c't Digital Photography

The in-depth quarterly for the photo enthusiast

Ralph Clevenger Workshop

Paths to Creativity

New Inspiration for Your Images

Similarity Search
Low-light Shooting

Gear Tests

Olympus OM-D E-M1

High-end Micro 4/3 Lenses

Canon EOS 70D vs. Nikon D7100

Experimental Photography

Getting it Right by Doing it Wrong

www.ct-digiphoto.com

15 (2014) • **$14.99**
Spring Issue

$14.99US/CAN

DISPLAY UNTIL JUNE 25

PHOTOGRAPHY EXPLORATION IN CUBA

Experience an adventure in photography unparalleled in our hemisphere!

Join Mike Hagen, owner of Visual Adventures and Director of the Nikonians Academy, and award-winning history teacher Alethea Tyner Paradis for an extraordinary cultural immersion in Cuba. In the field, Mike will deliver instruction on topics such as street photography, working with off-camera flash, and developing your photographic eye. Participants will acquire skills to help them create outstanding images of the 20th century's most mysterious island. This is a rare opportunity to document the relics of history, suspended in time, and the faces of a population hopeful for the approaching future. Our pilgrimage to Cuba is the perfect moment to capture an enigmatic place in transformation.
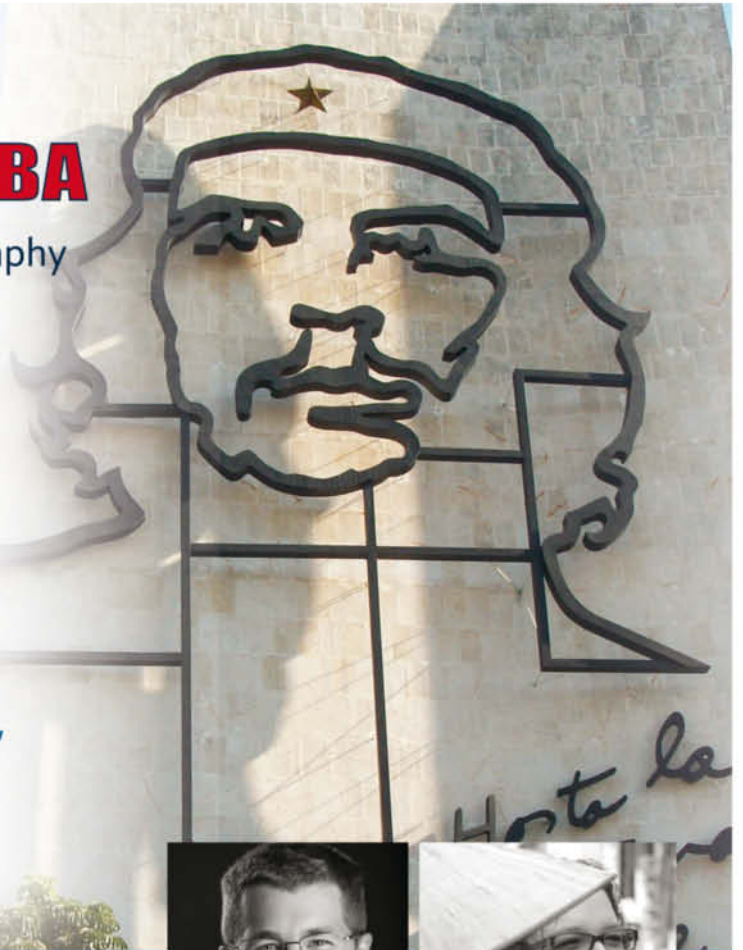
Mike Hagen   Alethea Tyner Paradis

HIGHLIGHTS:

- Walk Old World Havana
- Explore Cuba's Colonial Culture and Ecological Treasures
- Photograph Rare Scenery
- Experience Afro-Caribbean Rhythms and Cuisine
- Witness Living History and Modern Art

ITINERARY:

Havana ~ Las Terrazas ~ Vinales ~ Pinar Del Rio
9-days: October 4-12, 2014 / All-inclusive experience with license to travel and direct flight from Miami to Havana/double-occupancy / $5,975.
Limit 15 participants
Reserve your place at: www.nikoniansacademy.com
or www.visadventures.com

LEARN MORE AT:

Friendship Tours World Travel / Alethea Tyner Paradis
info@friendshiptoursworld.com / (805) 685-8687
www.friendshiptoursworld.com

Visual Adventures   nikonians academy
Mike Hagen / mike@VisAdventures.com
(253) 851-9054 / www.VisAdventures.com

Starting on page 20, our article *Getting it Right by Doing it Wrong* aims to get your creative juices flowing by ignoring convention and deliberately 'shooting wrong'. Admittedly, it is not a good idea to completely ignore important factors like focus, correct exposure or noise control but, if you learn to consciously bend the rules, you can give your creative repertoire a real boost. Our workshop explains how to use camera movements and multiple exposures to give your images a new slant, and also details some of the limitless possibilities of playing with exposure shifts, perspective and motion blur.

The results are anything but random, and each broken rule produces a planned effect, so solid technical skills and a good photographic eye are essential if you want to retain control while you push the envelope. Our author, Cyrill Harnischmacher, is convinced that the techniques he introduces will help you take a step closer to developing your own unique photographic style.

An equally fascinating but completely different approach to developing your skills is provided by nature photographer Ralph Clevenger in his article *Paths to Creativity* (page 120). National Geographic photographer Jim Richardson once remarked, "If you want to be a better photographer, stand in front of more interesting stuff", and Ralph Clevenger takes this advice to heart, using his own top-notch images to explain how he finds and captures his subjects. His work is based on the unshakable precept: "Everything can be more interesting if you learn to shed your preconceptions and see things in more interesting ways."

Have fun experimenting and see you next time …

Juergen Rink

Shoot Wrong 20

Canon EOS 70D vs. Nikon D7100   42

Portfolio

Juergen Scriba is a physicist who uses his own special take on the world to produce surprising and thought-provoking images.

Experimental Photography

Breaking the rules is often the best way to create new and exciting images. Designer Cyrill Harnischmacher introduces some of his favorite ways to 'shoot wrong'.

Camera Tests

This issue's camera showdown pits the Canon EOS 70D against Nikon's D7100. We also take an in-depth look at the new Olympus OM-D E-M1 flagship model.

Lens Tests

We test the latest high-end Micro Four Thirds lenses from Zeiss and Voigtländer and put them through their paces in the lab and the real world.

Similarity Searching

Using visual source data is an intuitive and exciting way to search for images in private archives or on the Web. We tell you how similarity searching works and check out the best of today's similarity search tools.

GPS for Photographers

Many cameras have built-in GPS and Wi-Fi functionality, making them perfect for recording geodata that you can then use to document your trips via online map services.

Desert Beauty Shoot

Pro photographer Martin Haeusler lets us look over his shoulder while he photographs Jessica Sutta in the Californian desert.

GPS for Photographers 76

Low-light Photography 96

Low-light Photography

The twilight hours and the dark of the night are perfect times to shoot astounding photos. Our workshop guides you through the techniques you need to make the most of low-light situations.

Paths to Creativity

Renowned photographer Ralph Clevenger uses nature photography as the basis for an in-depth look at how to expand your creative horizons and take your photography to the next level.

About Us

> **DVD Download**
>
> If your copy of the magazine contains no DVD, navigate to www.ct-digiphoto.com/dvd152014 to download the DVD content for free.

Free DVD

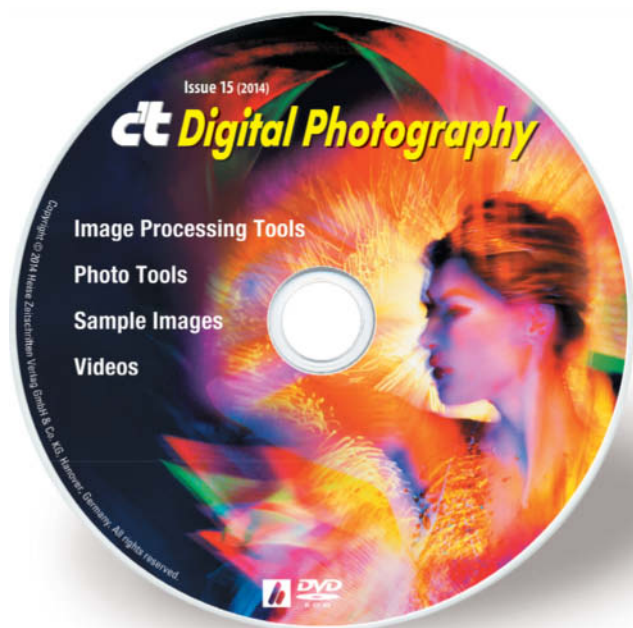**Special version software: Studio Line Photo Classic**

An exclusive *c't* version of a great all-in-one asset management and editing suite.

Videos

• Digital Night Photography
• Steve Sasson: The Inventor of the Digital Camera
• Animal Photography with Ruth Marcus
• Sandro Santioli: Colors of the World

Reader Forum

Oil-painting Wizard

The water-soluble oil is done. Of course, the model is far more beautiful than I can do justice to, but here it is, with a tonne of artistic license (clearly). The colors are a radical departure, due to my obsession with orange, blue, and gold. As it turns out, I had a heck of a time photographing the oil painting due to spectral highlighting. I had to get assistance from someone more handy with cameras to get this far! In fact, modern cameras actually seem to make these sorts of photos more challenging for me. It's really very hard to find the proper settings among the many, many menus. While working the knobs and dials, part of my brain is generally going "This camera would be handy if it came with an oil-painting wizard". A professional photographer would have done much better than I can! All told, though, thank you for the inspiration, and to Thomas Saur and the model for the idea and execution! Thank you! I continue to check your magazine for photo-refs!

Tracy Paddock

Clever Downsizing

Thanks for an interesting magazine. Whilst I was waiting for treatment for my right shoulder I revisited the article titled *Something for Everyone* in the Fall 2013 Issue. I found it very useful in the pressing context because my shoulder means I need lighter gear than my usual Nikon D700, 28-300 lens, other lenses and associated equipment. I was turning to the Micro 4/3 system when I read an article in the RPS Journal. I also noticed that the Leica V-Lux 4 appeared to replicate the features of the Panasonic Lumix FZ200. One of the features of the Lumix that appeals to me for bird photography is the ability to increase the optical zoom digitally to approximately 1000mm. Can this be done with the Leica? In looking at what is available I am concerned that the lens magnification factor (vis-a-vis 35mm full-frame) does not parallel the magnification factor. For instance, the lens factor for an APS-C sensor is 1.5 (1.6 for Canon) but the magnification factor is of the order of

Photoshop Alternatives

I have spent tens if not hundreds of hours studying alternatives to Bridge and Photoshop and they all have one or more issues that preclude them from being real contenders. While GIMP is a great program it lacks a proper thumbnail browser (an easy implementation) and an integrated RAW Converter. As far as I can tell, UFRAW will not work in Windows. In any event, it's really a standalone program. While not free, *Zoner Photo Studio Pro* is a serious contender for Windows users.

Ronald Hobbs

2.2. It is of course greater for Micro 4/3 and more so for Lumix and the Leica. The sensor size for both is 1/2.3". Can you please tell me what this is in millimeters?

Stanley Robinson

Leica's V-Lux 4 is based on the Panasonic Lumix FZ200 but costs more than twice as much, although the Leica does include a free copy of Lightroom. A 1/2.3" sensor measures 6mm x 4.5mm and has a crop factor of about 5.6. Its total surface area is about 28mm^2.

Composing with Color

Thank you for the excellent article, *Composing with Color*, in **c't** *Digital Photography 14*, p. 116. I hope to see more composition articles in the future. Perhaps an article on photography composition books? I went to amazon.com and searched for "photo composition books" and received pages of results. Which ones would you recommend?

Richard

Thanks for your positive feedback! Our sister publisher Rocky Nook offers a great book on photo composition: "Learning to Photograph, Volume 2: Visual Concepts and Composition" by Cora and Georg Banek.

@ Tell us what you think:

We are always happy to receive your comments and suggestions in a letter, an e-mail (editor@ct-digiphoto.com) or at www.facebook.com/ct-digiphoto. We reserve the right to abbreviate your input for publication. Our comments are printed in italics.

DVD Highlights & Contents

This issue's free DVD provides a rich selection of image editing tools, including an exclusive special version of the StudioLine Photo Classic image management and editing application. Free HDR creation, RAW conversion and image viewing tools round out the package.
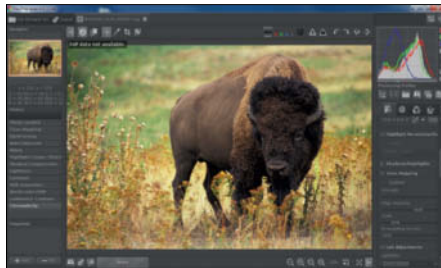

Digital Night Photography

Video tutorial: Photography is all about light, but at night there is virtually no light to capture. This video provides some solutions.

Raw Conversion with RawTherapee

Free software: Database-based RAW editors are not everyone's cup of tea, and *RawTherapee* offers a pure file-based alternative.

StudioLine Photo Classic 3 SE

Special version software: Our exclusive version of *StudioLine Photo Classic SE* gives you Image editing, archiving and geotagging functionality for free.

Night photography plays an important role in Leo Seidel's portfolio, although the night itself is not his favorite time to shoot. Even low-light photographers require some incident light to create images, and Seidel most likes to shoot during the twilight hours.

The time between sunset and complete darkness provides a rich variety of fading shades that can be turned into great night shots if you know how to go about capturing them. At this time of the day, the contrast between light and shade is subtle and perfectly suits the recording capabilities of digital camera sensors. Seidel's advice is not to trust the camera's automatic ISO and exposure settings but instead to go against the grain and use low ISO settings in low-light situations.

This video provides a brief explanation of the basic techniques Seidel used to shoot some of his best night shots and documents a nighttime visit to the Tegel airport in Berlin. Even though this location provides virtually no visible light, the camera sensor still managed to capture some fine images of the vintage aricraft on show. To pep up his images, Seidel uses a handheld spotlight to add subtle accents that ehance the unique atmosphere of his photos.

The result of using modified camera settings together with light painting techniques results in outstanding nighttime photographs.   (sts)

RawTherapee is a fully-featured but lightweight RAW editor without any built-in database functionality of its own.

Compared with heavyweight programs like the commercial *Lightroom* or the open-source *digiKam* packages, it inevitably lacks some asset management features. However, this can be an overhead, as less features mean less administration, and switching between editing applications is certainly easier if you don't have to synchronize databases.

RawTherapee is a great choice for photographers who prefer the lightweight approach to using bloated all-in-one applications. The program supports all major desktop operating systems and always offers recent builds that mirror OS updates.

Like most RAW developers, *RawTherapee* offers non-destructive image editing and uses the open-source *DCRaw* tool for image encoding but uses proprietary algorithms to perform all image development steps. For experienced users, the program offers a wide range of options for tweaking the RAW development process, including the unique ability to set black and white points on a RAW level.

The package is a popular addition to many advanced users' RAW processing toolset but still provides a streamlined interface that is simple for beginners to master.   (sts)
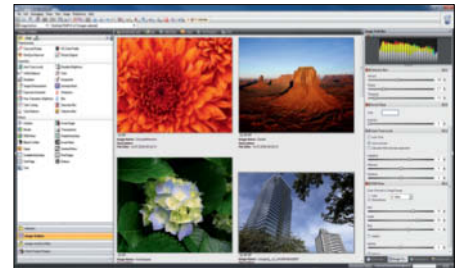
If you like to use a single tool for your entire photo workflow, *StudioLine Photo Classic* is definitely worth a look.

The program has an integrated database that makes managing and searching your images quick and easy, and offers a range of filters and image editing tools for fine-tuning your photos. The program's main workspace is based on a thumbnail view and there is a separate viewer utility for zooming and comparing 'before' and 'after' views, making it perfect for use in dual-monitor environments. On the output side, *StudioLine* offers various printing options.

To use our exclusive *c't* version of the software, you have to register your copy online to receive your personal activation code. The *c't* edition includes many of the features found in the commercial version, including backup to external media, various filtering options and geotagging.

c't Digital Photography readers who wish to unlock the program's full potential can upgrade to *StudioLine Photo Classic 3 Plus* for the special price of just US$19. The regular online price is US$59. In addition to the features mentioned above, the full version also offers web galleries, timeline functionality, and custom printing and layout options. The *c't* activation key and upgrade discount option are available until August 15, 2014.   (sts)
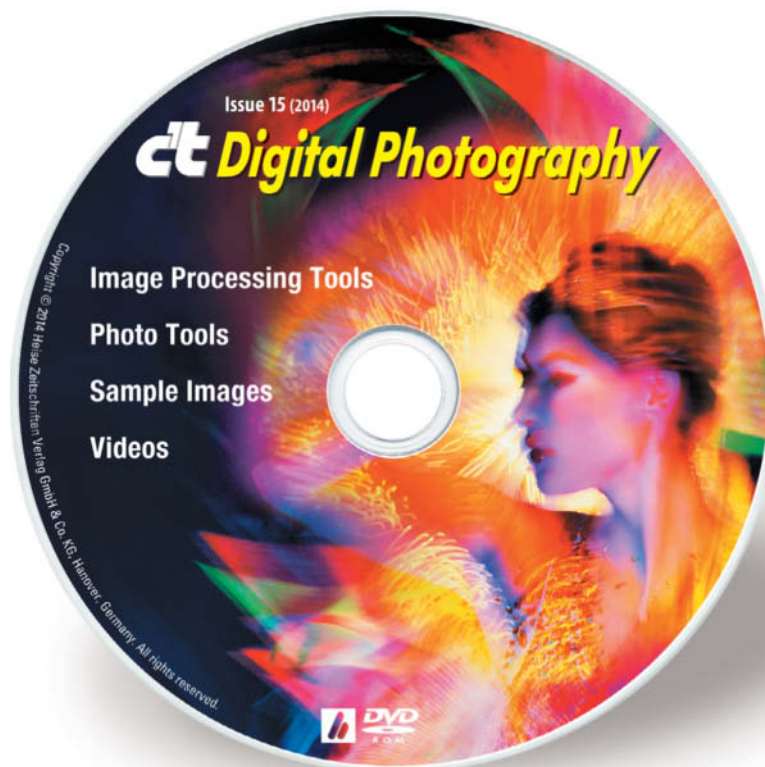
Image Processing Tools

Windows

Fotomatic 1.4

GIMP 2.8.10

GIMP Portable 2.8.10

GREYCs Magic Image Converter (GMIC) 1.5.8.2

Image Analyzer 1.36.1

Inkscape 0.48.4

Inkscape Portable 0.48.4

Luminance HDR 2.4.0

Photivo 2013-12-09

PhotoFiltre 6.5.3

PhotoFiltre Portable 6.5.3

PSPI 1.0.7

RawTherapee 3.0.1.0

StudioLine Photo Classic SE 3.70.61.0 (*c't* Edition)

UFRaw 0.19.2

Wavelet decompose

Wavelet Denoise

Mac OS

GIMP 2.8.10

GREYCs Magic Image Converter (GMIC) 1.5.8.2

Inkscape 0.48.4

Luminance HDR 2.4.0

Photivo 2013-01-11

Raw Photo Processor 4.7.2

RawTherapee 3.0.0

Linux

GREYCs Magic Image Converter (GMIC) 1.5.8.2

Luminance HDR 2.4.0

PSPI 1.0.7

RawTherapee 2.4.1

Photo Tools

Windows

Enblend/Enfuse 4.1.2

EnfuseGUI 2.1.3

ExifTool 9.49

FastStone Image Viewer 4.9

FastStone Image Viewer Portable 4.9

GTKRawGallery 0.9.9

GTKRawGallery Portable 0.9.9

jAlbum 11.6.4

XnView 2.13

XnView Portable 2.13

Mac OS

EnfuseGUI 2.1.3

ExifTool 9.49

jAlbum 11.6.4

MacPorts 2.2.1

Linux

ExifTool 9.49

jAlbum 11.6.4

Sample Images

Camera Test Sample Images

Lens Test Sample Images

Videos

Animal Photography

Colors of the World

Digital Night Photography

The Inventor of the Digital Camera

Get in the Picture

**c't Digital Photography gives you exclusive access to the techniques of the pros**

Keep on top of the latest trends and get your own regular dose of inside knowledge from our specialist authors. Every issue includes tips and tricks from experienced pro photographers as well as independent hardware and software tests.

There are also regular image processing and image management workshops to help you create your own perfect portfolio.

Each issue includes a free DVD with full version software, practical photo tools, as well as eBooks and additional video material.
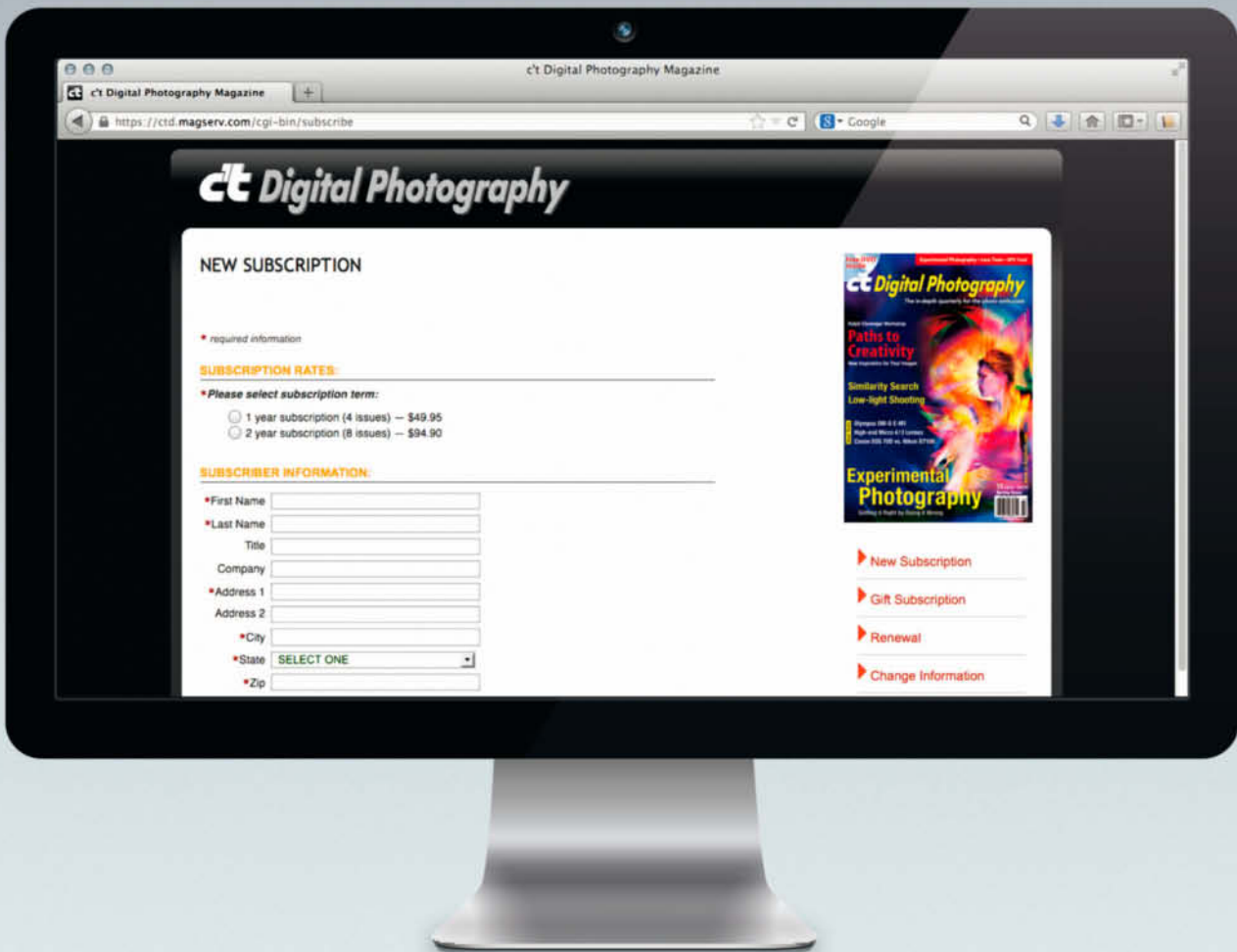
Portfolio

Juergen Scriba

With an unusual background as a physicist, journalist and artist, Juergen Scriba seemed destined to produce unusual photos. Pushing the boundaries of digital technology, he goes his own way when it comes to selling his work, too, as he is no great fan of the traditional gallery scene.

Former physicists crop up in some surprising places – Angela Merkel became the Chancellor of Germany, for instance. But there are probably very few who have dedicated themselves to photographic art. Perhaps it is not surprising to discover that Jürgen Scriba came to it via a career in journalism that included taking the readers of news magazines deeper into the subjects of science and technology. The surname Scriba is not a pseudonym and means 'writer' – destiny or happenstance?

Scriba has been working exclusively as an artist since 2006. He describes himself as a 'media artist', which describes his work better than the conventional label 'artistic photographer'. For his *DLDscape* project, Scriba had people attending an event walk through a corridor where a three-meter-high sign saying 'Look – You are in the Picture' made them fully aware they were being photographed. The end product is a gigapixel image composed of 1152 individual source images that shows the myriad of different ways people reacted to the presence of the camera – from completely informal and at ease to striking a deliberate pose. *DLDscape* reveals an individual aesthetic that stretches all the way from the 'type case' feel of the whole image to the single images in which the subjects appear to be caught in someone's crosshairs. Scriba's website provides a link to the original gigapixel image that can be viewed using Zoomify (http://jscriba.com/dldscape/dld_zoom.html).

Scriba is highly dedicated to digital technology, not only in the *DLDscape* project. For him, the digital images he makes are merely the raw material he uses to create his works. *situ art* is another series that comprises images of individuals: in a paternoster elevator, strolling along an embankment, riding escalators or, seen from above,

hurrying through an airport. These digital riddles are Scriba's way of documenting how people randomly come together in public spaces without actually communicating.

His photos do not claim to portray reality, nor even an illusion of reality. Deliberate errors of perspective make it clear that something is awry. *Airport*, for example, shows a tile pattern from above, but the people are standing at an angle. The strange perspective is even more striking in *Summer City*, in which the people and cars are photographed side on, but the ground is shown from above. That the alternating gray-green rectangles and gray asphalt create a filmstrip effect is no accident. Scriba is exploring the way time elapses and, just like in a filmstrip, some people appear several times.

Scriba conceived his latest series, *elements*, to research the elements fire, water, air and earth through photography. It is an unusual tack for a scientist to take, but the result is most intriguing. In the 'fire' photos, the flames appear frozen, as if this ephemeral element has a material structure. The vibrant colors are mystifying, and we couldn't resist asking Scriba how he produced these fantastic images. All he would tell us was that he used the assistance of a pyrotechnics expert, his own knowledge of spectral colors and some proprietary tricks with his camera settings. No chemical substances were involved in creating the colors.

Patrons of the bar at Motel One in Stuttgart can see large-format glass prints from the *elements* series on the walls. Installations of this nature are Scriba's method of financing his work, as there is little money to be made from the art business in its analog incarnation. "The traditional business model, artificially enhancing the

Juergen Scriba on the Oktoberfest in Munich: "We humans behave strangely at times, don't we? It seems we seek out experiences that scare us in order to have fun. Some people get a huge kick out of being whirled around in a funny-looking machine."
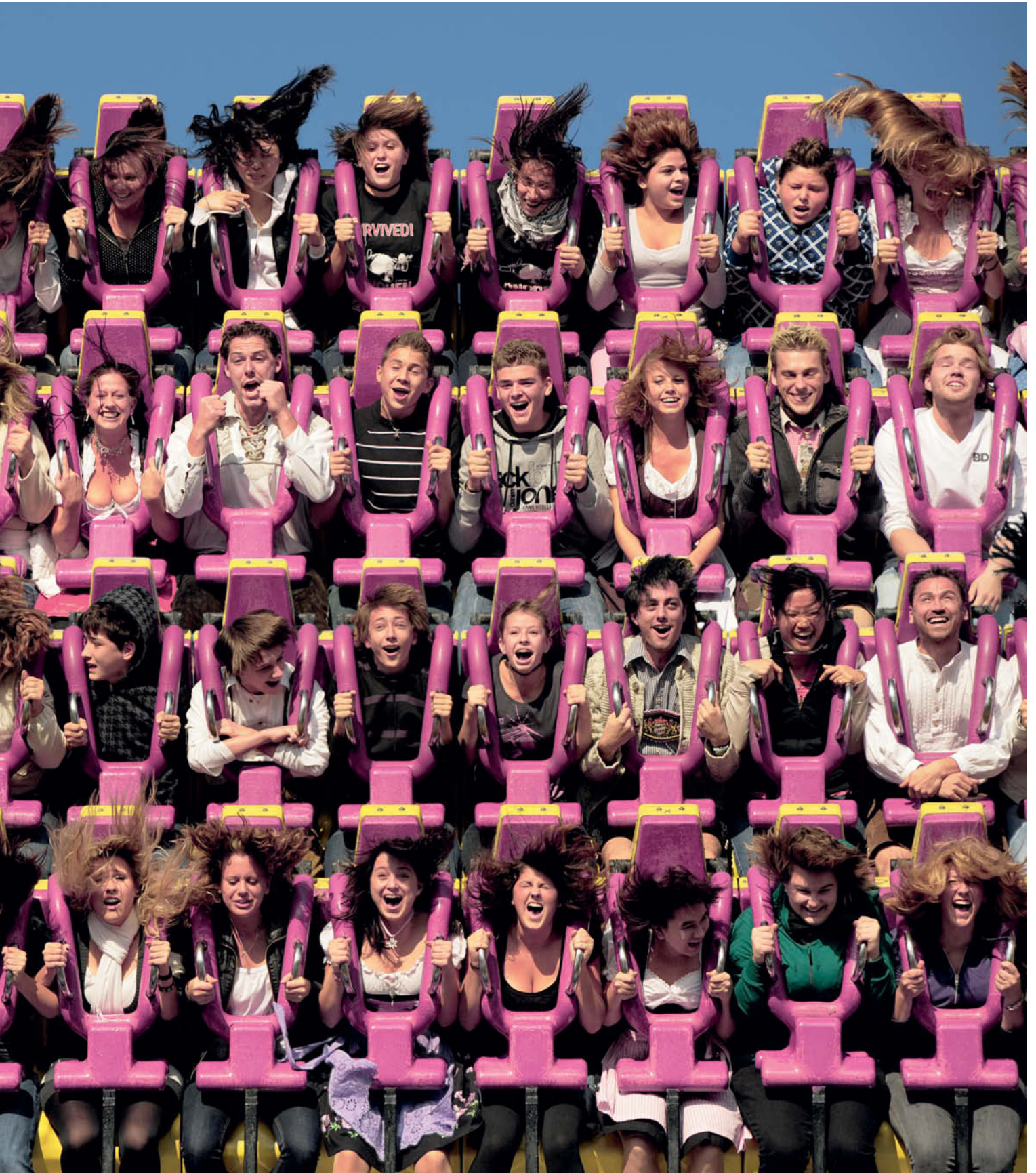
Paternoster

The presence of a camera in front of a paternoster elevator disturbs the routine of office life. The camera stands motionless in front of the elevator for a whole day, extracting some form of acknowledgment from every worker who passes by. Some strike a pose; others try to pretend it isn't there.

'value' of a print of a photo by deliberately limiting its availability, makes no sense in the digital world." Rather than working with galleries, he favors cooperative projects with architects and interior designers.

Still photographs account for most of Scriba's output, but the multi-talented artist does not restrict himself to a single medium. He also composes videos from the tens of thousands of photos taken for his *situ art* piece. Called *Timescapes,* the videos were used in a stage show put together by former Kraftwerk member Karl Bartos and make arresting viewing as large-format panoramas in a hotel bar in Berlin's main railway station. With his gigapixel images, videos and installations, Juergen Scriba certainly knows how to make the most of the opportunities digital technology offers today's artists. (jr)

Juergen Scriba
www.jscriba.com

Recommended Reading:
Yesterday's Future
ISBN 3940396249

Video: *Timscape: I want*
http://vimeo.com/21068457