographing alongside them, or is their work average? If the images that the potential guide has taken go beyond just record shots of easy-to-find species, such as a Giraffe on an African safari, there's a good chance you'll learn more from them. For example, a silhouette image gives an indication that you are looking at a trip organised not only by creative photographers but also ones that get you to the right places at the right time of the day too. Go beyond just looking at the images for the particular trip you are looking at but look to see just how experienced they really are, how long they have been guiding, how long they have been taking photographs and their experience in the field.

3. Look carefully at the itinerary and how it is structured. Conventional

tours are often just that. Well put together photography trips, particularly in the wildlife arena, recognise that the best images come from spending the maximum amount of time at the best locations rather than visiting more places. Weather changes,





Grizzly Silhouette

animal behaviour is different every day and it often takes you a day or so to get under the skin of a location yourself. A good guide's experience recognises when it is likely to be worth staying put in a location. Our vehicle spent almost all day



King Penguin encounter

with the Polar Bear cub and its mother shown here, waiting for them to wake up and we were rewarded with some fantastic playtime shots as a result of our patience. When booking accommodation and internal flights on the first trip we ran to the Falklands, the ground operator couldn't believe I wanted to take people to so few locations but they were the best to immerse ourselves in and that is what produces the best and most different image opportunities, such as seen in the photo of King Penguins approaching a client in the Falklands..

4. Try to talk to them about the trip. You may get to see them giving a talk so go up and talk with them. You'll get an instant insight as to what spending time with them might be like. The best photographers don't always make the best guides. If that's not possible just ring up. If you speak to someone about the trip you should pretty much be able to work out their level of enthusiasm, knowledge of the place and how the trip will run. Ask about the logistical side of things, the subjects and the locations – anything that helps give you an insight into just how well organised things are likely to be. You should also take that opportunity to be 100% sure that they have all the necessary public liability insurance and also that they

are fully compliant with the Package Travel Regulations. Remember anyone booking any accommodation, providing food or transport, even for one night, is selling a Package Holiday and they need to be compliant.

5. Try to find someone who has travelled with them before. Personal recommendation or feedback is the greatest input you can have. Alternatively, a good Google search will help to find someone to ask. If you can't though, that may be giving some clues in and of itself.

Hopefully, there are some insights here, from an operator's perspective, as to just what you should be looking for. A good trip should leave you wanting more experiences of its ilk, both in terms of your photography, the images you have taken, the people you've been with and the experiences you have had and shared together too. When this happens the role of good photographic trips should become clear and obvious too.

Mark Sisson is a widely published and award winning nature photographer and Director and co-owner of *Natures Images*. He has many opportunities to travel with his camera and on many occasions guests too as well as the chance to share his passion and knowledge for nature photography with them too.

Contact: www.natures-images.co.uk

STORY

ISRAELI PHOTOGRAPHER, ASHER SVIDENSKY, HAS A VISION OF THE FUTURE OF PHOTOGRAPHY AS THE WORLD'S FIRST INTERNATIONAL LANGUAGE THAT WILL CONNECT US ALL. IN 2013, HE DROPPED THE IDEA OF STAND-ALONE IMAGES TO CONCENTRATE ON PHOTOGRAPHIC PROJECTS. HE BELIEVES THIS IS THE FUTURE OF PHOTOGRAPHY IN OUR SUPER-DIGITAL AGE, AS PEOPLE DEMAND MORE THAN ONE IMAGE. TRAVELLING INITIALLY TO ASIA AND CURRENTLY IN ETHIOPIA, ASHER SEARCHES FOR THE STORIES BEHIND THE IMAGES, AS HE EXPLAINED TO MARGARET PRESTON.



Eagle Huntress close encounter

After military service in Israel, Asher Svidensky worked as an assistant on corporate and fashion projects but it wasn't something he was passionate about. In 2013, he decided to change pace and travelled to Asia in search of "dreams and a portfolio".

His first project was on the Eagle Hunters of Mongolia. These hunters preserve a traditional way of life, passed from generation to generation, of taming eagles and using them for hunting smaller animals, such as foxes and marmots.

"Since I was very young I had a fascination with Mongolia," said Asher, "because it is so hard to find information about it. However, as I was travelling, other things changed for me, both in the way I looked at photography and what I wanted to do with myself.

"The original idea for the Eagle Hunters project was to be there for a week but eventually I stayed for about 40 days. Since then, I dropped the idea of doing stand-

TELLING



13 year old Ashol-Pan, Mongolia's first eagle huntress in more than 1000 years.

alone beautiful images and focused on photographic projects.

"The reason I think it is so important is because I think, in many ways, it is the future of photography in the super-digital age, where people demand to see more than

"There are so many people, cultures, traditions that we know very little about, but they are powerless to inspire us unless we put them in the spotlight"

one image. I think photo projects or stories are in many ways the best way to transfer messages to the eye."

Initially, Asher attempted to document the way of life of the hunters but soon realised that the real story lay in the future of this culture and he searched for a portrait that

would represent the future of this ancient Mongolian tradition.

"I wanted to document the future generation" he said. "Kids who take their first



Eagle Huntress in training

steps in learning the hunting skills; kids who hold the tradition's future in their hands".

Asher realised that it was due to Mongolia's rough terrain and difficult climate that the eagle hunting art was meant for men alone.

On the other hand, in a country where 70 percent of its educated population are women and most of its educational institutes are run by females, he wondered if it was possible that the future of the eagle hunting tradition could also lean on feminine shoulders?

He set about looking for an eagle huntress and found her in the form of Ashol Pan, the daughter of an experienced eagle hunter around Han Gohadok, south of Ulgii.

He was amazed by the young girl's comfort and ease as she began handling the grand eagle.

At the end of the session, Asher asked the father if he would consider training his daughter full time. He replied: "Yes, but I wouldn't dare do it unless she asked me to do it."

"And if she does"? asked Asher. "Next year you will come to the eagle festival and see her riding with the eagle in my place" replied the father.

"From the answer", concluded Asher, "I realized that the idea of women's participation in keeping the tradition is a possible future but just like many other aspects of Mongolian life, women will need to take it on by themselves.

Asher's next project was on the Yin-Bou cormorant fishermen at the Xing Ping village on the Li river in southern China.



Yin-Bou Master Cormorant Fisherman and grandson

"My idea was to go into this super-famous place and to try to find my own story in that area that might be off the beaten track".

Asher became frustrated however, because the fishermen are now so famous they have

fallen into a routine every sunrise whereby they go out with a group of tourists and stage classic images.

"I wanted them to do other things", said Asher. "But the second I wanted them to go

to different places, I was herded along to follow what they thought was good.

So we had many struggles trying to understand what each other wanted". Eventually, Asher got them laughing by



Yin-Bou master fisherman: 73 year old Yue-Ming, Xing-Ping village, China

taking part in the then-viral ice bucket challenge.

From then on, they were happy to co-operate and in the process, learned how photography could be fun.

As a result, what Asher achieved with this project is a rare glimpse into an ancient and simpler world, where man and nature worked together in beautiful harmony but which is almost entirely gone -- fading away into the shadows in the face of modern life.

Asher adopted the same approach of spending time with the people in his later projects on the Miao tribes of southern China and the Fire Dancers of Kerala, India. He likes to encourage people to become not just the subject of his project, but to be an active part of the story.

"I keep moving. Keep trying. Keep looking for the next story. I tell these stories in the hope of inspiring someone, whether it is to give them the motivation to follow their dreams or to go out there and explore the world themselves. There are so many stories out there. People, culture, traditions, that we know very little about, but they are powerless to inspire us unless we put them in the spotlight."

Turning to the future of photography, Asher was optimistic, provided photographers are prepared to adapt.

"Print will always be there, just because it is a very collectable fine art" he said. "As time goes by, you might have more and more images being presented on a digital platform.

Some fine art photographers might decide that their work should be presented only on a 4k or 8k screen, so collectors will have to erect these screens. I bet the future will be in this direction. I won't say that printed images will be here forever but I will say that photography will be.



The search for the Miao goddess

"Photography is an international language. You actually communicate in images. Saying a word is the action of projecting an image into the listener's head. Because of that, photography in general, whether it is videos or still images or whatever people will invent in the future, is just a very powerful and important process of communicating as humans. So I think that photography will evolve and change and adapt itself to the needs and lifestyle around us.

"Photography today has changed from a documenting art form to an actual art form into a very popular art form. It is something that every person can communicate with.

"Gallery changed to Instagram to Facebook and it is a great way for people to share

thoughts and ideas and things they are passionate about".

"Professional photographers, who want to make a living out of it, or just dedicate their lives to it, will constantly have to adapt. It won't be a situation where you just do that one thing that you saw somebody else do and you enjoyed it".

"The clearest example is that today, even though it is so much fun to make stand-alone images and beautiful single images, it is just not relevant for the market today. It is not what people are looking for when they look at photography.

"If you are a born photographer, you love seeing stand-alone images because it is



Miao Tribal girl



Art image from a photo project titled: "The search for the Miao goddess".



Miao Silversmith at work

a great way for you to learn and you can appreciate them, but most viewers just enjoy photography or photography is part of their culture and they demand a lot more.

“They want you to show them a full-on story. They want to have gorgeous images that are more than just pretty.

“Today, photographers have to understand their audience. When you become a photographer you have to adapt”.

One of the challenges for any photographer travelling in another culture and another language, is to find a good guide. However, this is something that Asher has found relatively easy.

“I always found the best guides are not necessarily the guides from tour agencies” Asher said, “but people who are passionate about what I do. You build up a relationship and a working style as you go and it is always nicer because they are not there to do a job.

“They are there because they are interested. I obviously pay them for their work and time and as they are there primarily because it is interesting to them, the way they work and engage in what you do is just amazing.

“In Mongolia, I have been there so many times that all the people who guide me are people with whom I have real relationships and we have fun for a few days or weeks.

“In China”, he added, “I met my favourite guide in a guest house, where she was working. I showed her my photos on my laptop and then, on her day off, she walked around with me and started translating for me for fun.

“I met another guide, an engineering student, in a bar in central Beijing. She is one of the best guides I have ever met”.

With regard to post-processing his images, Asher tends to keep it to a minimum these days.

“I tend to capture my images in the very very last moments of light” he said. “I think this is when colours and light come together so beautifully to make images which seem unreal.

“As most are photographed a few minutes after sundown, at twilight, many images that come out of the camera are very dark because I can’t photograph at high shutter speed.



A Miao mother fixing her daughter’s wedding dress, Xijiang village, China.



Fire artist, Kerala, India

I keep my editing mostly to opening up the darkened shadows and brightening the image but I won't do intensive colour correction or delete stuff out of the image or mix two images.

"I try to keep it loyal to photography", he added, "but I prefer to make it brighter or darker in Photoshop or Lightroom rather than spend \$10,000 on buying the newest camera that will allow me two more f-stops or two more ISO jumps"

Contact: www.Svidensky.com

YouTube: <http://bit.ly/1N3Gqcp>



Fire Artist



BEAUTY IN BANNER REST FALLS

Soft Water

WATERFALLS CAN BE A CHALLENGE, WHILE PROVIDING WONDERFUL CREATIVE OPPORTUNITIES. IRISH RESIDENT JOE HOUGHTON BRAVED THE MAMBA SNAKES IN A LITTLE KNOWN SOUTH AFRICAN WONDERLAND AND TOOK FULL ADVANTAGE OF THE SPECTACULAR LIGHT TO PUT HIS LONG EXPOSURE SKILLS TO THE TEST.

In the heart of Kwazulu-Natal in South Africa lies the little town of Port Edward. Most people barely register its existence as they speed through on the coast road but a few of the locals know of a hidden valley, within which lies a wonderland for the intrepid photographer.

My wife Penny and I have spent a good bit of time in KZN over the past few years and late in 2014 we joined the local camera club in Margate to make some connections and plug ourselves in locally – one of the best emails I ever sent!

Living in Ireland, we have a good number of waterfalls and I was bemoaning the lack of such in the locale to Tony, one of the club members, when he told me of a semi-secret spot he could get us access to. He did caution however, that it was an area well known for deadly mamba snakes, so we would have to be careful.

For some reason this put Penny off going to investigate...So the first visit was in January 2015, just a scouting trip really for Tony and I and we spent a happy couple of hours by the pond shooting the modest cascade, keeping half an eye open for the rustle of creepy crawlies in the undergrowth!

This was a 121 second exposure, $f/16$, Nikon D810 with the 70-200 f2.8 lens at 120mm, ISO 500, Manual mode and a Lee Big Stopper giving 10 stops of exposure reduction. My carbon-fibre 3 Legged Thing "Brian" tripod was perfect for the shoot, being light enough to pack into our luggage - weight always at a premium with two toddlers to bring as well! The owners of the land told us of a much bigger falls a bit further down the river, but it was about an hour's hike through very dense undergrowth from the top falls, and we weren't dressed for such an expedition so we filed this away for a future visit.

We were back in KZN that summer, so Tony and I headed out again in June aiming to do some more shooting, only when we arrived we found no water coming over the falls at all and the pond a scummy green sludge – KZN was in an extended drought – not ideal for shooting waterfalls!

Back again in January this year, things were better as there was a lot of rain over the Christmas period, so off we went again, fully kitted out to get down to the lower falls. Tony gave me a call and suggested heading out a 7am, but I suggested we leave it until around 10am, which might seem odd for a landscape shoot, where the early light is typically what you want. But you need to check your location before making these decisions. If we had gone that early, the sun would have been too low in the sky to illuminate the lower waterfall and pool, whereas arriving around 11am meant we got wonderful light deep down into the steep-sided valley.

We arrived at the top falls to find a well-worn trail leading down the valley, sandbags and netting, even wooden handrails down the precipitous river edge. A film crew had used the location the previous month, so we benefitted from much improved access to the lower falls and later learned that the location also featured in the 2006 feature film *Blood Diamond*. No sign of Leonardo De Caprio or Jennifer Connolly the day we were there, though!

I scouted around a little before we headed down the trail and found a wonderful view down onto the main falls from above. It's always worthwhile spending some time in an unfamiliar location having a walk around the whole site – I often come across different viewpoints that would otherwise not have been obvious when doing this.

Making this shot involved edging my way very gingerly out about five feet along an overhanging tree trunk and extending my tripod legs with one on the trunk and two on the cliff edge, then sitting really still for the 2 minute exposure. D810, 16-35mm lens at 27mm, ISO 64, Lee Big Stopper, Bulb mode, 111 seconds, Manual mode, Hahnel wired remote release. There was about 20 or 30 metres of empty air beneath me, so I was hoping the tree wasn't rotten...

This is my favourite shot of my set – the one I had visualised and hoped to get from below the tall falls. Tripod in the water to bring the camera as low as possible, an S shape leading the eye from the foreground back upstream to the waterfall and wonderful detail brought out in the undergrowth on the left – I love radial filters in Lightroom to throw subtle spotlights – as the French photographer Serge Ramelli so eloquently puts it – “complexifying ze light!”. D810, f/18, 16-35mm lens at 23mm, ISO 320, Lee Big Stopper, Bulb mode, 120 seconds, Manual mode, Hahnel wired remote release.

The final shot shows why the later morning start worked so well – we wouldn't have got the lovely details on the face of the cliff and the dappling of foliage on the pool earlier on. So you can do landscape work outside the golden hours! D810, f/20, 16-35mm lens at 26mm, ISO 250, Lee Big Stopper, Bulb mode, 120 seconds, Manual mode, Hahnel wired remote release.

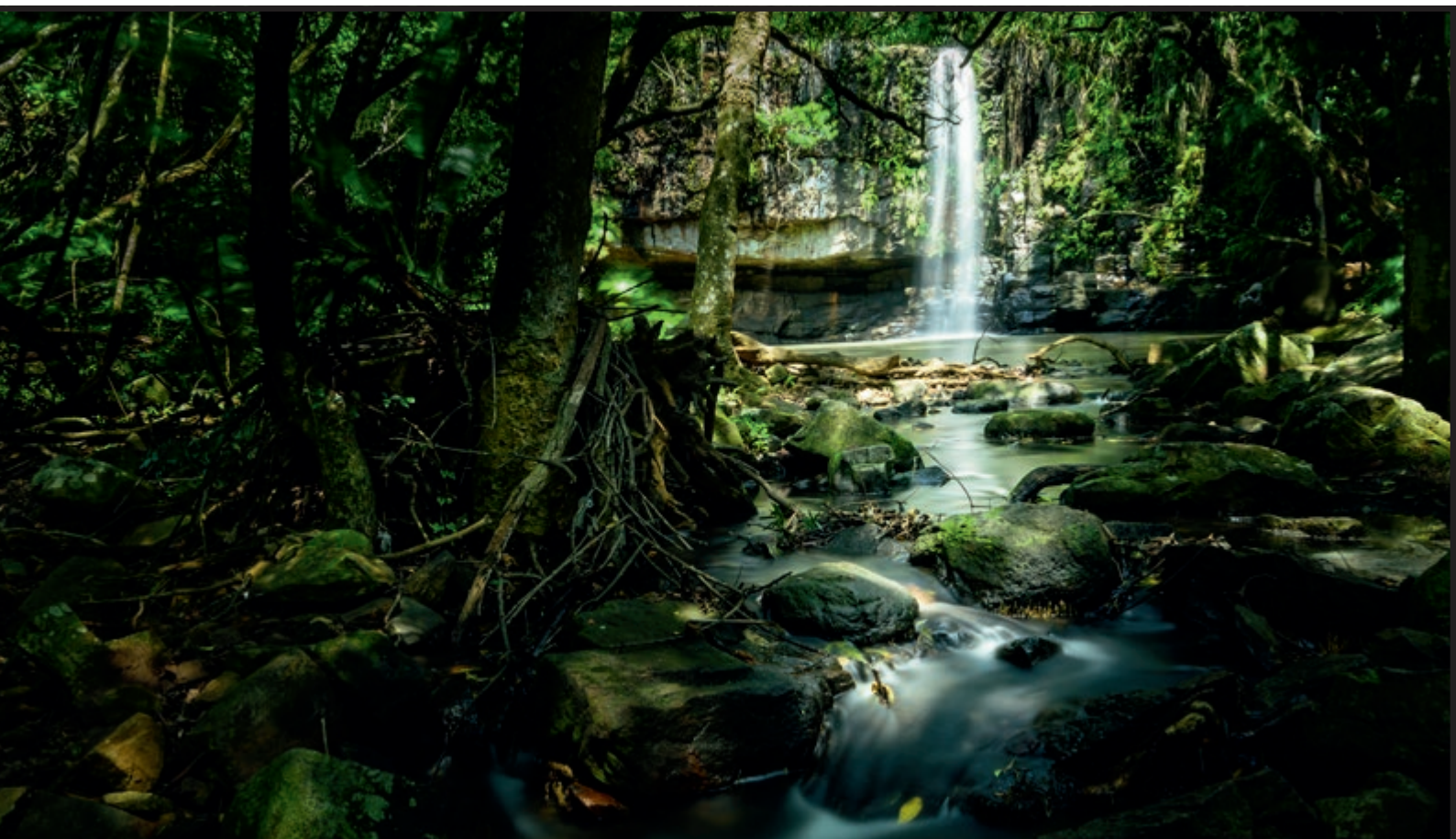
Getting the shot – how to do 2 minute exposures.

For working out the long exposure times I use a great little app on my iPhone called LE (Long Exposure) Calculator. You just enter your filter density and base shutter speed without the filter attached and it gives you

the correct exposure with the dark filter on and a countdown so you can start and stop your shutter at the right time.

The trick to getting shots with a very dark filter like the Big Stopper is to compose and get your shot set up with no filter on. I generally use Live View to zoom into the shot and make sure that my focus is just where I want it – typically about 1/3 of the distance into the scene, then I switch my lens focus slider to Manual to stop the autofocus hunting again once the Big Stopper is mounted. Obviously you need to be on a good, solid tripod that isn't going to move at all – especially if the legs are in water. Also, close off your viewfinder – the D810 has a little shutter to stop light leaks, but on cameras without one a bit of blue-tack works fine.

With a 10-stop filter, 1/30th sec turns into a 30 sec exposure, 1/15th ends up as 60 seconds, and 1/8th sec into around 2 minutes. I like the sheen and misty look water gets after a couple of minutes, so I play with the ISO and aperture until I'm getting around 1/8th sec exposure and then I know that the Big Stopper will get the shot with a 2 minute exposure.



Banner Rest Falls and River



Banner Rest Falls Reflection

Note the variations in ISO and aperture across the 4 shots shown – this allowed me to remain at 2 minute exposures as the light changed for each image.

Here's a little trick. Always take one shot at the faster shutter speed without the dark filter on – this will give you a true colour rendition and will also freeze the foliage. Then mount the filter, adjust the exposure to Bulb and take your long exposure. Now you have the option in post-processing to layer the 2 shots and mask out blurry foliage by letting the shorter exposure show through around your misty water from the long exposure. With my Big Stopper I typically find that I need to adjust the White Balance to the right – warmer – by around 2,000 kelvin to compensate for the colour cast introduced by the filter – but this varies with exposure time and also the filter used, so you need to experiment. Having the fast-exposure shot gives you a good reference though to help adjust the longer one too. !

Joe Houghton is a photographer living in Dublin, Ireland. He has provided Nikon's Irish training in the Republic since 2008 and together with his wife Penny runs Houghton Photography (www.houghtonphoto.com).



Banner Rest Falls from above

DIGIT CHALLENGE:

SCENE INSIDE A SEASHELL



A scene inside a seashell

This composite image came to mind whilst I was processing photographs I had taken of the statues on Crosby Beach by Anthony Gormley. I had for a while been wanting to echo or recreate the magic of childhood when fairies lived under toadstools and also inside seashells, or so I believed. However I wanted to do that using an adult figure.

The challenge of the Crosby Beach images was the high dynamic range, with the late afternoon sun behind the figures on the beach. I tried various positions for shooting them and two different lenses: my 50mm F1.4 and my 70-200mm F2.8. The latter proved to be ideal as it compressed the scene perfectly. I added a graduated neutral density filter over the sky.

I first shot an image of the shell on sand on the table. The setup consisted of a large, square plastic lid placed upside down with sand strewn over it. To form bokeh in the distance, I crumpled a large piece of kitchen

foil then opened it up again and placed it behind the sand, angled slightly upward towards the back. A table lamp was on the left and to the right I held an A3 piece of sky blue card to reflect blue onto the silver foil. The camera was slightly above table level at the front of the sand. The shell was placed where it would fall 2/3 of the way across the frame.

The main challenges of the shell image were:

Levelling the sand so it looked natural (a lot of trial and error and use of various implements such as kitchen knives)

Getting the shell in the correct place and seated at the correct angle (to allow a scene to fit neatly inside)

Feathering the edge where the sand tapered off into the background so the line looked natural (blowing across the sand helped).

Setting up sufficient depth of field to ensure the shell was in focus along with some of the sand in the foreground but with blurring of the transition line between sand and bokeh background

Ensuring the direction of the light in the scene inside the shell was the same as the light in the shell and sand photograph

My first attempt was rather crude and I needed to blur the background considerably more. I tried again with a much shallower depth of field. I blended these two images in Photoshop and added the Crosby Beach shot as a layer above, sizing and placing it to fit the elements I needed inside the shell. I erased the surrounding parts of the Crosby Beach scene leaving only the part inside the shell. Then came the magic. I changed the Crosby beach scene to blend mode Hard Light and the composite image lit up. I had achieved what I set out to do.

DIGIT CHALLENGE: CUPID



Cupid

I've been playing with composite images for several years now, certainly before they became fashionable.

I was lucky enough to take some photos at Guildford Cathedral, for the Queen's visit in 2011 and I prepared a montage for the Diocese to thank them. Although cutting out all the elements was hard work, it was really enjoyable on a dark winter's day and

I've done many montages for different events in the last five years.

Since then, the style of my composites has changed quite a lot and the current style of using textures to enable the different elements to blend well is certainly attractive.

I've been watching a lot of webinars and subscribe to some digital artistry websites,

so as to better understand the process as well as become inspired.

It was on one of those occasions that I saw an interesting image with an 'out of bounds' subject with a frame and a soft, but interesting background.

I had been up to Shoreditch, in London, to photograph the street art. I hadn't expected

to see something with lots of hearts and cherubs, and at the time I just took the photo without a lot of thought about using it as a background. It was just an attractive billboard. But when I saw the webinar, I realised that I had a perfect image for the main subject which would work with that street art.

The 'cupid' was one of the mime artists that can be seen in Italy and I had a photo of him/her from both Florence and Venice.

I had also bought the ornate gold frame to use in a wedding shoot, so I was able to photograph it again in the sun with the same angle of light.

Putting the three photos together was relatively simple. All the composite webinars talk about making sure shadows are correctly aligned, and it's that level of detail that can make the difference between a good image and an excellent one.

Cutting out Cupid from the background was relatively straight forward, but I took extra care with the bow and arrow using the polygon lasso for the string and kept that on its own layer so that I could put it on top of the frame.

There was some stencilling on the original billboard background, but it was incomplete, so I found a stencil font and manipulated that with a dissolve blend mode.

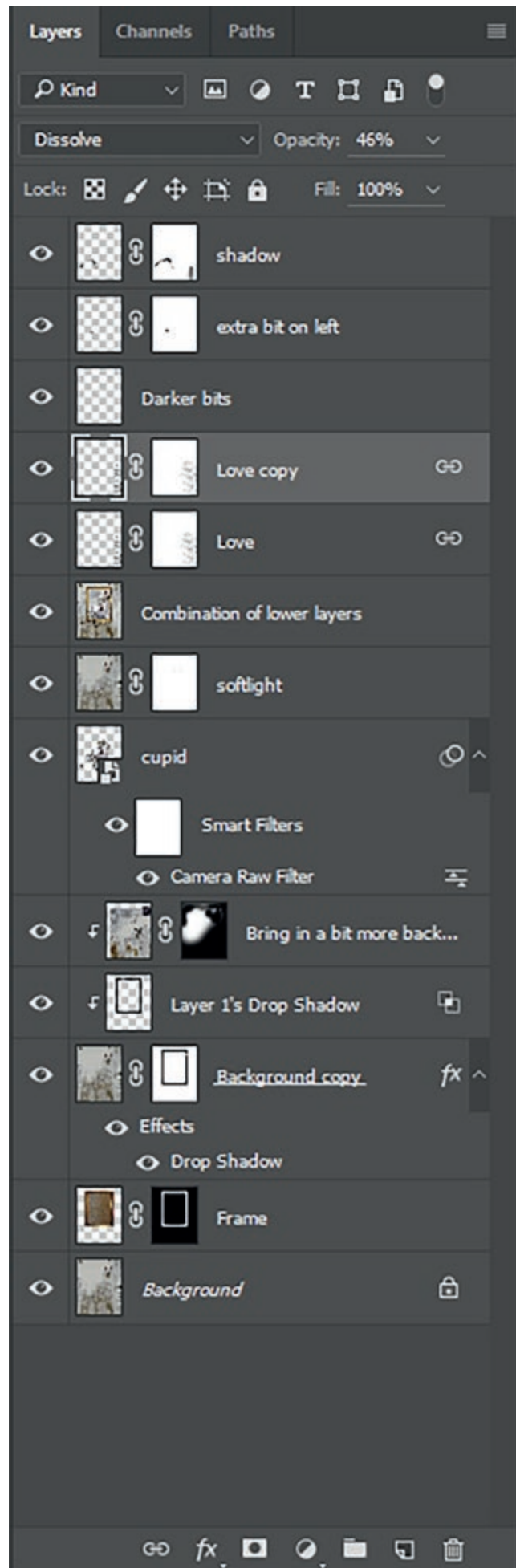
The rose had been part of the painted background so I positioned the frame accordingly.

I didn't use any textures in this image as the background was already quite textured.

Putting together montages / composites can be a painstaking process, with lots of layers, but with this image it came together quite quickly. Luckily I found my original Cupid image in my archives without any trouble.

For the SPA AGM Open competition, I printed it as a full 50x40cm print, so that there was no 'matt' and it did stand out well as a result.

Contact: <http://www.taylormadeimagery.co.uk/montages.html>



Right: Screen shot of the painstaking stages of processing to create the complex composite

DIGIT CHALLENGE: ROOFTOPS



Last summer I visited Egypt, and spent the first week at a hotel on the Red Sea at Al Qeseir. The accommodation was spread throughout the complex and I was fascinated by the architecture and specifically the shapes and variety of the roofs of the apartments. I took a number of images of them, really as a record, rather than for a particular project.

Back home, on a typically wet weekend, I came across the shots and was playing around filling in sections with different colours in Photoshop, when I decided that I quite liked the result.

I cleaned the marks of weathering and some cracks in the walls by selective cloning, and

straightened some of the lines with the rectangular marquee tool.

From other shots in my library, I then isolated the silhouette of a waiter pictured while on a boat on the Nile and a sun (really the moon, suitably coloured) and imported them via cut and paste and the Move tool, to eventually create *The Man in the Window*. I tried to ensure that all parts had a photographic beginning.

Being a bit of a judge baiter, I entered it in my club competition and was delighted to receive the lowest mark of the night. Deliciously, the judge said he could see where I had cut out bits of coloured paper and stuck them together as he could detect

the joins. He even gave mine a lower mark than the entry of another club member which had failed to upload.

Flushed with my success, I then created *Rooftop, Auberge, and Taverna*, incorporating birds in flight, a cat, and a bunch of daffodils. I have put together all four as this image, making sure that the sky in each is of a similar hue. I am aware for many, the taste will resemble that of Marmite. Each of these individual entries, and the combined four have had some success in exhibitions.

More importantly, I have had a lot of fun creating the images, and observing the various reactions to them.

IN PREVIOUS ISSUES

A searchable, cumulative contents list of previous issues is available from the DIGIT Group Magazine page of the Group's website at:
www.rps.org/DIGIT



NO. 66, 2015 ISSUE 3	NO. 67, 2015 ISSUE 4	NO. 68, 2016 ISSUE 1
2 EVENTS	2 EVENTS	2 EVENTS
4 EDITORIAL <i>Margaret Preston</i>	4 EDITORIAL <i>Margaret Preston</i>	4 EDITORIAL <i>Margaret Preston</i>
4 FROM THE CHAIR <i>Janet Haines ARPS</i>	4 FROM THE CHAIR <i>Janet Haines ARPS</i>	4 FROM THE CHAIR <i>Janet Haines ARPS</i>
5 MY AMBITIOUS ROAD AHEAD <i>Walter Benzie ARPS</i>	5 AGM ANNOUNCEMENT	5 COLOUR PERFECTION <i>Rob Griffith</i>
6 BEYOND BEAUTIFUL <i>Charlie Waite FRPS</i>	6 GOING STRAIGHT FROM CAMERA TO PRINT <i>Iain McGowan FRPS</i>	6 THE NATURAL WORLD ENHANCED BY DIGITAL TECHNIQUES <i>Adrian Davies ARPS</i>
12 SHORT ROUTE TO LONG EXPOSURE <i>Paul Sanders</i>	9 DIG PROJECTED IMAGE COMPETITION 2015 JUDGES	10 ATTACHMENT TO THE SEA <i>Mikhail Bondar</i>
16 TAKING SELFIES TO ANOTHER LEVEL <i>David Sadler ARPS</i>	10 PIC 2015 CREATIVE: GOLD MEDAL AND RAYMOND WALLACE THOMPSON TROPHY WINNER	15 RICH NIGHT LIFE IN COSTA RICA <i>Sheila Haycox ARPS</i>
20 DIGITAL IMAGES: QUO VADIS? <i>Anthony Healy ARPS</i>	11 PIC 2015 CREATIVE: RIBBON WINNERS	18 ICELAND FROM THE AIR <i>Veronica Barrett FRPS</i>
24 DIGIT CHALLENGE: 24 High Key Architecture by <i>David Pearson ARPS</i> 26 Working With Models by <i>Janet Haines ARPS</i> 28 To Create Images In The Style Of An Old Master Painting by <i>Paul Johnson ARPS</i> 30 Sensual Lady – Smoke Photography <i>Juliet Evans ARPS</i>	14 PIC 2015 CREATIVE: OTHER ACCEPTED IMAGES	23 RISE OF THE DRONE <i>David Hogg LRPS</i>
32 Apple Peel Effect by <i>Jim Duncan ARPS</i>	25 PIC 2015 OPEN: GOLD MEDAL WINNER	27 GET WELL PREPARED FOR MULTI MEDIA DISPLAY <i>Richard West</i>
33 FROM IMAGE TO SKETCH <i>Palli Gajree Hon FRPS</i>	26 PIC 2015 OPEN: RIBBON WINNERS	29 CAN AFFINITY PHOTO DELIVER A KNOCKOUT TO ADOBE PHOTOSHOP? <i>Roger Norton</i>
51 IN PREVIOUS ISSUES	29 PIC 2015 OPEN: OTHER ACCEPTED IMAGES	31 MACRO IN FOCUS <i>Susan Hendrick FRPS</i>
	51 IN PREVIOUS ISSUES	33 SPOTLIGHT ON DURDLÉ DOOR <i>Stephen Banks</i>
		35 IN PREVIOUS ISSUES

