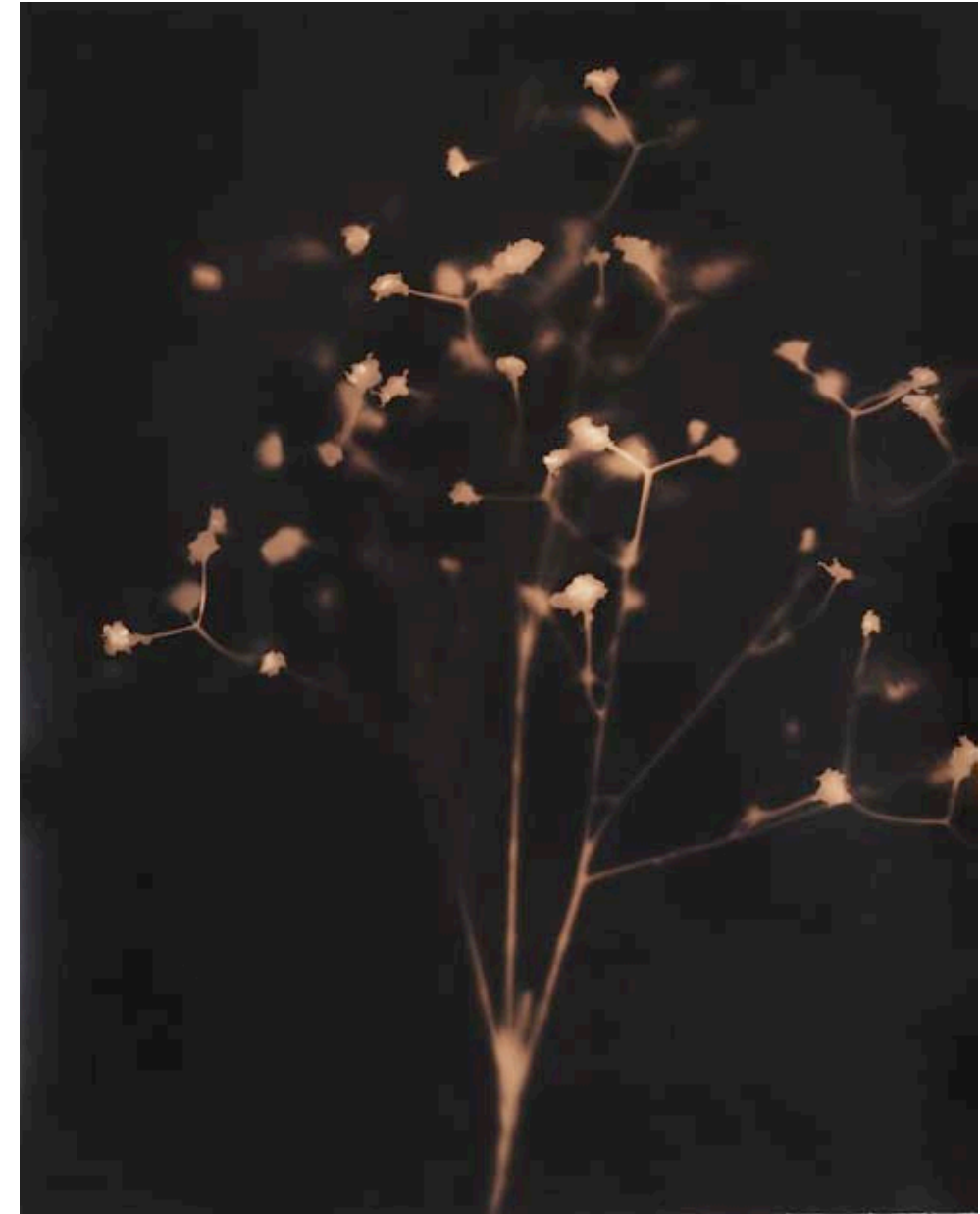




THE WORLD OF LITH PRINTING



THE WORLD OF
LITH PRINTING

THE BEST OF TRADITIONAL DARKROOM AND DIGITAL LITH PRINTING TECHNIQUES

Tim Rudman

ARGENTUM

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Half title page: **B. A. Bosaiya**

Title page: **Cece Wheeler**

Opposite: **Tim Rudman. Fotospeed Lith paper, developed in LD20.**



To my family, Ingrid, Natalie and Christopher, for their support, help and love.

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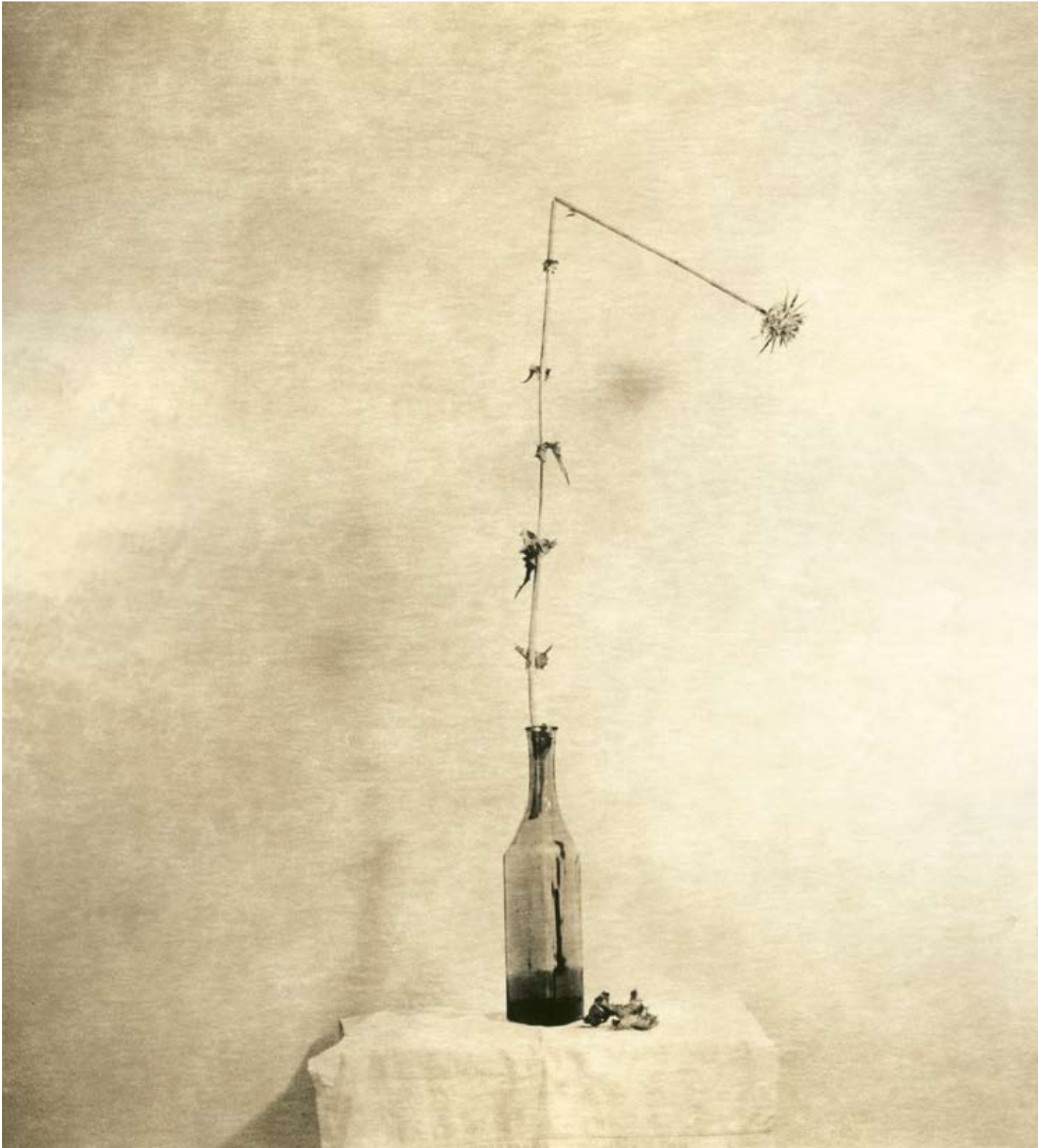
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Acknowledgements



Skip Smith

Foreword

Eddie Ephraums

As we look at the wonderful prints from around the world that comprise *The World of Lith Printing*, it is worth considering another picture – one that the book as a whole depicts – that is vital and quite wonderful. I'd like to say something about this picture, leaving Tim to talk about the actual contents and objectives of the book in his introductory section, 'About this book'.

In my role as Argentum's commissioning editor (and just like any other photographer), I try to keep abreast of what's going on in photography: finding out the latest developments, observing trends, seeing who's doing what and where. Over the last few years all the indicators here in the UK and abroad pointed towards the demise of traditional, darkroom-based photography, with digital taking its place. I couldn't imagine myself commissioning a wet-process book like this or making silver prints ever again. It was the end of an era and even a traditional darkroom worker like myself accepted that change ought to be embraced. Switching to digital seemed to make sense, offering many advantages over traditional methods: greater predictability, more speed and cost savings, to name but a few. And, as manufacturers switched to making digital materials instead, there seemed to be more scope for personal expression through those means. Yet, something seems to have countered this trend.

For many photographic practitioners, faced by the prospect of the 'virtual' darkroom, there was the realization that a physical connection with one's craft was an important part of the image-making process. And if one is looking for a printing process to physically connect with, then lith is it. It is just about the slowest, most time consuming of all the silver-based wet processes and the most unpredictable – to the extent that one never quite knows how a print will come out (at least that's my experience!). Lith needs to be controlled, yet its infinite, wonderful variation means the process will never be totally mastered. Practitioners of the craft appreciate this and the way that it challenges them, beyond the What-You-See-Is-What-You-Get of digital, providing ample reward for those who persevere, as the wonderful variety of prints in this book amply testifies.

That said, we can't deny what digital has done to take photography forward into the twenty first century. But perhaps it has done so in a way that was unexpected. Its sudden and dramatic arrival got many to question what photography – *real* photography – meant (and still means) to creative individuals. The answer to this question can be seen in *The World of Lith Printing*, in the overall picture it reveals – an enthusiastic celebration of creativity, both individual and global, that challenges norms and is happy to dismiss accepted or current trends.

We should acknowledge Tim and others like him – such as those who have contributed to this book, who have kept supposedly 'outdated' processes like lith printing alive during the early days of digital's domination. Their steadfast passion can be seen in books like this that will continue to inspire photographers the world over, encouraging them to think about what they believe in and stick with it, rather than pander to change whenever it comes along.

I hope you enjoy *The World of Lith Printing*, I believe you will, whether you are a traditional lith printer or someone like me, who now prints digitally, building on lith's traditions. *The World of Lith Printing* offers something for everyone: great images, up-to-date information and the opportunity to think about what creativity means to us, not just as individuals, but as the photographic collective of individuals the world over.



Arthur Suilin

'Eddie Ephraums is the author of *Creative Elements*, *Gradient Light*, *Darkroom to Digital* and, most recently, *Nude Photography Notebook*. He is the consultant commissioning editor for Argentum and runs his own book publishing consultancy.

About this book

Lith printing is much more about image interpretation than it is about image reproduction and thus it holds a particular appeal for creative photographers and printers. Black and white has always had a special place in 'Photographic Art' as it simplifies subject matter to shape, tone and light and by removing the potential distraction of colour it abstracts the image from reality. Lith printing abstracts it a step further, giving results that look less photographic.

My lith printing instructional book *The Master Photographer's Lith Printing Course* (TMPLPC) was written to demystify this once obscure process and make it accessible to anyone. It's not a difficult process once you know how it works. The subsequent rise of interest globally in this highly creative process has been very gratifying.

This book is not intended to supersede TMPLPC, still the only instructional book on lith printing, but to serve as a companion to it, for whilst information and instruction are vital when learning a process, it is **insight and inspiration** that we need to develop our art further and providing these is one of the key objectives of this book.

The other concept behind *The World of Lith Printing* is one of **sharing**. To this end it showcases portfolios of work from invited guest photographic artists around the world who have used the medium in many very different ways for their work. It also exhibits a gallery of work from open submissions. My guests discuss aspects of their work, and open contributors share information through both captions and the *Lith forum* section.

Factual information is provided in the text sections, which offer a brief introduction to the process, key points, newer lith printing techniques and some aspects of toning for the lith printer. These are either introductory, for the newcomer, or supplementary to the main text of TMPLPC.

Many materials used in lith printing have changed. Some have gone, but new ones have appeared or are on the way. A complete **update of current lith printing materials** is provided.

We now live in a **digital age**, which photography is embracing rapidly. This presents both challenges and opportunities. Besides digitally simulating lith prints, this new technology can also be harnessed by traditional darkroom lith printers. Digital technology now allows us to combine the precision and limitless editing opportunities it offers with the craft of hand-made silver lith prints via digital negatives produced on domestic inkjet printers. It also facilitates the reproduction of darkroom lith prints onto alternative materials and/or to a different scale – **the marrying of the old and the new** opens up exciting and creative possibilities.

I am so grateful to all my guests for agreeing to bring their expertise and artistry together in this book – a truly global experience in all senses. There are six **international guest portfolios** in the 'wet' lith printing section and three more in the digital lith section, and their creators also write about the techniques they use.

From Great Britain, **Stuart Redler's** personal vision results in striking images in various genres, sometimes quirky, often humorous and always graphic. His arresting architectural images shown here are models of composition and photographic seeing, enhanced by the graphic effect of short

development times in strong lith developer. His work in other genres is a 'must see' and a visit to his website is recommended. Stuart is a professional photographer who lives near London.

In marked contrast, **Cece Wheeler** from America used extremely long processing times for her delicate floral lith photograms and her beautifully constructed domestic appliance series, in order to bring a softness to their design and form. Ingeniously, her photogram images were exposed in the developer. Cece is Associate Professor of Art and Chair of a Computer Arts Department.

The faux lith images made by **Chris Miller**, also from America, move toward the surreal by exploiting the use of bleaches and redevelopment in lith developer for false colours and have a very different look to the work of all the other guests. Chris is a professional landscape photographer.

A different approach comes from Canada – 'pinhole lith'. **Guy Glorieux** works with many camera formats up to 20" x 24" for lith-printed paper negatives. He also uses whole-room pinhole cameras. His installations use positive and negative images of epic proportions! Guy is a founding father of the annual Worldwide Pinhole Photography Day.

Previously based in Australia, but now working in New Zealand, **Jackie Ranken** used the lith process and selenium toning for her widely acclaimed lith aerial landscapes, earning her the titles of 'Canon Australian Professional Photographer of the Year', and 'Landscape Photographer of the Year'. She then self-published *Aerial Abstracts* and gained the award for the Australian Institute of Professional Photography 'Book of the Year'.

The German photographer, photo-chemist and master printer **Wolfgang Moersch** shows us a glimpse of what is possible using the lith process. Wolfgang is well known in central Europe, not only for his workshops and fine art printing but also for the contributions he has made with his own impressive range of developers, toners and other darkroom product innovations.

Skip Smith from America is a semi-retired professor, who exploits nearly exhausted lith developer to impart a timeless, aged feel to his lith still life prints. Skip is the 'traditional-to-digital' link in the book, reproducing his 'wet' process lith prints digitally onto art paper and satin, to make extra large prints or very small accordion books, sometimes utilizing antique albums to complement the timeless appearance of his prints.

Margaret Ball from England once used silver halide papers containing cadmium to achieve the colours in her lith prints when toned with selenium. When these papers were withdrawn, she found her own digital method to reproduce the effects she wanted from her negatives. Margaret recently achieved the distinction of being made an Associate of the Royal Photographic Society of Great Britain with a submission of these architectural interiors.

My final guest from England is **Eddie Ephraums** who first became a household name in the nineties with his books on darkroom work and his distinctive printing style, which included lith printing. Given his work in publishing and designing photographic books, the transition to the digital world was a natural one and became the subject of a recent book, *Darkroom to Digital*. Eddie thus completes the circle in the digital section of this book, for which he is also the commissioning editor and designer.

An introduction to lith printing

Whilst this book is not intended to be a complete instructional tome on lith printing (see 'About this book'), it seems appropriate to include a brief explanation for those who are not yet familiar with the process, so that the procedures in the book can be properly understood. Those who want to learn more about all the practical aspects of lith printing are referred to *The Master Photographer's Lith Printing Course*¹.

What is lith printing?

Firstly, as you will see from the images in this book, lith printing has nothing to do with using lith or line film for a high-contrast graphic effect – which is often what photographers new to the process assume from the name. Lith printing uses highly diluted lith developer at the printing stage, rather than at the negative processing stage, so normal negatives (B&W, infra-red or colour) are used. The choice of paper is vital, as not all B&W papers are suitable and even those that are can give very different and varied effects. Updated details of 'lithable' papers and developers are included in this book.

The results can be immensely diverse in different hands, according to the choice of materials and the techniques used. Lith prints possess unique characteristics and properties and these can be exploited to get different effects, so it is a flexible, adaptable and therefore very creative way of printing. It is all to do with grain size...

Infectious development

What drives this process and allows it to be so creative and variable is a property of lith developers known as 'infectious development'. Put simply this means that as tones get darker they develop faster, so they get even darker, develop even faster, get darker still, and so on. This results from a chemical chain reaction and consequently development of the darker tones in the print accelerates exponentially, leaving the lighter tones lagging way behind.

The significance of this is that during development the silver grains in the paper's emulsion grow steadily larger and in doing so, they change in appearance in a number of ways:

- The fine grains of early development are generally super-warmtoned, soft and creamy in texture, grainless in appearance and low in contrast.
- The large grains of late development are colder in tone, coarse in texture, very grainy in appearance and high in contrast.

In lith printing, this can be exploited by stopping the development when the balance of large and small grains (in shadows and highlights respectively) is as you want it – what I call the 'snatch point'. There is no right or wrong choice for this moment. It might be when the print is predominantly fine-grained (warm, creamy, grainless, low contrast) or later in development when predominantly large-grained (cold, coarse, grainy and contrasty) – or it might be with a balance of small-grain light tones and large-grain dark tones (warm, soft and grainless highlights with cold, grainy high-contrast shadows). The choice of snatch point has a profound effect.

¹ Published by Argentum

Practical aspects

In order to obtain this tiny grain size, development must be terminated long before it reaches completion. Allowing only partial development, however, would yield no more than a faint image on the paper. To get a normal density under these circumstances, the paper must be massively over-exposed, usually by about two or three stops (or doubling the exposure time two or three times over).

In order to slow development down enough to allow intervention exactly at the chosen moment the developer is heavily diluted. The degree of dilution has other effects as well. It can also change the colours produced, together with the contrast and the tonality in the print.

There are many factors that change the outcome and this is why lith prints can have such a personalized appearance and why lith printing can be such a creative medium to work with, as we see on the pages of this book.

Some of these main factors are:

- Choice of paper. This can have a major effect.
- Choice of developer. Also the ratios used of parts A and B. (See 'Developers for lith printing').
- Dilution of developer. Higher dilutions give warmer colours and extended tonality.
- Freshness vs. 'maturity' of developer. Used developer is more colourful than fresh.
- Processing temperature. Above 25-30° C this becomes significant.
- Exposure. See 'Golden Rules' below. Try some big changes here.
- Snatch point. This has a major effect.
- Toners. Lith prints are very toner responsive.
- Bleaches. These can be used in highly diluted form for subtle colour changes.

Finally, my Golden Rules for lith printing

Provided the chemicals are OK, everything can be worked out by these two rules:

Golden Rule One:

Highlights are controlled by exposure under the enlarger.
Shadows are controlled by development, i.e. snatch point.

Golden Rule Two:

For a given paper, the colour, texture and contrast are related to grain size in the paper emulsion – which in turn is related to its stage of development.

This is necessarily a very brief account of the process, but see 'Lith printing key points' for a quick reference guide.