Architecture’s Discursive Space: Photography

Marc Goodwin

Aalto University publication series
DOCTORAL DISSERTATIONS 123/2016

School of Arts, Design and Architecture
Aalto ARTS Books
Helsinki
books.aalto.fi

© Marc Goodwin

Graphic design:
Hanna Valle

Materials:
Galerie Volume 115 g, Curious Cosmic Moon Stone 360 g

Fonts:
Botanic Sans by Jaakko Suomalainen, Akkurat

ISBN 978-952-60-6880-0 (printed)
ISBN 978-952-60-6881-7 (pdf)
ISSN-L 1799-4934
ISSN 1799-4934 (printed)
ISSN 1799-4942 (pdf)

Printed in Libris, Finland
2016

Architecture's Discursive Space: Photography

Marc Goodwin

ACKNOWLEDGEMENTS

I could never have made this book without the help of a great many people.

Firstly, I would like to express my deepest gratitude to my supervisors, Professors Merja Salo and Antti Ahlava. Each has been instrumental in shaping my understanding of photographic and architectural research. I could not have studied this particular interstice between the two fields without their wisdom, help and advice. Words can only fall short of expressing all they have done.

I was particularly fortunate to have two unofficial supervisors, as well. My warmest gratitude goes to Professor Juha Varto, who has been there for me during the entire course of my research. To him I owe not only the first conferences and seminars I participated in, countless people I met, and texts I read. His humour and knowledge were also a great support when I was hit by doubt at times bordering on despair. I wish also to thank Professor Mika Elo, who directed me to artistic research and was instrumental in my first publication. His extraordinary knowledge of theory together with his involvement in the Journal of Artistic Research proved crucial to the overall shape and direction of my work.

To the many appearing in a long list of professionals whose input was indispensible, I thank you immensely. For example, the architects who participated in my fieldwork: Samuli Miettinen of JKMM, Kimmo Lintula, Mikko Summanen and Niko Sirola of K2S, Vesa Oiva of AOA, Pekka Helin of Helin & Co. in Finland; Kim Nielsen of 3XN, Didde Fuhr Pedersen and Troels Troelsen of Henning Larsen, Torben Hjortsø of PLH and Mikkel Beedholm of KHR in Denmark. To Jorma Mukkala, architect and Editor in Chief of the Finnish Architectural Review, go special thanks. The picture of Nordic openness and cooperation, he was extremly kind and helpful even when I was writing to critique the editorial practices of his Journal. Architect and renowned architectural photographer Adam Mørk was kind enough to give me a long interview in his studio. Martta Louekari provided me with valuable insight to Finnish architecture both at home and in China. Thanks go also to Professor and architect Dorita Hannah for entrusting me with the photography of her Event Spaces project. Likewise I am grateful to Rainer Hemberg for choosing me to photograph Finland's Parliament House. This research could not have taken place and would not have had meaning without this contact to these practitioners. That they were also kind, clever and talented was particularly fortunate though fortuitous. It was incredibly generous for such busy people to give their time in this way.

I would like to extend my thanks to several institutions. Firstly, to Aalto University Media Department for funding my research for three long years. This was a great privilege and help. To the entire Research Institute at the School of Art and Design Aalto University, namely Päivi Hovi-Wasastjerna, Pia Sivenius, and Mirja Saari. To the Finnish Cultural Foundation and Cimo, for funding my first year of research. My fieldwork would not have been possible without this aid. To Pirita Posti for making those grants possible and steering me in the right direction when I was completely lost at sea. To the Eugène, Elisabeth and Birgit Nygren Foundation, for their generous grant and to Luckan for their assistance in applying for it. To the publication service of Aalto University, with special thanks to Sanna Tyyri-Pohjonen and graphic designer Hanna Valle. Together they made the book you hold in your hands.

Several academics have given their time and perspicacious thoughts towards the development of this research. Without Stephen Loo, I could not have written the key article of this book, Architecture's Discursive Space. To Anni Vartola I owe not only most of my knowledge of Finnish Architecture, but also her tireless critical feedback for my writing about conventions in Finnish Architectural photography. Florian Dombois provided a eureka moment in a conversation about how images can act as models for not only models of things in the world. To Joaquin Roaldán I owe not only an invitation to Granada, but my use of photo-elicitation and other constituents of interviews conducted.

Friends and family have also played their part in keeping this ship afloat. Maija Tammi was a careful, exacting and precise proof-reader. So too was my niece, Emily Gussin. Christina Landbrecht was the key to photographing several theatres in Berlin. Felix & Nana, artist duo extraordinaire, gave not only their time, eyes, ears and thoughts, but provided me with a perspective I would not otherwise have had. The Siren family could open a foundation for all they have done to help me in this arduous process. Most of all, I wish to give my warmest thanks and gratitude to my (soon to be) wife, Cecilia, for challenging and changing my worldview and enduring her busy partner.

Marc Goodwin, Helsinki, June 2016

ABSTRACT

This research asks the simple question: Do images make buildings? More specifically, it asks how. The research question is addressed via four articles, published in peer-reviewed journals from 2013 to 2016. Each looks at a different aspect of the question: visual conventions, visualising atmosphere, photography as visual data, and the repeatability of these experiments. In addition, the dissertation includes extensive photography section that both illustrates the texts as well as dialoguing with them.

A brief description of each article follows.

'Nine Facts About Conventions in Architectural Photography' published in the Nordic Journal of Architectural Research (NJAR 1/2014).

This study is one of the first to use content analysis of images as a means of interpreting architectural discourse. Nine facts were extracted from a detailed analysis of images that appeared in 3493 pages of the Finnish Architectural Review (ARK) between 1912 and 2012. Close attention was paid to the types of images used repeatedly in order to focus on key editorial and photographic decisions. Editorial decisions consisted of type, size, chromatic scale and number of images. Photographic decisions consisted of human presence, weather, depth-of-field and camera orientation for interior and exterior photographs. Data, which quantifies the frequency of each type of image, indicates that there is a strong reliance on visual conventions in ARK. When considering the limited range of images used in the publication, it becomes clear there is little correlation between the complexity of architectural language and environments and the simplicity of its depiction. That discrepancy suggests there is a need for research and development in the field of architectural photography in order to better inform readers about the diversity of architectural practices.

'A Hinge: Field-testing the Relationship Between Photography and Architecture, in the Journal of Artistic Research (JAR 3/ 2013).

This article seeks to share the methods and preliminary results of an artistic research project in the field of architectural photography. A central concern is the representation of atmosphere in place of the standard depiction of objects. Important also is an attempt at co-design through an interview process with architects based on the notion of the dialectic. This aspect of the study is important not only for this experiment itself but is also crucial for analysing the scalability of practices pursued in this investigation. Findings include excerpts from interviews and examples of photographs. More than just a project about photographic practices, however, this study is part of a larger investigation into the relationship that has developed between photography and architecture, focussing especially on Finland and Denmark, and the institutional practices of architects, publishers and photographers working in collaboration.

'Architecture's Discursive Space: Photography', currently in peer review for the book 'Visual Methodologies in Architectural Research', due to be published by Intellect in 2016.

Ultimately, I conclude that conventional architectural photography is reliant upon one atmosphere — the blue and white of eternal summer that has replaced the black and white photography that came before it. A simple system of visual categorisation through grids became my working method for dealing with terabytes of data in the form of photographs. The grid, it is argued, is at the core of architectural depiction, with origins in Renaissance treatises. As a contemporary editing system, however, grids make it easy to spot patterns in purchased / published images, and cross-check statements made in interviews and in writing with photographic statements.

'Grey Matter', to be published in the first 2016 edition of the International Journal of Education through Art.

As mentioned in the article on atmospheres, it was important to test the repeatability of this research. Could others use atmospheres as a system for classifying images? Is it useful to look at conventional photography as one such atmosphere? Could the classroom be used as a research lab to test the viability of non-conventional atmospheres in the world of architecture. The second phase of the nine-month course ended in a highly successful exhibition and talk at the Finnish Museum of Architecture. The course and exhibition were called Grey Matter because images sought to reflect the lived experience of autumnal Helsinki, testing claims that good architecture must be shown in good weather.

Findings in this research challenge received wisdom about 'objective' photography of architecture. They suggest the need for scrutiny of conventionalised practises and argue for an expanded field of architectural photography. That new architectural photography would be informed by the notion of atmosphere and its categorisation into a panoply of responses to site conditions.

The architectural atmosphere sine qua non, known as objective photography, is taught in schools and enforced through repeated global publication. This research suggests that interdisciplinary courses between photography and architecture departments might disrupt the current beliefs and practices of educators and publishers alike. This dissertation argues in favour of such a disruption.

TABLE OF CONTENTS

Table of Contents xii

List of Original Publications xv

Preface xvii

Photographs xviii

1 INTRODUCTION 1

1.1 Ground for Research 1

1.2 Research Questions 3

1.3 Aims & Methods 5

1.4 Structure 6

1.5 Materials 7

1.6 Definitions 9

2 DISCURSIVE MAP:
A combined literature and practice review 11

3 RESULTS 30

3.1 One: What would a short-list of conventions in architectural photography include? 30

3.2 Two: What would a photographic interpretation of 'atmosphere' mean, and how would architects receive it? 31

3.3 Three: What is the best way to visualise photographic assertions arrived at through practice-based research in architectural photography? 36

3.4 Four: Why do practice based research, and can such research be repeated and generalised? 37

4 DISCUSSION 39

4.1 General Remarks 39

4.2 Theoretical Implications 41

4.3 Practical Implications 42

4.4 The Validity of this Research 43

4.5 Limitations of this Research 43

4.6 Suggestions for Further Research 45

5 SUMMARY 48

6 REFERENCES 53

7 ARTICLES 59

7.1 9 Facts About Conventions in Architectural Photography 59

7.2 A Hinge: Field-testing the Relationship Between Photography and Architecture 81

7.3 Architecture's Discursive Space: Photography, Intellect Books 99

7.4 Towards Grey Matter — by Bridge or Tunnel? 123

8 APPENDICES 135

Appendix I
Website: Using Grids as a Tool 136

Appendix II
Blog 136

Appendix III
Definitions 136

Appendix IV
Sample Interview 138

Appendix V
Sample Questionnaire 140

Appendix VI
Early Archmospheres 148

Appendix VII
Industry Work Flow 159

Appendix VIII
AIA Instructions for Photography Commissions 161

LIST OF ORIGINAL PUBLICATIONS

9 facts About Conventions in Architectural Photography (NJAR 1/2014)
http://arkitekturforskning.net/na/article/view/481

A Hinge: Field-testing the Relationship Between Photography and Architecture.
(JAR 3/ 2013)
http://www.researchcatalogue.net/view/30884/32384

Architecture's Discursive Space: Photography (Intellect Books)
Chapter in Visual Methodologies in Architectural Research

Towards grey matter — by bridge or tunnel? (IJETA 12 / 1 2016)
http://ojs.library.ubc.ca/index.php/ijeta/issue

PREFACE

The desire to undertake this study took root thirteen years ago on a train. It was roughly an hour's journey from Goldsmiths University in South London to my sister's house, and I had brought one book with me for the weekend — *Privacy and Publicity*, by Beatriz Colomina. I knew very little about Le Corbusier or Adolf Loos at the time, but found I couldn't put the book down. Not for the journey or the weekend. By then, I was spending most of my time reading about architecture or photographing it with a large format film camera. But little did I realise how the story Colomina told about these key figures of modernism – and their filial or phobic relationships with photography — would presage my own experience with architects for the years to come.

I finished my MA, spent a year putting together my portfolio, then finally got my first big job. It was for the regeneration of an entire city centre, and I was terrified. Toby, the managing director of the firm, gave me some advice that has stuck with me to this day. He told me to give them exactly what they were looking for, only better. I have been shooting with that in mind ever since. I love my work and consider each and every commission a privilege — at times of the sort so exhilarating you can't eat or sleep. But the meanings behind Toby's, comment together with several other questions, have built up over time.

The first came with the transition from large format film to digital capture. Excited by the potential of this new medium, I experimented with several means of capturing and depicting time-lapse in a single image and the unfolding of spaces, such as the surfaces of a building or the facades in a square, on to a single plane. Upon showing these images to my best client's PR manager, I was told they were not photorealistic and that the company wouldn't purchase them. That response was repeated everywhere. What was meant by *photorealistic* and what was causing this resistance to change?

Some time later I pitched a project to the publishers Thames and Hudson, who agreed to do a book based on these new concepts of light and space. Suddenly all of the architects I contacted were interested. Publicity — of the sort that comes with no strings attached — had apparently altered the private prejudices of this conservative practice against a new sort of image. Why the change of heart? Perhaps risk was the decisive factor in opening up a space for experimentation. Here was a finding worth investigating.

Before long I realised clichés were part of the vocabulary of photorealism. I have trudged around more half-finished buildings with architects holding tree branches than I care to think about. The same goes for watching the weather page for sunny skies, picking dates for shoots like a gambler placing bets on a horse. And of course flowers, personal items and people have no place in the empty world of architectural photographs.

Most of all, however, I found I wanted to know why there was so little dialogue between architects and photographers. Commissions were of two sorts. Either you were given an incredibly detailed brief with explanatory texts, plans, renders, indicated vantage points, focal points and camera angles to shoot very specific aspects of a site. Or you were told to "work your magic". Either way, there was no interaction, even with

established clients. In the former case, you were essentially ticking boxes in a wish list, in the latter you often got nasty surprises upon meeting with the client to see what the "magic" had produced. I think the reason for this lack of interaction was summed up nicely by Manfredo Tafuri when he said it showed a "wish to contain all the problems within the architectural discipline, to avoid well-founded outside examination" (Tafuri 1980: 103) . He claims the problem has been around since the 1930s and is a result of an out-dated but tenacious belief in the avant-garde. Perhaps then, there is little hope for change? Perhaps also, there is no need for it. My research has given me the chance to test those questions.

Roughly four years after my MA, I began teaching on a weekly basis. Doing so took me back to a relationship with photography that I had by then forgotten. On the one hand, students were eager to try new things and full of references I had never seen. On the other, many of my colleagues espoused ideological beliefs about photography which bore no relationship whatever with my practice, or anyone's in my field. Here was another finding: for better or for worse, education exists in a bubble, even where vocational training is the order of the day. Here again I site an early motivation for this study, albeit a nebulous one at that point in time.

Years later, I can't help feeling like a traveller with a foot in two different countries. I grew up mid-Atlantic, and have subsequently lived in five other countries for years upon end, so perhaps it is only natural. The result is that you start to wish you could pick the best from each place and share it with everyone. The coffee is better in one, the smoked salmon in the other. One place is organised, the other beautiful. If only it were possible to have it all or at least find a way to share what each place is good at. Perhaps it will be, eventually — at least in this metaphorical sense. In the meantime, my goal is to work as a translator between discourses and practices. It is all too easy to get carried away whilst writing and succumb to delusions of grandeur. For though this research has been of all-consuming importance to me for the past four years, I realise it will neither save the world nor change the state of affairs it addresses. The reach of a doctoral thesis is extremely limited, and the voice of its author typically carries little weight. But in addition to being an enriching technical exercise, it is an opportunity to share early findings with others. However small the circle of readers, I value and look forward to their feedback in order to take many more steps towards bridging the gaps between architects and photographers, industry and education.

PHOTOGRAPHS

I include the following selection of my images to demonstrate the importance of light and colour when reading the atmosphere of an image. In the case of the architectural photograph, this experiment is crucial because, as this study will show, much of story of architecture is told through photographs that follow a small set of conventions. See Appendix VII at the end of this dissertation. It produces a list of best practices which reproduce or at least encourage many of those conventions.

I have chosen to look especially at light and weather conditions. This is for three main reasons. Firstly, they are an element often left out of the list of conventions discussed in books about architectural photography. Rules of thumb are normally identified as: the use of wide angle lenses, certain types of camera placement, non-converging vertical lines, and the absence of people. Secondly, light and weather struck me as important because I moved to Finland from Spain in order to do my research. The weather could not have been more different in each. However, the light and weather reflected in the architectural photography of both countries, and as this study will show, all countries around the world, is more or less the same. Many of architectural photographs are shot under similar meteorological conditions, at similar times of the day which aim at producing a kind of non-atmosphere: a timeless, placeless image of clear blue skies and uninhabited spaces. Retouching finishes the process of homogenization. Finally, weather is a very literal application of the word atmosphere, so crucial to this investigation

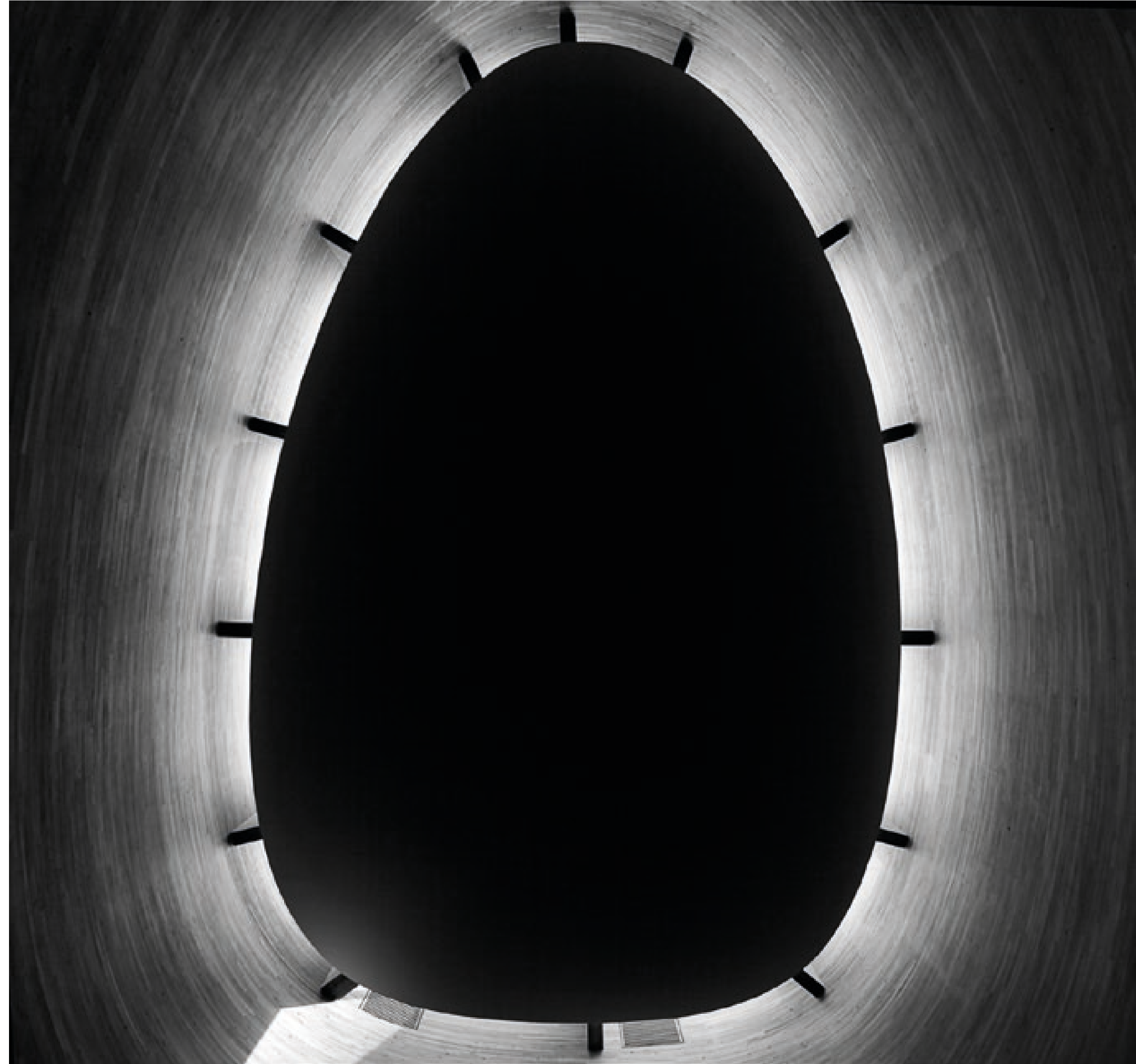
This image selection has thus been made in order to question the notion that photographic rules of thumb are imperatives. What makes conventional moves best practices? If they are rules that cannot be broken, then they will produce the only kind of images suitable to the purpose of showing and promoting architecture. However, conventions whose only reason for being is familiarity through repetition, should be looked at, tested and critiqued as discursive spaces. They should not be considered optical truth.

For all of these reasons, practice based research through photography has been crucial to this investigation. It has produced three sorts of engagement with the topic not possible through other research methods. Firstly, it has produced visual material for interviews specific to the project of each architect. These images were produced subsequent to any other photography of their work, and done at the time of research. Secondly, it has allowed a practitioner the space and time to reflect on their practice in ways not formerly undertaken. Thirdly, it presents new visual material for the reader to contemplate together with the text. A few more words about the third point are needed.

This photography section is offered with multiple aspirations. It can act as illustration for the text, just as the text can help to elucidate the images. However, beyond that particular perspective, the one of the author, it is hoped they will give rise to reflection about the status of the architectural photograph and put into question its ontology. Such images can be photographic or designed on a computer. The distinction between the two grows ever smaller. Photographs are retouched extensively and computer renders of images are seamlessly fitted into backgrounds captured with digital cameras. The diminished boundary between computer and photographic images (both digital) suggests new frontiers for the architectural photograph. Unless of course architectural photography will be different from all other forms of photography, and cease to alter. In which case perhaps we should call it *de Stjil*, or better yet, International Style.

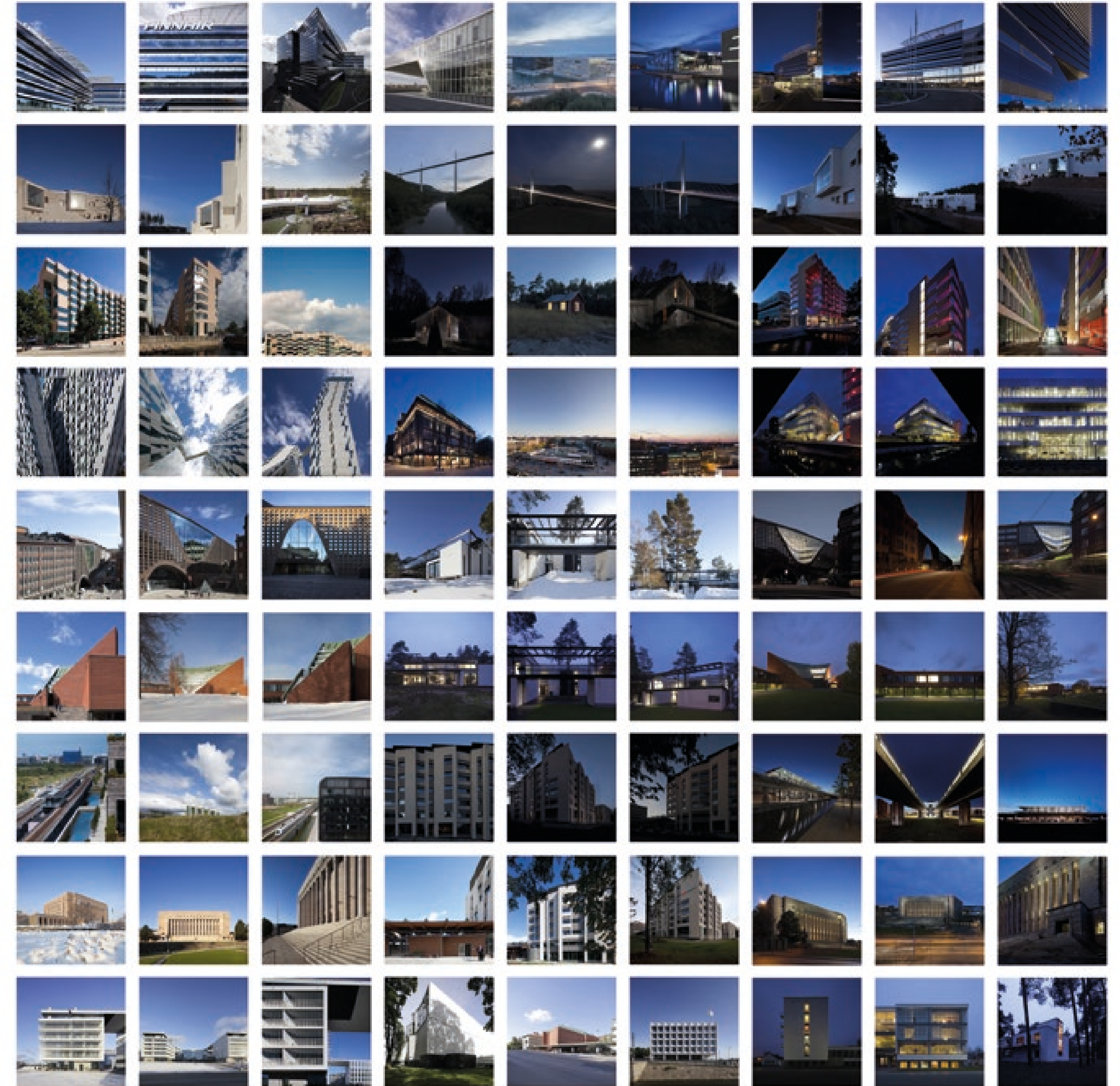
black & white

As the first (architectural) photographs were black and white, these images represent an investigation in that historical way of seeing. Suitable subjects of were sought to falsify the claim that certain kinds of buildings are ideally matched with a certain kind of image. What is the atmosphere of the future passed?



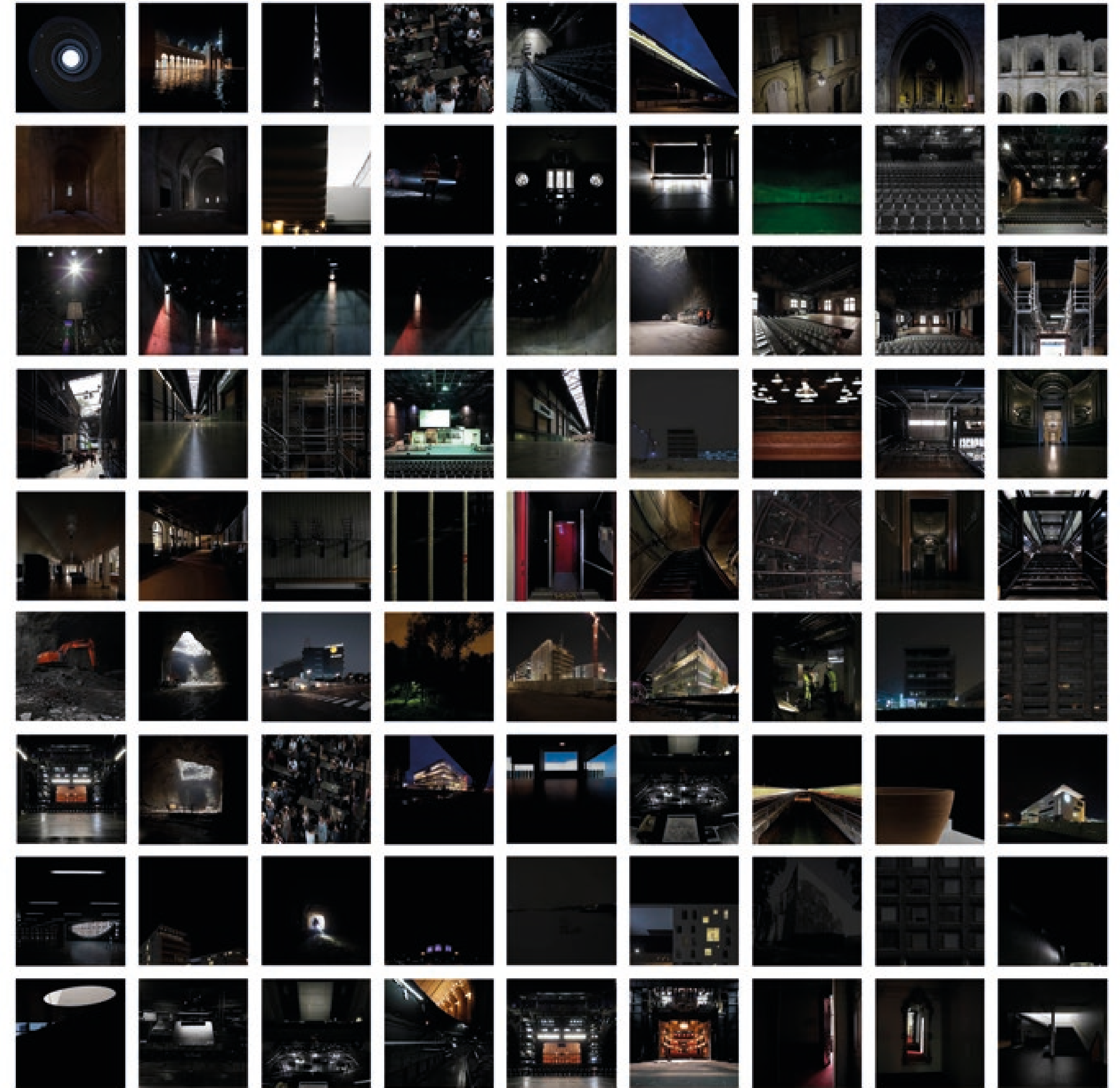
blue

There appears to be a penchant for certain colours in architectural photography. Is there a rule imposed on those who would publish, insisting blue is best? Has blue & white replaced black & white in architectural photography? How might that influence our perception of atmospheres in these images? How might the repetition of such practices influence design?



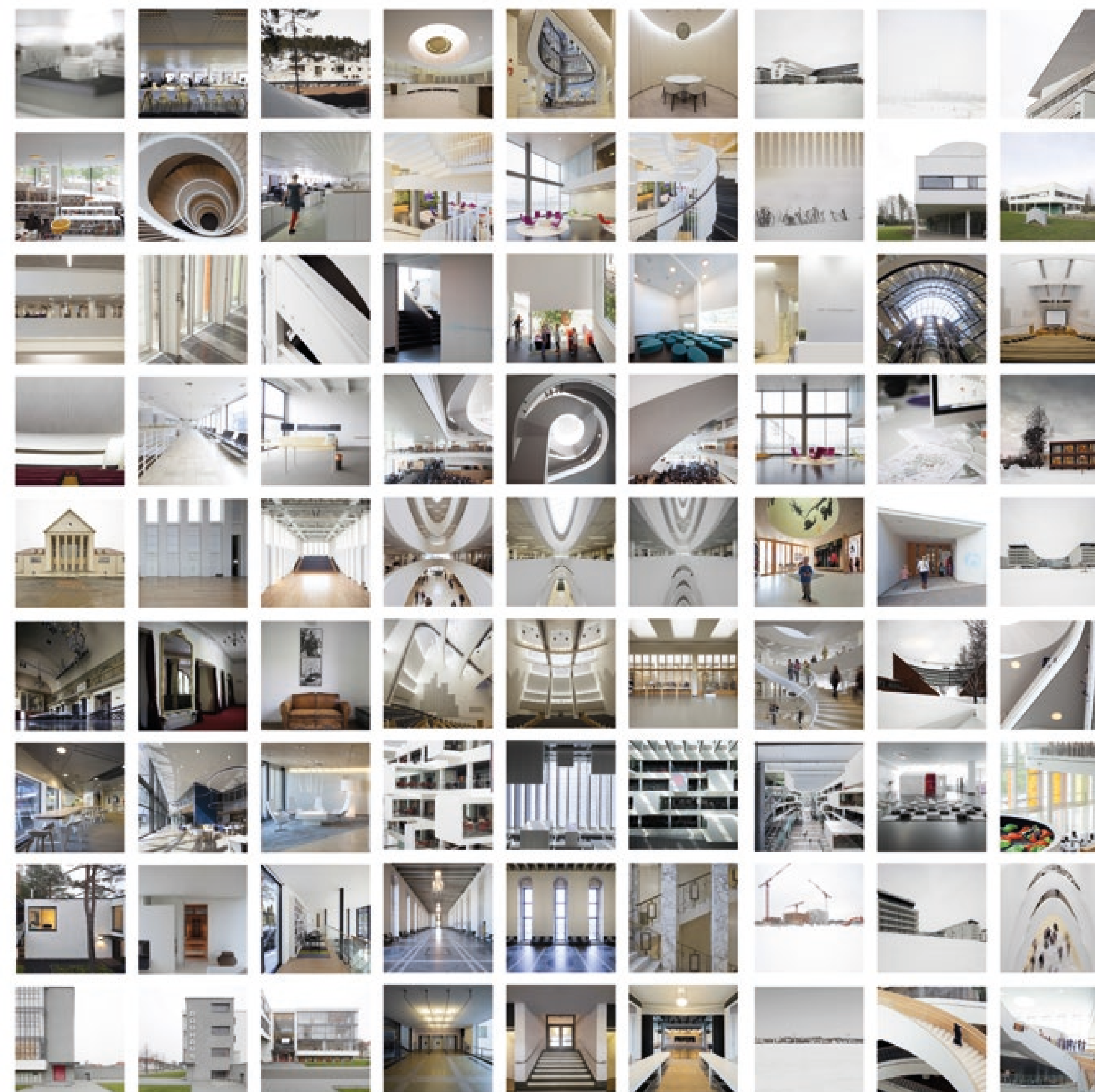
black

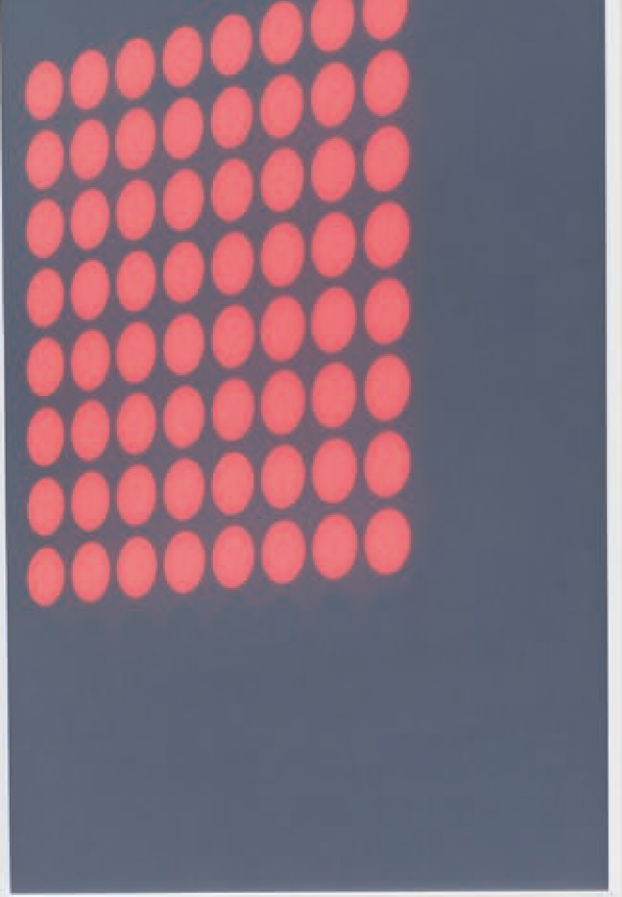
Much of architectural photography is nocturnal, exteriors in particular. That is because it is easier to appreciate the interior and exterior in one photograph at night. With the lights on inside you can combine these spaces once the light goes down outside. Many people also find the mixture of light beautiful. However, you won't often find black skies in these images. They are nearly always blue. And black interiors are equally rare in the modern world of the white cube.



white

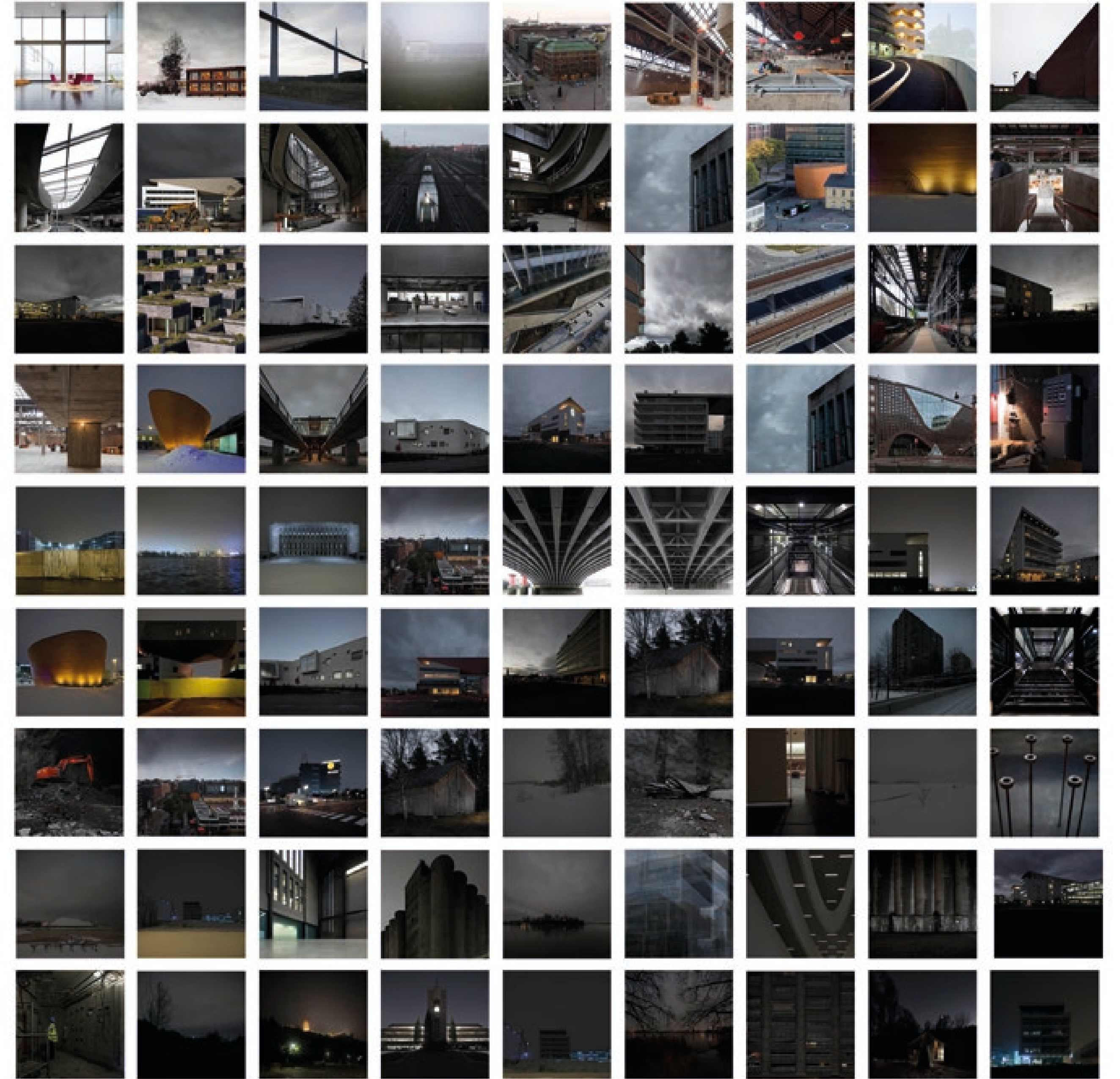
This colour of colours is everywhere in architecture, but rarely does one see a high-key photograph. White walls under blue skies are common. White walls under white skies are not. This series seeks to test that hypothesis. The Nordics proved to be a particularly rich testing ground with its snow covered winter settings. Such images do find their way into publications, but are still quite rare.





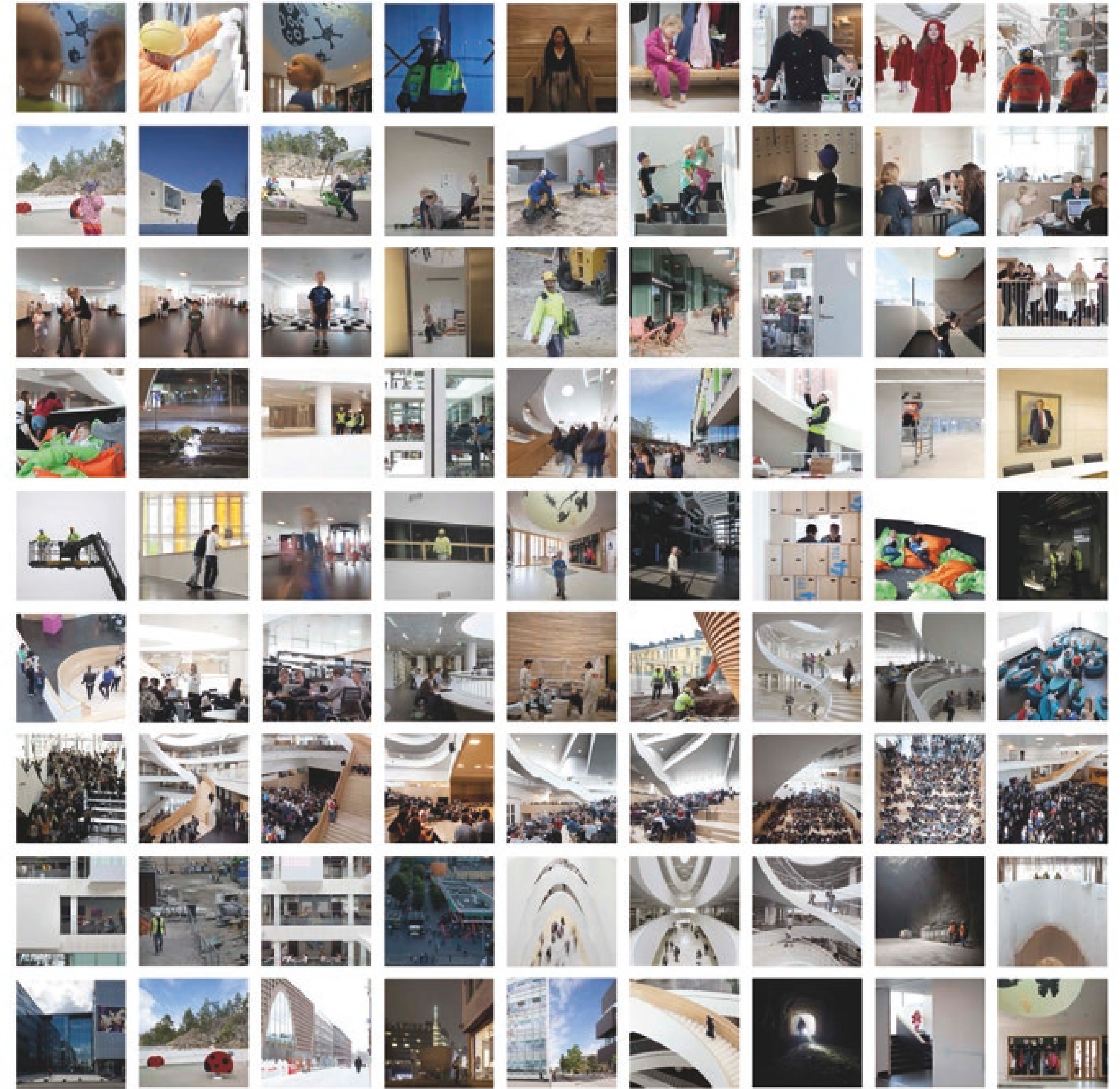
grey

This highly respected colour of woollen suits and silver rarely finds its way into the architectural press. The reason would seem to be obvious: no one likes bad weather and dark rooms. But can it really be that simple? Is there no place for grey buildings under grey skies, especially when each are the norm in certain parts of the world, such as northern Europe? Again, the Nordics provided a rich panoply of grey skies to photograph throughout the year.



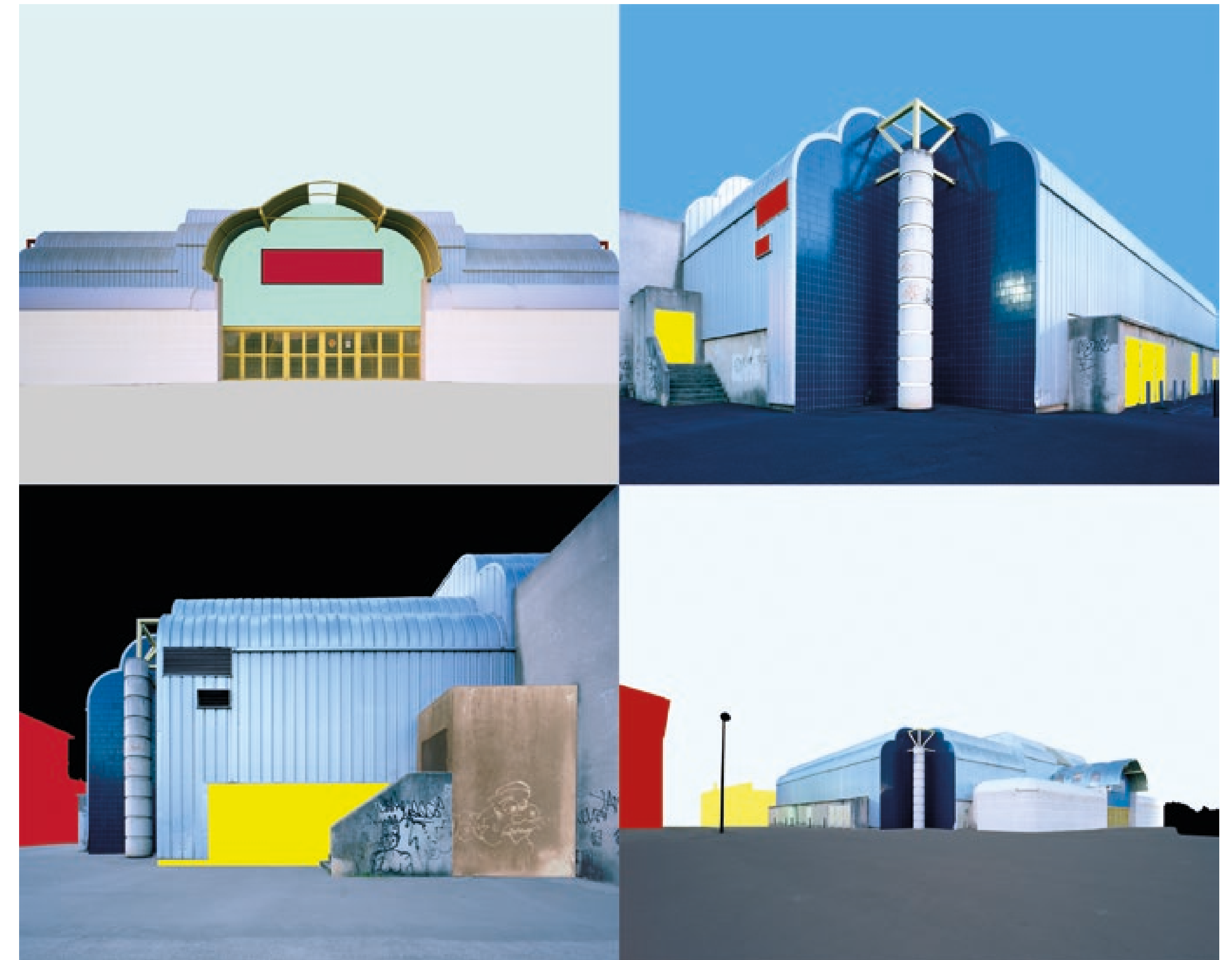
people

The presence or absence of people is crucial to the atmosphere of an architectural photograph. It has become a tedious commonplace to discuss emptiness. Yet the fact remains that architects like people in their texts but not their photographs. And when people are used, they are often stiff, forced, artificial, transparent, smeared or blurred – anything but human. We see the same gestures and tropes repeated. You could do anything with people. Show, stage, confront – is a nude descending a staircase as shocking as it was in Duchamp's time?



experiments

This series is as much about elimination as it is about imposition. Colour fields are used to interpret architectural space in a way that aspires to the spirit of de Stijl. In other images, captures are layered, night and day are compressed. But mainly this series aspires to recognise the fact that there is already a great deal of heavy-handed intervention in architectural photography. The conventions of the practice keep you from seeing them, but here there is no slight of hand.



1 INTRODUCTION

This study seeks to add a photographer's voice to the somewhat private discussion architects have been having about the photography of their work. In theory and practice, architects are extremely reliant on photography: as visuals for talks, illustrations for publications or the decisive factor in competition entries. Images — principally photographs — are at the centre of an architect's work and education. Yet rarely are they treated as photographs: constructed views achieved through choices conditioned by ingrained rules, preferences and technical practices. Instead they are often taken for transparent windows onto the real work — the architect's. Some of the blame for that no doubt goes to the star system of architecture and its modernist myths about polymaths running the show. However, as in so many commercial practices, photographers have absented themselves from the discussion, and their silence has meant that the understanding of their practice has been defined by others. By choosing to write, I hope to bring not only a new perspective to any architects who might read this, but also suggest an inroad to photo-architectural studies.

1.1 Ground for Research

Inherently interdisciplinary, this study sits on the periphery of two different practices and fields of enquiry, using photography to look at architecture and architecture to look at photography. Hopefully they will grow nearer to each other and cross-pollinate in future as art forms, commercial endeavours and learning environments. It is the goal of this enquiry to work towards increased communication and connectivity between the two disciplines and practices, and to better understand the current relationship between them — both commercially and academically.

I have chosen practice-based research as the principle means of working towards that rather ambitious goal; however, discourse and content analysis have also proven crucial. In order to reflect on my own practice, I needed to better understand the practice of others — architects, editors and photographers alike — and situate my own practice within such contexts. I soon arrived at a study on conventions in architectural photography, which then led me to an exploration of unconventional photography and it's commercial reception. However, I do not wish to introduce a false binary, here. As will become clear, conventional photographs operate as a normative standard but are one of endless atmospheres through which architecture might be experienced. That said, 'custom is our nature' (Pascal: 2013, 92), so the conventionalised means of deploying architectural images are deeply entrenched and taken for granted as optical truths. The conventions of the architectural drawing were established at the Renaissance, and have been part of the photographic rulebook since the invention of photography. It is not my intention to enter into normative thinking about conventional photographs themselves, but rather to reveal and articulate such conventions, speculate on the rhetorical mechanisms behind them, and argue for a research-driven, polysemic photography to explain architecture through photographs and differentiate architects from one another. My research looks at how the conventions of architectural photography stereotype its reading, ultimately limiting the ways in which architecture is imagined or understood.

As well as writing in the hope of making a small contribution to existing literature on the subject, I have worked at creating a comprehensive tool for architects and photographers to use. The tool is experimental as is the method, because each is very much in its nascent stage. Nonetheless, they are developed enough to share in this context and will benefit greatly from critique. I offer a tool for visualising discourse through photography via a body of images which together with a collection of articles seeks to critique and expand the relationship between photography and architecture. I have chosen to call that method 'Archmospheres' in order to imply a fusion of architecture and atmosphere as the subject and substance of the body of photographs offered here. The ability to generate grids and alter those grids is the tool I offer as a method for inquiry into architectural discourse deployed though photography. I will develop that idea later in the text.

It may prove helpful to state the development of ideas as a means of understanding what unifies these articles. Some might call this the red thread running through each. Sticking to metaphors from the built environment, I prefer to think of it as a look from a high tower which grants a view of the panorama in three hundred and sixty degrees. Each article has relied upon theoretical frameworks for the analysis and deployment of a given concept. C.S. Peirce, Walter Benjamin and Susan Sontag for the notion of realism. Gernot Böhme for the articulation of atmospheres as an inter-subjective phenomenon. Rosalind Krauss for the concept of discursive spaces and her antimonies of modernist and postmodernist art practices. John Dewey for the idea of learning by doing. No one theory unites the articles, because the purpose was not to see how they might illuminate such a theory. Rather the overarching goal has been to articulate the relationship between architecture and photography by unpacking the prejudices and practices of each. I will return to these authors and their respective theories below where suitable in the discussion of each article.

Notwithstanding, Kierkegaard's (1985) knights of faith and resignation do serve as an ideological ground for everything I have written. They provide a theoretical understanding of the all too familiar divide between artist/artisan or amateur/professional. This has been important because my work (and that of the commissioning architects) is commercial. However, I am trying to argue that there is a learning moment that might come from the synthesis of certain working methods of amateurs and professionals.

The current separation of fine and commercial art is entrenched in language: we still think of amateurs vs. professionals. But do we ever reflect on what we are saying? One means to be in love with something, the other comes from the idea of the solemn declaration one makes when joining a religious order. Professionalism in this case means the production of restrained, un-evocative images in the name of transparency and objectivity. The point can be made even clearer by reading Hannah Arendt's discussion of the meaning of all European words for labour in which amount to paint and effort in footnote 39 of *The Human Condition* (Arendt 1998: 48). The less you see the work of the photographer, the less painful it is for everyone, perhaps. The knight is resigned to his role and we are resigned to look at its effects.

Does such a position engage in normative thinking along the

lines of a binary opposition? Possibly. But I am not trying to suggest that architects must cease to expect a service and simply put their faith in the work of inspired artists. Rather, I am arguing that the creative impulse which leads photographers and architects alike to study need not be cast off completely once it is time to do serious work. Within the market place the use of images is extremely conservative, within academia more so, yet the bridged space might offer a way out as "proto-practice shouldn't merely be just like being in practice; it should offer the opportunity to experiment, to push and test ideas away from commercial pressures…" (Hunter 2012: http://www.architectural-review.com/today/alternative-routes-for-architecture/8636207.fullarticle).

1.2 Research Questions

This research started with what seemed like a simple though provocative question:

Do images make buildings?

The next question was how to test such a hypothesis. Initially, it occurred to me to contact a small number of experts to interview on the matter. I met with ten architects in Finland and the same number in Denmark before arriving at six firms to partner up with for my research.[1] I wasn't long into my fieldwork, however, before I discovered the question was not at all provocative, nor was it simple. 'Images' might refer to illustrations, technical drawings or photographs. Architecture is about more than just buildings. But 'make' was ultimately the most complicated part for it could be taken to refer to several things including:

— An image's role as a model for something to be made (the assumed role of technical drawings) rather than as simply a document of something already made (the default belief about a photograph's ontology and function).
— The use of images in marketing, determinant in 'making' a career in architecture.
— Photography's role as a source for design and a testing ground of design. Are designs made with photographs in mind? Are buildings built to be photogenic?

[1] *AOA, JKMM and K2S in Finland; 3XN, PLH and KHR in Denmark. The process of partnering with architects is explained further in the second article.*

Much to my great surprise, experts were unanimous in agreeing that buildings were often built with photographs in mind. This was no discovery; it was taken for granted. Architects were polarised on what that relationship with photography meant, as Beatriz Colomina (2000) revealed in her portrayal of the media friendly vs. the media phobic architect. Photography was either good or bad for architecture. But no one, it seemed, had considered the notion of multiple photographies and their potential for altering the focus of the debate. It was at this point my question shifted to an emphasis upon conventions in architectural photography and an exploration into alternative practices. Hence, the initial research question has been broken up into four sub-questions, each addressed in separate article. Those questions are as follows:

— What would a short-list of conventions in architectural photography include?
— What would a photographic interpretation of 'atmosphere' mean, and how would architects receive it?

— What is the best way to visualise photographic assertions arrived at through practice-based research in architectural photography?
— Why do practice based research, and can such research be repeated and generalised?

I have sought investigate each of these questions by identifying some of the component parts of conventional architecture through literature, content analysis of photographs and through fieldwork. By using the same methods I located a potential candidate for alternative practices in the notion of atmosphere. The topic has a long history in literature from Pevsner (1955) to Pallasmaa (2011) but little application in commercial images.[2] Using the research environment of the university as a means of developing and testing the viability of such images provided a solid reason for doing practice-based research.

Conventions are crucial. There several rules of thumb which stipulate what is and is not good architectural photography. These rules influence the practices of photographers, commissioning architects and editors of journals and online publications. My research will show this in the chapters to come. Research will test whether this was an arbitrary set of rules that have become enshrined in practice, and if so ask why they are so resistant to change. Just as the 19th century architecture was deeply concerned with Greco-Roman Orders or Gothic windows, the 20th century avant-garde was essentially a dogmatic, systematised response to those concerns. Similarly, I will argue, contemporary architectural photography is about the adherence to a system based on a conventionalised beliefs about the right way of doing things — the only way. However, rules change. What seems like optical truth today becomes tomorrow's flat earth. I think photography could serve architecture very well as a means of doing research into these sorts of conventionalised practices. Photography could be used to expand architecture's discursive space. I have aimed to test that final hypothesis — one which underlies all of the other objectives — throughout the four main stages of this research.

The following table provides a quick reference to key aspects of each of the four articles.

[2] *Pictorialism takes the debate back further, at least to the work of Edward Steichen at the turn of the twentieth century.*

Article	Theory	Methodology	Data	Outcome
1	Grounded Theory	Content Analysis	9 Charts	Insight into Conventions
2	Phenomenology	Interviews & Photography	6 Case Studies	Insight into Atmosphere
3	Modernist vs. Postmodern	Photography & Edition	9 Grids	Visualisation Method
4	Effectuation & Existentialism	Teaching & Curating	Coursework & Exhibition	Applications of P.B.R.

1.3 Aims & Methods

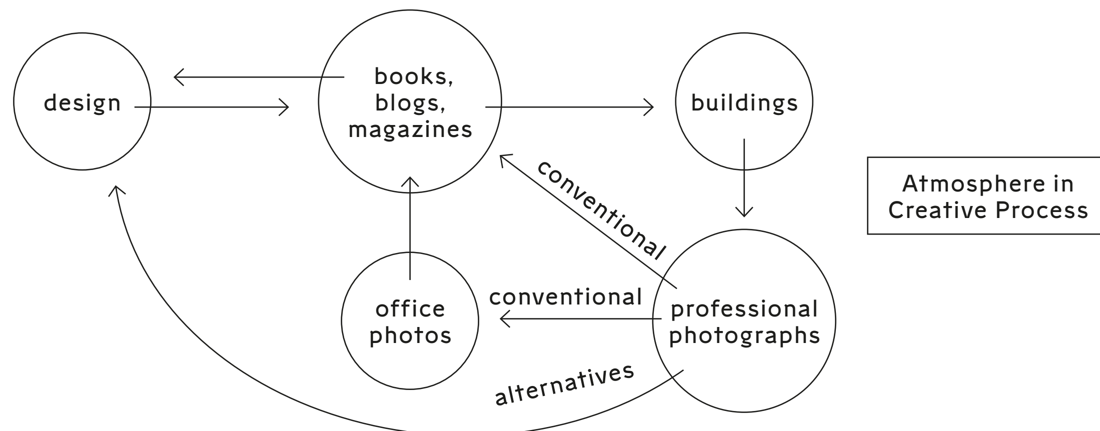
For the sake of clarity, it seems worthwhile to repeat a couple of points here. The main aim of this research is quite simple: to analyse the history and current state of commercial architectural photography. In order to do so, I have focussed on conventions and the notion of atmosphere. Each topic has been looked at by experts in the field. Each has much to do with extant practices in architectural photography.

My methods are equally simple. Following standard academic practices, I have looked at what academics have written about both topics and consulted contemporary experts. From there, I have conducted practice-based research through photography and interviews. To better understand the relationship between photography and architecture, I have centred my attention on five principle objectives:

— Articulate and assess the conventions of architectural photography
— Seek categories of visualised atmospheres and critical / commercial responses to them
— Test for disconnects between visual and verbal architectural discourses
— Create a tool for the direct visual understanding of those findings
— Test validity and repeatability of atmospheres model in site-specific architectural photography

Critical uses of photography offer a concrete example of what might be meant by an expanded field of architectural photography, instead of one which is currently bound by the perceived limits of promotion, persuasion and documentation. Photography, I will argue, is a good medium for analysing architectural beliefs and practices, and is an undervalued research and development tool both for design practices and theoretical systems. It is a means for sharing ideas and works. Yet it is bound by false beliefs. I will demonstrate that notions of transparency are based on false premises about objective truth. Optical truth will be poised against the notion of atmospheres. I shall avail to make the transparent a little more opaque, colouring the water so as to make it visible. All of this can be done without sacrificing photography's established roles in marketing and illustration. It is not an either/or situation.

An expanded role for photography within architectural design might look like this:



That role is needed because of the current lack of information between commissioning architects and photographers. That disconnect falls into two main categories, illustrated below in figure two. The remaining four categories summarise two positions I have argued for during the course of the thesis (imagined states c & d) and a synthetic compromise which I see as a workable solution at this stage.

	Assumption	Metaphor	State
a.	Architect to Specify all Photographs.	Shopping List	Extant
b.	Photographer to 'work their magic'.	Prayer	Extant
c.	Commission viewed As research opportunity.	Feedback loop	Imagined
d.	Dialogue to create new Images, opening up dialectic, Producing third space.	Bridge	Imagined
e.	Lists should come from Ongoing learning process through dialogue and analysis.	Classroom	Synthesis of a + c
f.	Work must be produced through open, critical, analytical methodology.	Laboratory	Synthesis b + d

This tri-part division into thesis, antithesis and synthesis is of course familiar. I do not suggest that the synthesis of extant and imaginary states would necessarily result in the method of communication listed. Rather, it is a direction which my analysis of the extant states suggests would be worth pursuing, one which I take as more easily put into practice than the imagined states listed in the antithesis.

1.4 Structure

This is a compilation thesis, a term used in Nordic countries for a thesis by publication. It is not a collection of previously published articles, written prior to the undertaking of doctoral research, however. Research was planned as a series of articles right from the beginning, and I have received feedback from supervisors all along. The articles form completed sections of the research project. In this sense, the dissertation is scarcely distinct from a standard monograph.

Rather than write a monograph at the outset, I have chosen to publish the chapters of this dissertation as articles in peer-reviewed journals (prior to submitting the dissertation for examination) for three main reasons. Firstly, I am eager to share my findings and receive feedback from the academic community. The formulation of a thesis is a lengthy process, and since years pass between commencement and conclusion, the academic milieu to which the research questions belong will inevitably alter during that period. Publishing articles is a way to be active within that world during the process of research and writing. Secondly, the notion of a peer review has meant a kind of learning-while-doing means of conducting research. It has been by far the most challenging aspect of this research. Academic writing standards are specific and rigorous — a kind of gateway to publication where one must have the correct passwords. It seemed wise to develop these fundamental skills prior to submission of a manuscript. Lastly, as stated earlier, there are four interconnected questions addressed within this dissertation that seek to answer the research question: do images make buildings? Hence it seemed only logical to break the research up into four different parts and treat each article as a separate but interconnected research project. I hope the end result is as coherent and cohesive for the reader as it is for me.

Ultimately, the initial research question has been reframed into one about the ontology of photography according to different actors operating in different networks. What you think photography is, it turns out, is highly dependent on what you want from a photograph, what you do with it and what you do in general. For all of those reasons, this thesis is comprised of a series of articles that addresses different perspectives remaining consciously and overtly situated in my own perspective — one conditioned by my practice. What I want from photography, and from this research, is to identify, analyse and question gaps between practices which I believe I am ideally situated to observe.

1.5 Materials

The dissertation is divided into three parts and split across two forms of media. The first two parts appear in print: a body of texts and a small series of photographs. The two dialogue with each other, but I hope each can be appreciated separately. The final part, submitted as online content, is designed to add to as well as reveal strengths and weaknesses of printed material. I was not eager to publish a thesis exclusively online because I know many people share my preference for reading the printed page and looking at photos in books rather than on a screen. Additionally, the printed material can be taken as a curated, edited selection of the material available online principally as data for further investigation.

The body of this research is conveyed through the four articles reproduced here. The text from each remains unchanged. However, the literature reviews have been synthesised into a 'discursive map' appearing in the dissertation just after the introduction. This will permit readers to gloss over the literature reviews in the articles themselves, if they wish to do so. Whilst article based, I wish to reiterate this is not what is sometimes referred to as a professional thesis, where a practitioner's work is collected to produce a dissertation. The articles were written during the period of funding and could just as easily have appeared as chapters in a monologue.

The photographs appearing at the beginning are the results of three projects conducted during the course of study from 2010 to 2014: the atmospheres project, the event space project and the grey matter project. The atmospheres project is explained in articles two and three. The grey matter project is explained in article four. The event space project is mentioned in article three, but perhaps requires further explanation here. It was commissioned in January 2014 by Professor Dorita Hannah of Aalto University and the University of Tasmania to reveal the varied atmospheres of sixteen different theatres around the world. Work is included here with the other projects as it provided an ideal opportunity to test the notion of atmosphere as inter-subjective and reproducible via photography in a commission. The work is for a book about performance space design to be published by Routledge in 2016.

Images in this dissertation are artefacts, evidence, illustration, documentation, argumentation, representation and presentation but hopefully will also provide some enjoyment on their own. Each grid represents a different proposition, a response to a unique problem. Each of these problems should be apparent from the grid, but along side each is a brief statement that offers some insight should that be needed. In addition, a selection of images from each grid has been made. These small portfolios are included so that the reader can examine the photographs in their original formats. The grids force a crop which creates a sense of uniformity. It is important thus that the reader have the opportunity to make their mind up about the assertions behind each grid by viewing some of the images.

As stated earlier, the development of 'Archmospheres' as a new means of conceiving of and visualising architecture has been a key outcome of this research. An interest in atmosphere amongst architectural theorist was an early finding. The lack of atmospheric variety in commercial architectural photography was discovered during the interview process and via analysis of images in the architectural press. The 'Archmospheres or Atmographs' is the name of the blog I used as a research log. In the new site, however, the project is presented as a series of grids and selected images in print. However, flexible categories and a greater number of individual images are offered via the following website:

http://marc-goodwin.com/atmographs/

Atmographs are a filtering and sorting technology for looking at *Archmospheres* critically. Here the full 81 images per grid can be viewed individually or in comparison with other images. Furthermore, the visitor is encourage to use the shuffling mechanism to create their own collections of images on the basis of atmosphere, architecture, type of building, location. The website was essential in order for images to be available as a tool — a true paratactic aggregate — and not merely a fixed means of exhibition (hypotactic). I hope to have expanded the range of what is normally considered architectural photography via the printed grids. But they are still a fixed presentation, albeit a whole made of 81 parts. With the website I wanted to let visitors choose various ways of comparing images. Ideally in the future, it will be possible to expand on that starting point and let visitors make their own comparisons between any and all images, devise their own categories, create pdfs according to their needs and even

alter images through cloud software. It may be instructive to compare it with the archmospheres tab of the site:

http://marc-goodwin.com

Additionally, the blog, documenting ideas and key advances in the research from September 2011 to September 2014 can be viewed here:

http://archmospheres.wordpress.com/

1.6 Definitions

For the sake of clarity, I will attempt to take a stand on certain key terms and issues that are used in several different ways by practitioners and theorists. These may be taken as a crucial subset of terms specific to both my practice and the present research. Words are crucial. It is less their etymologies that concern me here than an attempt to clarify the way I understand certain terms. These working definitions are given to convey those meanings to the reader, in the hope that doing so will be helpful.

— Architectural photography: by this term I mean commission-based photography appearing in trade magazines such as El Croquis and the Finnish Architectural Review, the popular press such as Mark or Wallpaper and occasionally in research journals such as the Nordic Journal of Architectural Research and Architecture and Culture. The Phaidon Atlas of Contemporary World Architecture is perhaps the best example of all because it demonstrates how the conventions I have identified are followed all around the world, amounting to a sort of universal style. I am not referring to independent publishers (covered at the end of the 'discursive map' section of the dissertation) or fine art projects.
— Documentation: this a convenient term for expressing the belief that a style of photography, often opposed to Pictorialism (Naef 1978, Rosenblum 1984), can provide objective visual evidence. Documentary style exists as a photographic practice that is well researched and has been reinvented on several occasions (Frizot 1994, Hostetler 2000). However, I take issue with the notion of transparency or objectivity in architectural discourse when referring to documentation. To create such a visual document is to remove the creator, eliminate interpretation, and simply present things as they are, via an image. That is impossible because the sense data stored as information content in a photograph is transmitted via a visual language (Kress 2006). That language is a convention, loaded with cultural baggage. A document is a picture.
— Image vs. Picture: According to WJT Mitchell, a picture is 'something one can hang' or something appearing printed in a publication, a physical thing; an image is the visual and mental formation of something. (Mitchell 2005: 85 & 140). This distinction is important because a finding of this research was that the architectural community (academic and commercial) is concerned with images of their buildings where I have been concerned with pictures in publications. The image and picture is one and the same in most cases, only the reason for looking at them changes their ontology.
— Interpretation: Interpretation is the 'how' of the 'what' that is normally called the subject. All content is subject to interpretation in order for the presentation of an image as picture to take place. Much of that interpretation in architectural photography is guided by architectural discourse. See article three.
— Practice: by this term I mean three interconnected things. Practice as medium-specificity which has shifted the ontology of art (Flusser 2011, Benjamin 1936), practice as the working life of commercial professionals (Iloniemi 2004, Redstone 2011), practice as research as understood specifically within academia (Barrett 2007, Biggs 2011).
— Practice Based Research: My perspective in the research I have presented here is at once that of a practitioner and that of an observer. This is because I am working as both a photographer in a field of architects and a researcher into a series of practices. That is what I take Practice Based Research to mean, in line with established definitions from experts in the field (Barrett & Bolt 2007, Biggs & Karlsson 2011).
— Presentation: The medium can never be irrelevant because every picture you see is mediated. The medium not only is the photograph but also the techniques used to produce the thing that is a photograph. The medium shares another person's particular view with a viewer. Hence the act of looking at a photograph has an aspect of inter-subjectivity which takes place via constructed objects — photographs, in this case of other constructed objects. A photograph presents a certain way of seeing, a set of choices taken by a photographer, to a viewer.
— Promotion: what normally takes place when a photograph is commissioned. Nearly everyone on Earth can now produce photographic pictures. Technology has made that possible. Paying for a professional means a different, better sort of picture is required for the purpose of promotion. But on that basis of what paradigm is one picture better than another? That question is a central concern to this research and further afield. See discursive map.
— Representation: the default definition of architectural photography. These photographs present architecture anew via the medium of a photograph. Representation via two-dimensional imagery is an integral and relatively straightforward part of architecture often divided up into classes such as: section, plan, elevation (Perouse de Montclos 2011: 22-29). Unfortunately, cultural theory from Althusser and Foucault to Horkheimer and Benjamin suggests there is more to consider when using this loaded word. See documentation.
— Transformation: To capture an image (with a camera, pen and paper, the eye, radar, spectrograph, thermostat reading, etc.) and render it into a final version that re-presents a particular place and time is to transform: to choose an image from a limitless number of possible ways of perceiving a place. Just as seeing is selective and determined by beliefs, showing seeing — photography — is anything but the whole truth. A whole truth would an infinite thing, whereas photographs are clearly finite. Transformation takes place whether we recognise it or not. See interpretation.
— Taking place: I offer this term as a way to replace the above terms by describing what architectural photography is and does. The idea is a simple one: you 'take' a picture of a place. Equally, by doing so, you take a place and make it yours, taking a visual aspect of the world and transforming it into a smaller flatter object. The practice is not objective or neutral, and photographs are not transparent windows. Studies of architectural photography are rife with neologisms. It has been referred to as: building with light, constructing a legend, camera constructs, shooting space, constructing worlds, and so on. So perhaps adding another new notion to the pile will not be very useful. Certainly this term is not the only way to rightly see the practice. Rather, in keeping with the notion of paratactic aggregates, it could be seen as one of so many parts which adds up to a picture. Taking place, building with light, constructing a legend — may the reader decide.

2 DISCURSIVE MAP: A COMBINED LITERATURE AND PRACTICE REVIEW

The following section is part literature review, part practice review. While central to historical surveys of architecture, architectural photography is often overlooked by histories of photography. Similarly, architectural scholarship is often insular, ignoring photographic, fine art and philosophical insights which might challenge the architectural way of seeing architectural photography. Each oversight evidences the need for a reconceptualization of the practice of knowledge within the histories of photography and architecture. Each has much to gain from taking the other into account. This review will look at literature on architectural photography with that need in mind. The review starts with traditional scholarship — books written on the subject of architectural photography. From there, to dialogue with literature, interviews with experts in the field of architectural photography have been included together with examples of written rules published by architectural institutions dealing with photography. Finally, this section will end with the most contemporary publications to date.

The title of this discursive map is derived from what is arguably the most influential architectural treatise of all time: *I Quattro Libri Della Architettura*. The nine rules I will develop here are a direct reference to the nine rules of 'grammar' Palladio developed in that book. They also facilitate the emergence of key arguments embedded in a large cross-section of literature, which I shall present. By adopting this structure, I wish to point out how historians of architectural photography have created rulebook for the practice of such photography. I take Feyerabend's position on the Sapir/Whorf Hypothesis that languages are not merely instruments for describing events they are also shape them; 'their "grammar" contains a cosmology, a comprehensive view of the world' (Feyerabend 2010: 16). Significantly, Palladio believed his nine rules amounted to the grammar for architectural design. I will return to that notion too at the end of the review.

The organisation of literature into these different categories has been done to facilitate their summary and analysis. It is hoped this will make the section easier to read, as well. It has proven one way to group ideas and discuss the content of certain books. However, it should not be taken as a definitive position on any of them. Aspects of each book spill from one category into another. They could have been grouped differently.

Whilst the general tone of the literature covered is critical and negative, there is reason for optimism — a kind of light at the end of the tunnel. It comes in the form of three publications. Independent curator, Elias Redstone, has just released two books: *Constructing Worlds* and *Seeing Space*. These will be considered together with his long-term project for alternative architectural seeing: *Archizines*. Additionally, recent publications developed from conferences on the topic of architectural photography suggest that a critical apparatus for its reappraisal exists. Collectively, such publications point to new directions in the interpretation of architecture through images. Significantly, they have done so in a way that has attracted both expert and public attention. That Redstone in particular has been able to achieve this by eschewing the other eight rules set forth here is probably no accident.

1 Pr

Rule one is that the camera is the frame though which architecture is most often seen. I present as examples of that argument in the writings of Beatriz Colomina, Kester Rattenbury, Antti Ahlava, Laura Iloniemi and Petra Čeferin. Each argues how and why architectural PR is done first and foremost through photography.

Colomina's critique encompasses architecture, gender politics and media — each forming an integral part of the built environment and media space. I will focus on just two books here: *Sexuality and Space* (Colomina 1992) and *Privacy and Publicity* (Colomina 2000). In each she offers examples of how photography is the source for what architects see and build. Her exhaustive research centres on two archetypes: Adolf Loos, the perennial Grinch who insists that his spaces cannot be translated into images, and Le Corbusier, the media friendly, media savvy architect.

Adolf Loos gave generations of architects their battle cry: 'ornament is crime!' While many know the saying, few remember his buildings. In addition to decrying the use of ornamentation, Loos thought photography was unneeded and unsuitable as a means of interpreting architecture, (Colomina, 2000: 43), especially his. Loos' furry, cave-like interiors were designed for the sense of touch (Ibid 64). More tellingly, he denounced his competitor, Hoffmann, for making 'interiors that look good in photographs' (Ibid 64). Perhaps it is for this reason that his ideas remain part of the zeitgeist while his buildings do not. Citing Walter Benjamin, Colomina points that Loos' opposition of the senses of sight and touch is a false binary: 'Buildings are appropriated in a twofold manner: by use and by perception— or rather, by touch and sight' (Ibid 71). In the end, both Benjamin and Colomina argue, vision triumphs. Modern architecture is conceived as a battleground and technologies of communication are the weapons (Ibid 73). And those technologies are image and text — both grasped through the eye.

Windows — frames that fix or sequence the world — are crucial. Le Corbusier turned the vertical, single-moment, *porte-fenetre* frame into the horizontal *fenetre-en-longueur*, or strip window. According to Colomina, he did so upon seeing a strip of 35mm film. To grasp the significance of this way of framing, one is told to imagine a boat passing before each kind of window. The *porte-fenetre* fixes in an instant — you get a framed image of the boat. With the *fenetre-en-longueur*, that boat is seen moving through time, passing from one frame to the next (Ibid: 139). The movement is from the painter's world to the filmmaker's, and is crucial if we are to understand how this new window changes our view on the world. We are reminded that the architect saw this shift as far more than a geometric one. The movement from vertical to horizontal is sensitive to the importance of new media, which signals a new world to come. In the modern architect's hands, the house became a stage from which to view the world (Colomina 1992: 98–105). The issue is gendered because it is always male objects left in rooms photographed, standing in for the architect himself (Ibid: 123), and also of course because it is the male gaze that determines which scenes are photographed. Analysing Le Corbusier's use of text and image, Colomina concludes that for him 'to inhabit means to inhabit a picture' (Ibid: 115), and that he is not so much interested in 'site' as 'sight' (Ibid: 119). Different locations are, she argues, just different pictures (Ibid: 119 — 120), 'a space whose limits are defined by a gaze' (Ibid: 128). Le Corbus-

ier is one of the first architects to stage photographs. His images contain props and awkward people *pretending to be human* — a convention we live with in lifestyle magazines to this day. That convention is significantly developed by that most famous of architectural photographers, Julius Shulman, whom I shall return to later.

The next book, *This is Not Architecture: Media Constructions* (Rattenbury 2002), evolved out of Kester Rattenbury's doctoral thesis, and offers reflection on the intersection between architectural, photographic and editorial practices. Rattenbury crucially underlines the influence of other art forms on architectural photography. Two key principles are developed.

The first is that the conventions of architectural representation that were adopted by photographers in the nineteenth century came from earlier illustrations (Rattenbury 2002: 27). Rattenbury writes: 'following the powerful and strict conventions of architectural drawings, architectural photographs display structures devoid of human traces, often captured under fair-weather conditions, in a pristine state untainted by their everyday use' (Ibid 129). So strong are those conventions, in fact, that they resist technological change. A basic principle from the early history of architectural photography is that 'modes of representation are not significantly altered when new techniques are discovered, but that they perpetuate pre-existing conventions' (Ibid 34).

The second principle is that 'representation itself is not a reflection of some 'reality' in the world about us, but is a means of casting into that world a concept — or unconscious sense — of what reality is' (Ibid 34). So whilst the Architectural Photographic Association was founded in 1851 for 'procuring and supplying to its members photographs of architectural works absolutely *correct representations*' (Ibid 28), correct representations should not be mistaken for neutral or objective ones. Conventions involve mis-re-presentation as well as re-presentation (Ibid 28). Famed photographer Charles Negre said he took three different types of photographs for three different types of client: general views for architect, details for sculptor, picturesque views for painter (Ibid 30). This point is so important that Rattenbury repeats it much later in the book, citing another watershed moment in the history of architectural photography: Julius Shulman's famous Case Study House 22. For the general public Shulman produced the iconic 'Two Girls' image, for which actors, props and dramatic lighting were used. For architects the image he made was dull, grey and flat. One has the impression of looking at visualized data when staring at this image. The point is not to tell a story but focus on space — line and plane — without distractions. According to Rattenbury, this approach to photography manufactures a 'carefully contrived aesthetic stereotype' (ibid 122). She claims that producing this reliable, repeated stereotype is the architectural photographers' job, because they: 'bring a consistency of visual representation on which architects capitalise. Photographers craft a pictorial homogeneity among dissimilar spatial configurations' (ibid 129).

Architecture in Consumer Society (Ahlava: 2002) is a close look at Baudrillard's reading of simulacra, myth and space. People consecrate myths in consumer society through consumption (ibid 10). 'Myth' is defined as fundamental relationship between object and thought, where persuasion has great importance (Ibid 16). Consumer objects are coded to seem objective but hide obligations (Ibid 41). The lexicon of society is a language of signals: full of signification but empty of meaning (Ibid 43). Hence, it is not contents but appearance image and ambience that have become the merchandise when one talks about architecture (47). Ahlava combines the many arguments from *The Society of the Spectacle* (Debord 1995) with Baudrillard's early work, *System des Objets* (Baudrillard 2005). To this he adds the media discourse of Walter Benjamin to arrive at a general theory of consumption, applied to the field of architecture. Meaning becomes replaced by meanings that are embedded in specific cultures. Cultural beliefs and practices are reflected in architectural sites or environments. *System des Objets* has much to say about the creation of ambience in architecture. Meanings are multiple, movable and uncertain because the separation of structure and content becomes difficult when they take form in an overwhelming atmosphere (Ibid 49). Baudrillard concludes that publicity is hermetic, useless and meaningless (Ibid 178). However, 'like all heavily connoted systems, it is self-referential, we may safely rely on advertising to tell us what it is that we consume through objects' (Ibid 179). It provides us with meanings via the definitions it supplies. These definitions are derived from a 'universal code: status' (Ibid 212). Status is acquired not from birth or accomplishment, but through endless consumption of significant objects (Ibid 218). In such an environment of relativistic meaning, a culture invariably takes shelter in myths which are created in part through images.

Is it all About Image? (Iloniemi 2004), written by an architecture PR expert, stresses the importance of images and offers a toolkit to architects interested in improving their media profile. Whilst self-promotion is involved in the endeavour, Iloniemi's clear but expansive explanation of the mechanics of publicity in the field of architecture makes it a key text for this review. Her book offers six publicist case studies, six project case studies, eight analyses of the work of architecture critics, picture editors and publishers, as well as general reflections on the symbiotic relationship between architecture and the press. The section 'What the Media Say' states that the press wants 'clear images, clear facts, not gobbledegook' (Iloniemi 2004: 141) and claims architecture will always be about images because it is the easiest way to communicate design ideas (Ibid 143). Photography is the key marketing tool used in pitching for new business (Ibid 164). Architectural Photographer Peter Cook states that the best way to become an architectural photographer is to study to become an architect, since you don't need to know much about photography to do the job (Ibid 176). The technical aspects are few and easily acquired, he claims, hence what is left to learn are the demands of the client, which are best understood from the inside. Cook's devastating advice might explain why, as Iloniemi remarks, computer renderings are a bit samey (Ibid 187) at the moment if architects are quick to dismiss the work of the image-makers they commission as Cook has done. It might also explain why brands in architecture are largely internalised and not understood by their consumers (204). If a simple recipe for the making of a standardised image is all you need to do architectural photography, it supposes that image makers themselves (photographers and renderers) have nothing to add and no important contribution to make to the development of such imager. The important knowledge resides in the architect's office. Iloniemi ends the book with the most important lesson she has learned along the way: the

job of a PR agent working for architects: 'you are here to feed ... [architects'] vanity and get us published' (209). That quote suggests my suppositions are correct.

Constructing a Legend (Čeferin 2003) is a look at how Alvar Aalto, the Museum of Finnish Architecture and the Finnish Architectural Review created a brand of Finnish architecture. Photographs ape conventions previously established by graphic artists (Čeferin 2003: 26), and architects learn from photographs hence from a representation constructed upon decisions of inclusion/exclusion, style, tone — in short, a frozen gaze at a building, not the building itself (Ibid 27). She believes that reliance on photographs effects the very thinking about architecture, making it superficial (Ibid 27). Čeferin is not interested generalisations in the effects of established norms, however. Her focus is on the specific the creation and exportation of Finnish Architecture as a brand during the period of1957 to 1967. She argues that it was constructed chiefly by Alvar Aalto, the Finnish Architectural Review and the Finnish Museum of Architecture. This connected group of influential agents chose to create a particular image of Finnish architecture based upon mythological rhetoric that informs notions of Finnish identity.[3] Photography is the principal medium through which architecture is shared with the public (ibid 25) and it contributed to the spread of modern architecture from Europe to America (ibid 26). Exhibitions and printed media are the site where specifically Finnish architecture was constructed (ibid 28). Finnish architects sought to become a part of the international Modernist movement, and adopted many of its tropes: white unadorned buildings, simple geometries, etc. The museum was the main source of photographs sent to foreign curators, architects, critics — it was the 'gatekeeper and guardian' of the identity of Finnish architects and architecture (ibid 37). Before long, the self-referential language of critics established a standard vocabulary for writing about and photographing buildings (ibid 143), this vocabulary is stereotyped and repeated en bloc by critics and scholars who often have no first hand experience of the architecture in question. The same has happened, I argue, in the visual language of architectural photography.

[3] It is important to state for the record that Alvar Aalto was not interested in the same mythology as his forbearers – architects such as Lars Sonck or Gesellius, Lindgren, Saarinen – whose National Romantic style he dismissed as 'birch bark architecture' (Griffiths 2004).

2 Anaesthesia

Rule two is that photography is bad for architecture. The second group is comprised of Roger Connah, Neil Leach and Juhani Pallasmaa. Whilst as interested in PR as the previous group, the argument made by these writers is that too much attention has been paid to marketing, resulting in the detriment of architecture.

In his book, *How Architecture got its Hump* (Connah 2006), Connah asserts that conventionalism in photography confirms the sentimental within architecture (Connah 2006: 49 — 50), that the mores of optical truth we now read as objective photography were fixed somewhere around 1920 (ibid 50), and that what is really needed is a critique of the pact between architects and photographers (ibid 50-51). At present, there are just four types of the architectural photo, he claims: general shots which show the entire building, a conventional frontal shot (elevation), detail shots, and shots of something that happens by chance (ibid 53-54). These images rely upon cliché and lack the potential of comparative photography. Architects have ruled out other ways of photographic seeing (ibid 55). What has brought about this reduction to four clichés? Connah believes that publishing, commissioning bodies, and careerism have limited the use of photography to an accepted market standard supporting the status quo (ibid 56). Over the last thirty years of the twentieth century, very little in the architectural publishing scene actually helped the nonprofessional reading of images (ibid 57). Mostly, the ways of seeing architecture through photography remained in the 'private and privileged world of the architects themselves' (ibid 57). The result is a false history of architecture told through images that appear time and time again, reinforcing architectural myths (ibid 66). The implications are significant: myths can be created willingly and purposefully as indicated by Ahlava and Ceferin. Connah concludes that neutral photography has failed architecture for three decades (ibid 68) because there are six types of photograph missing at present. Their development could broaden the use of photography to represent architecture. Such photographs would have to address the following:

1. The fact that a building is an open form, not closed.
2. Movement makes the solidarity of material and culture incomplete.
3. The underlying structure is stunning and complex.
4. White modernist architecture is unapproachable, yet remarkable.
5. The building or site will mature when ruination begins.
6. What it will look like once lived in (ibid 67).

The meeting of photography and architecture might have been and still could be more fruitful. He writes:

> Altering the way we read architecture, which includes the way photography informs and deforms architectural promise, would help us understand why contemporary architecture is considered inactive and incomprehensible to all but architects themselves.... Rethinking the architectural photograph might accelerate such a speculation (ibid 72).

Anaesthetics of Architecture (Leach 1999) is still more critical of the use of images in architecture. His book was written to spark controversy. Predicated largely on the work of Walter Benjamin[4] and French post-structuralists, he argues that aesthetics intoxicate and numb the senses. We are 'inundated with images' (ibid 1), a surfeit which causes information overload (ibid 7). The real world no longer exists, having been replaced by Disneyland (ibid 3), aesthetics impedes judgment about the world (ibid 6) where we stagger about drunkenly laughing in a superficial dreamland. Aesthetics in architecture leads to Fascism. Ethics are replaced by aesthetics and social issues swept under the rug when the credo of art for art's sake is applied to life (Ibid 18-19). Dictator and architect are likened through their 'insensitive' treatment of the masses subjugated to their self-indulgent whims (Ibid 27). The use of computers, navigated by powerful avatars, is likened to a pilot loaded with bombs on his way to destroy lives (ibid 27). 'The intoxication of the image leads to a lowering of critical awareness' (ibid 54) — this is the eponymous anaesthetics central to his argument: 'aestheticization leads to anaesthetization' (ibid 54). We are alienated from ourselves because we live in a world of images (ibid 56). In turn, images are used by capitalism to sell things, and sex is one of the main tactics em-

[4] It is also presumably a reference to Susan Buck-Morass' famous essay 'Aesthetics and Anaesthetics: Walter Bejamin's Artwork Essay Reconsidered (1992).

ployed (64). Women have been victims of this system, treated superficially as objects, and Leach views the decorative in post-modern architecture as symptomatic of illness created by the same system.

Three responses come quickly to mind. Firstly, would anyone want to live in a world without *anaesthetics*? Surely it would be too painful. Anaesthesia, like the focus on form and surfaces that he labels aesthetics, is useful if judiciously applied where needed. Secondly, is the fascist architect Leach attacks perhaps the man in the mirror? This book reminiscent of the dogmatic writing that was often employed fascists in the 1920s and 30s: the manifesto. The obsession with aesthetics is his casus belli; he writes to declare war on those who would cheapen architecture by making it two-dimensional and photogenic. But no one seems more obsessed with aesthetics than he. Thirdly, in this and every other book written by Leach, he uses images to make his argument.

The Embodied Image (Pallasmaa 2012) is a collection of five essays interested in the relationship between architecture and images. The first covers a range of topics that by now will sound familiar to the reader: hegemony of the image (ibid 15-16), the demise of imagination (ibid 16-17), image production and the feasibility of architecture (ibid 17-19), architecture and the spectacle (ibid 19-20), images of control and emancipation (ibid 21-22) and the sense of the real (ibid 22-24). He argues that we are being manipulated by images in order to perpetuate the global economy and formulates an argument for a poetic alternative, as envisioned by Gaston Bachelard. Poetic images are 'embodied' because they are 'an evocative and meaningful sensory experience that is layered' and 'gives rise to an imaginative reality' (ibid 41). Successful artwork 'always maintains a tension between the two realities' (ibid 95). In contrast, the production of what often passes as beauty is simply cynical (ibid 114). However 'the task of architecture is not to beautify life, but to reinforce and reveal its existential essence, beauty and enigma' (ibid 115). The chief role of architecture, according to Pallasmaa, is to create meaning (ibid 119). Commercial images, on the other hand, shut down the imagination and implant messages in our heads instead of serving as launch pads for creative thinking. Enigmas are important, as is the periphery of our vision. These obscure aspects of seeing are Pallasmaa's instructions for a poetic architectural image, which might replace the conventional image we are accustomed to seeing.

3 Atmosphere

The third rule is that architecture is about more than just buildings because they are surrounded by and filled with atmosphere. The third group consists of architects and philosophers that focus on the topic of atmosphere: Gernot Böhme, Mark Wigley, Christian Noberg-Shulz and Peter Zumthor. Juhani Pallasmaa has also written on the subject and could equally be included here.

Gernot Böhme is a philosopher, writing only occasionally about architecture and rarely at all about images. His writing is so central to the subject of atmosphere, however, that he cannot be overlooked here. It is not architecture but scenography which Böhme uses as a testing ground for thought experiments. In a text titled 'The art of the stage set as a paradigm for an aesthetics of atmospheres', (Böhme 2013) he writes:

> It is the art of the stage set which rids atmospheres of the odour of the irrational: here, it is a question of producing atmospheres. This whole undertaking would be meaningless if atmospheres were something purely subjective. For the stage-set artist must relate them to a wider audience, which shall experience the atmosphere generated on the stage in, by and large, the same way' (Böhme 5).

In short, Böhme is certain that atmospheres can be produced, not just encountered, in given spaces. Additionally, he argues that they are inter-subjective, not private visions or experiences. They can be created and shared, like a statement or a mood. This understanding of atmosphere has been central to the photographic work I have done as well as the interviews I have conducted for the past four years.

Mark Wigley writes as if to engage Böhme: 'A long tradition of architectural theory assumes architecture is never more than [...] theatrical effects' (Wigley 1998:20). Theatrical effects are taken as a bad thing — words like *theatrical* and *scenographic* are typically pejorative terms when used by architects. The rejection of atmosphere comes from its definition: not completely divorced from its etymological roots, 'atmosphere' is still often taken to mean foggy landscapes or candle-lit rooms (Ibid 20). However, far beyond that narrow definition, atmosphere is everywhere. Wigley suggests the point is rarely lost on practicing architects, though it is often covered up: 'those who loudly proclaim their disdain for atmospheric effects carefully construct and atmosphere with their drawings' (ibid 27).

Peter Zumthor is not such an architect. As though in response to Böhme, Zumthor, lays out a set of component parts for the production of atmospheres in a book titled *Atmospheres: Architectural Environments - Surrounding Objects* (Zumthor 2006). The book was in fact published the same year as the original German edition of Böhme's book on atmospheres, so a connection between the two texts is not out of the question. Zumthor argues that 'we perceive atmosphere through our emotional sensibility — a form of perception that works incredibly quickly, and which we humans evidently need to help us survive' (ibid 13). The point is that if atmosphere is part of the way we encounter the world, shouldn't the spaces we inhabit take it into account? He centres on methods and means, 'the task of creating architectural atmosphere comes down to craft and graft [...] processes and interests, instruments and tools' (ibid 21). Zumthor divides his system for the production of atmosphere into nine chapters which give nine specific examples of things he uses to produce atmospheres — perhaps in response to Palladio.

Equally, it could be argued that each of these texts on atmosphere borrows from an earlier text. *Genius Loci: Towards a Phenomenology of Architecture* (Norberg-Schultz 1980) aimed to give readers a concrete understanding of environment Norberg-Schultz 1980: 5) as opposed to the discrete objects designed by architects. 'Place' is the word Norberg-Shulz centres on via five constituent parts: thing, order, character, light and time. *Place* is the sum total of these and synonym for genius loci — which is in turn a synonym for atmosphere. But images are important, too. Man-made places are given meaning by visualising and symbolising them (ibid 17). He explains that we have a tendency to create maps: images of the world that we can navigate and grasp that which is beyond our immedi-

ate experience (ibid 17). Images which reach the person looking at them through their atmosphere are Norberg-Schultz's recipe for meaningful architectural photography.

In photography, both professional and amateur, the notion of atmosphere is nearly as old as the practice itself. Pictorialism arose early on as a response to the standardisation of architectural photography. Alfred Stieglitz and Frederick Evans were two early exponents of personal expression in architectural photography at the turn of the twentieth century. However, a dichotomy soon arose between clarity and sharpness on the one hand and atmospheric photography on the other (Elwall 2004). This division was eventually to engender the F64 club from which emerged celebrated photographers such as Ansel Adams who argued for photographic sharpness and contrast as the driving force behind a new photographic aesthetic created only by photographic technology and technique, eschewing older painterly practices.

4 Arte

The fourth group represents a shift in perspective from observer to participant: Julius Shulman and Eric de Maré offer a first hand account of the work of an architectural photographer as well as some reflection on their practice. The fourth rule is that this field requires great technical skill — the etymological root of the word 'art'. Unfortunately, this section also reflects photographers' overall laconic presence in this forum of ideas.

In *Architecture and Photography* Eric de Maré states that 'visual sensibilities have become so dulled and atrophied' that he has taken it upon himself to spread 'propaganda for a more direct enjoyment of the visible world' (De Maré 11). Photography can aid people to look more closely at buildings and appreciate the world around them (ibid 12-13). If people are taught to care about the built environment, they will ask more from architects and the 'nightmare of visual squalor' (ibid 11) will be ended. His goal is to teach the reader two things: to care about the built environment and to understand how photography can act as a tool for developing the appreciation needed in order to care. The camera is a tool that allows you to express pleasure and share it with others. As such, he argues, photography has had a 'powerful effect on architecture' (ibid 17), however it is not always a positive one. Photography can be used to tell lies:

> An undistinguished structure, situated in some grim desert of cultural sterility and seen mostly below the grey skies of this watery island, can be made to appear in a photograph like a masterpiece in a dream world where the sun is always blazing, the skies are of the deepest Mediterranean blue, the trees eternally in leaf, the chiaroscuro pure drama (ibid 18).

De Maré contradicts himself repeatedly over the subject of rules. He states there should be no rules for architectural photography, and then proceeds to fill the book with lists of rules. Pictures are divided into three classes — record, illustration, picture (ibid 25) — and we are told how to produce each. The first two are the basis for most commissions. 'Picture' is his word for 'artistic work', which he tells us is his main interest as a photographer. The central elements of artistic work are: contrast, repetition, balance, climax and cohesion (ibid 30). He sites Ruskin and Brandt as two experts who rule it impossible to set rules for composition. Then he proceeds to give us those impossible rules. This process of self-contradiction is enacted a third time when he states that architectural photography is concerned with form not romanticism (ibid 33) then advises us to 'feel the past as stimulating romance' (ibid 36). My purpose here is not to discredit de Maré or suggest that he was suffering from some sort of mental breakdown. His book is a pleasure to read both for his writing and the beauty of his images. Rather, I wish to point out how this field lends itself to contradiction as soon authors attempt to be dogmatic. Clearly this is part of my reason for setting forth 'the nine rules' of architectural photography here.

While De Maré is the picture of self-effacement, widely held to be typical of people living on one side of the Atlantic, Shulman engages in the great pastime of self-promotion, a cultural norm of the other side of that great divide. I point this distinction out because it might explain the surprising tone of Shulman's final book. His career is far more compelling than his writing in *Architecture and its Photography* (Shulman 1999). Shulman's first words are in praise of himself. He explains that this book is a celebration of his sixty-two-year career, one spent working in 44 of America's 50 states (ibid 15). He goes on to state that the greatness of mankind is reflected in the arts, and that studies of architecture would be 'vacuous' without photographs. For the remainder of the book, Shulman recounts the story of his career over the course of three hundred pages filled with anecdotes interspersed with images. We are told, for example, that upon receiving the first set of images from Shulman, Frank Lloyd Wright proclaimed: 'at last someone understands, in a photograph, my statement — you have penetrated the spirit of my design!' (ibid 122). The reader is also told how Shulman gave Richard Neutra a lesson: 'Do not expect a photographer to undo a construction blunder' (ibid 137). Much of the book reads this way. In it, he shares the kind of stories one tells at parties in order to be charming, and I suspect many of these stories were rehearsed over the course of several years. Another book, *Constructed View: the Architectural Photography of Julius Shulman* (Rosa 1994) is far more recommendable a means of learning about the life and work of Shulman. Both the images and texts are better. However, a study of Shulman's last book is important because it contrasts with his first. In it he claims the right to interpret a scene with his camera, rather than merely faithfully documenting it, as encountered at the time of each photograph. That claim contrasts greatly to the stance taken in a much earlier book published by Shulman, to which I shall now turn.

In *The Photography of Architecture and Design* (Shulman 1977), Shulman writes as a teacher. He explains how to take pictures, how to make a business out of photography and how to develop a 'discerning eye' which allows a photograph to act as a bridge between a building and a viewer. His pedagogical (and somewhat dogmatic) advice to the reader is to remember that 'architecture should take precedence over the photograph' (ibid 35). He continues, 'the purpose of an architectural photograph may be documentary, interpretative or both, but it is seldom the pure art of photography' (ibid 35). Again on the same page he writes of a great danger: 'an art work can be created of such grandeur that it could in fact, overshadow and misrepresent that architecture' (ibid 35). This earlier book, published by the Whitney Library of Design (a fact worth

keeping in mind) reveals a very different Shulman. When analysed in light of statements made in the 1999 publication, we come across a seeming paradox. He clearly states in the later publication that his role is that of an artist interpreting a scene. He claims that conversations about objectivity are meaningless, and he is surprised they continue to have currency. How can this be? Is he contradicting himself? Did he change his mind over the years? Or is this contradiction indicative of the central dilemma of an architectural photographer: navigating the role as artist entrusted with visualising another's art. A few statements reveal his enthusiasm for the practice of photography: 'this night scene is vividly impressive. It expresses the interior design better than a daylight view—and has the potential of whetting the editorial appetite of an art director of a magazine!' (ibid 16). In a still clearer example, he writes: 'the cue for the photographer was not the house alone, but rather the rare beauty of the atmospheric effect of the distant mountains, which could only be captured during twilight' (ibid 13). 'If you don't take such liberties, you are guilty of not using your imagination!' (ibid 36). 'Remember that visual qualities of an area differ considerably from photographic ones, especially when a wide angle lens is used' (ibid 37). 'I couldn't resist this playful abstract expression of the architect's design' (ibid 49). In all of these statements, the value of the photographer's ability to interpret the scene, not just document the building is clearly voiced.

A paradox is in the making: a photographer must have the skill to create a compelling image but must not aspire to become an artist, over-interpreting or distorting the work of the architecture. The career of the author needs to be factored into the equation. Books about architectural photography written by architects are often a form of self-promotion in which photography is used as a tool. The photograph is only a means to an end — the advancement of an architect's work. The all too rare photographer's voice underlines the obvious but easily overlooked fact that the photographers also engage in creative practices and operate in a market where self promotion is the order of the day. They make images are under two conflicting pressures. On one hand, they must provide a service to the client and modestly claim to put forth the great work of an architect in its true light, without distortion. On they other hand, they must somehow distinguish themselves from the herd in order to compete. Yet the subject matter — architecture — must not be overshadowed by the photograph. To what degree are architectural photographers simply skilled artisans in the service of a visualisation of architectural discourse, and to what degree are they expected or allowed to be artists who use architecture in order to make images? If this work is a conventionalised system for the accurate documentation of architecture, why are there any star photographers at all? To misquote Orwell, all photographers are equal but some are more equal than others. The tug of war between two opposed roles explains many of the self-contradictory statements one comes across in books on the subject of architectural photography.

5 History

The fifth rule is that you must know your history and be condemned to repeat it. The fifth group consists of three historical surveys of architectural photography by Cervin Robinson and Joel Herschman, Robert Elwall, Robert A. Sobieszek and Clare Zimmerman. Each provides an impressive visual catalogue of photographs as well as excellently researched essays on the history of their creators. However, each suffers from the historian's need to appear distanced and objective, creating certain missed opportunities for critique of the practice. However, bits and pieces of critical thinking seem through the cracks in the façade of impartial objectivity. That will be my focus. *Architecture Transformed* (Robinson and Herschman 1990) argues the importance of binaries. Two parallel practices soon emerged in the history of architectural photography: professional and amateur. Perhaps this is true of any creative endeavour. But the consequences are particularly significant in architectural photography. Amateur photography embraced spontaneity and new angles made possible by twin-lens reflex and SLR cameras. Professional architectural photography remained unmoved by these innovations sticking to established conventions. These radically different styles might have but ultimately did not influence each other. Two types of architectural photographs were developed as a result. Unfortunately, Robinson and Herschman chose the terms 'experiential' and 'factual' to define each kind. The terms are clumsy and potentially misleading. The 'experiential' photograph is defined as one which includes people and attempts to tell a story or create a sense of narrative. It answers the questions: 'who' and 'where'? In contrast, the 'factual' photograph is in fact almost completely devoid of facts. The messiness of life has been cleaned up and the focus is now on 'how?' A final binary they point out is the direct comparison of two or more things through photography. This, they claim, became standard practice:

> The generation that turned forty in the 1930s had been brought-up on popular magazines that had not set only discordant pictures next to each other…but might in a drawing juxtapose the image of a skyscraper and a transatlantic steamer set upright on its stern to compare their relative lengths (ibid 112).

It was a decisive step in the photographic way of seeing architecture: 'This fresh sensitivity to juxtapositions made photographers increasingly sensitive to the structure of their pictures—that is, to the elements that might compose them and to the manner in which these could be combined' (ibid 112). This visual communication technique allowed for both narrative and judgement.

> Talbot juxtaposed a foreground litter of clumsy, sail-powered lighters or river barges that appear to have been abandoned in the mud. Whatever the reality of the situation being photographed, the contrast depicted in the images makes the statement that the bridge is a revolutionary piece of technology…which has left behind the picturesque but inefficient traditional means of crossing the river (ibid 32).

Architectural photographers taken thus are not technicians operating instruments for the purpose of documentation, but rather are seen as storytellers with a variety of narrative devices at their disposal. The point is significant not only for an understanding of photographic practices but also as a means of measuring their impact on the representation of architecture. However, it is developed no further.

Robert Elwall's position as director of the RIBA photography library no doubt gave him a privileged vantage point from which to ob-

serve the community of its contributors. His book *Building With Light* is filled with scintillating quotes from experts and practitioners. Pointing to the strange role of photographs he states that 'architectural historians often treat photographs as if they were the buildings themselves' (Elwall 2004: 8). The point is driven home via architect HS Goodhart-Rendel's quip: 'The modern architectural drawing is interesting, the photograph is magnificent, the building is an unfortunate but necessary stage between the two' (ibid 8). The Architects Journal went as far as to claim 'to no other profession is a proper understanding of the whole creative and revelational scope of modern photography more important than our own' (ibid 120). The idea is repeated just five pages later: 'Without modern photography modern architecture could never have been put across' (125). Photographs were crucial 'as visual stimuli for Modernist architects' (ibid 127) providing information about building practices and styles throughout history and around the globe. Photographs, were not a transparent slice of reality, objectively and scientifically reproducing the built environment, but an artificial construct built up by choices (ibid 128). The point is crucial and one wishes Elwall were around to write an entire book about it.

The Edifice is Colossal (Sobieszek 1986) focuses entirely on nineteenth century architectural photography. Sobieszek begins by stating that the first photographs were of architecture, and that many of the "techniques are still in use today, the earliest tricks have become conventions" (Sobieszek 2). The point is so important he repeats it five pages later, this time linking it also to the Beaux-Arts style of rendering elevations. It was during the mid nineteenth century that the first architecture journals, such as the *Revue générale de l'architecture et des travaux publics* were formed and the first photographs appeared (ibid 4). From the outset architects and editors of these early publications suffered the same anxieties espoused by Leach, Connah and Pallasmaa: the possible usurping role of the camera. Might the eye of the photographer take away authority and control from the architect and supplant direct experience of the building with second hand experience via an image of it? (ibid 7). This anxiety is amusingly paralleled to a fifteenth century mason worrying that Guttenberg's invention of moveable type might replace direct experience of *Notre Dame of Paris* with words (ibid 14).

Claire Zimmerman provides an update to this topic with her book *Photographic Architecture*. This is an update not only because it was published much more recently than other books on the subject, in 2014. It also introduces a new idea. In her book she presents two key concepts: architectural photography on one hand, the impact of photography on architectural design on the other. She unites them in the term "photographic architecture" and sees the circulation of architectural photographs and photography's impact on design as two sides of the same coin. Images appear on the surfaces of buildings. At times they are quite literally photographs printed on surfaces, at other times they are designs reminiscent of photographs. Equally, buildings become more and more photogenic as the unrivalled importance of photography for conducting the business of architecture becomes a given. Additionally, this book is important because it adds the subject of German architectural photography, notably absent until now in the English-speaking world. Finally, her analysis of images pays unusual attention to the process of photography, recognizing the many steps taken in the production of architectural photography and

analyzing photographs with a discerning eye. All of this information adds much to the store of knowledge about architectural photography built up by her predecessors.

6 Power

The sixth rule is that power is placed in the hands of very few photographers[5]. Dennis Gilbert and Richard Bryant had nearly exclusive relationships with most major British architects for decades; the same is true of Jussi Tiainen and recently Tuomas Uusheimo in Finland, Hisao Susuki, Duccio Malgamba and Jesus Granada in Spain. In May 2012 I discussed the power of the image with Denmark's foremost photographer, Adam Mørk. I repeated the interview in March 2013 with PR agent Martta Louekari, the sole person representing Finnish architects in China. Interviews are presented here as an update to the writings of Shulman, De Maré and Iloniemi with a focus on the Nordic context.

Adam Mørk trained and worked as an architect before going on to become a photographer. Sounding like a follower of De Maré, he told me 'you can create a mood and you can guide [viewers], you can create a key for how to access a building – in a good way.' This is true, he claims, because 'a lot of people see images first, and then [the] building.' He made statements that divided architects from 'others': 'The general public ... when they look at photos of architecture ... look, I think, at pretty pictures first, and buildings second.' Mørk is convinced that the photographer plays a key role in determining how a building is experienced: 'you choose what the spectator sees; and if you choose carefully you can enhance the building; you can cut away the weaknesses in architecture; you can add an extra layer to the building or how it is perceived.' However, when I asked him if he thought photography could influence architectural design, he immediately responded 'no!' Then he reflected for a moment and changed his mind, coming up with an example of how photography has made such an impact. He said that in the nineties everyone looked at Hisao Suzuki's images in *El Croquis*, and that when working on competitions those photographs had a lot to do with what kind of submissions one made. People imitated what they saw in that publication. So in that sense, he concluded, photography can have an influence on design. Architects versus the general public were just one of the binary divisions that emerged in our conversation. Key topics also included conservative vs. progressive publishers, and image vs. text. Mørk stated:

> I never read the press releases before I photograph the building. I can sometimes read the project description. I talk with the architect. That's better. Because the written words about the project...the way we are communicating has been taken over by professionals. 10 years ago it was more architects that were doing everything. But as soon as the companies are more like 5 or 6 persons, they have a PR department. It is often not architects who are in those departments. The good ones understand architectural photography. The bad ones are more attracted by images that are normally in the annual report of a company. Smiling people. That is the way they have been trained to communicate.

Publicity, publication, and public space were all topics addressed by

[5] *A quick look at the following shortlist of agency websites suggests the status quo is changing, the number of contributors increasing: architecturalphotographers.org/ www.viewpictures.co.uk/ www.arcaidimages.com/*

Martta Louekari. Architects use a kind of visual jargon that comes from architectural training. The problem, however is the audience: 'They assume that the person who will see it is another architect, which is totally insane.' It is difficult for many people to relate to the kinds of images normally used. When asked what might be a workable solution to this problem, she gave the example of architect Tuomas Toivanen's wife wearing a bear costume in a series of photographs inside a house designed by him. 'Humour helps you to relate, bringing everything closer instead of pushing things away'. 'That creates a really good image for the office because it makes it look like you care.' Another key problem with the use of PR, as she saw it, was the lack of differentiation from office to office. It would be easy, she claimed, to add differentiation hence brand value because of the current lack of diversity in terms of externally communicated office identity, and because behind the scenes offices are more diverse than their PR would have you believe. At present, she stated, there are two types of images. 'The huge mega-company that makes buildings like machines. Or the super-stiff, awkward, cold, artist offices.' There are differences between offices, she thinks. However, they all employ similar images and buzzwords (such as sustainability) to the effect that those differences are not communicated effectively. 'It would be so easy to make them more alive some how' according to Louekari. 'Viewed from the outside they all seem dead. It would be really easy to change that but no one kind of dares to do that in Finland.' A concrete solution she suggests is for architects to work more like ad agencies. Just what she means by that is likely to raise a few eyebrows: What advertising companies do is make a big theatre show, where the try to convince the client that this yellow circle that they did is the most genius thing ever. It is a process of kind of like fooling, almost, the client.' One might think the idea of fooling a client is a purely negative one, but Louekari, thinks 'there are some good things as well: more discussion, more feeling for doing something for the client.' At present she believes the case is quite the opposite: 'I don't know how much they respect the client in reality. And I think that can be seen in the way they present the work.' There is little attempt made to listen to the client or present an image to that is readable to a non-specialist: 'In Finland architects think they are the ones who can decide. Compared to China, they have a lot of power. In China the architect is kind of like a waitress.'

7 Transparency

Transparency is the seventh rule of architectural photography. The topic is best scrutinised in *Camera Constructs: Photography, Architecture and the Modern City* (Higgott & Wray 2012). Reviewed both by Valeria Carullo in the *Journal of Architecture* in 2013 and Pepper Stetler in the *Journal of the History of Photography* in 2014, it is an all too rare case of trans-disciplinary interest in an inherently interdisciplinary medium. It is also the first book I come across that considers architecture and photography equally as its subject matter.

The book developed from a conference on architectural photography that was held by the editors, some years prior. Conference papers are expanded into chapters. Each of these addresses topics ranging from modernism to models of reality, interpretation through art, and finally photography as a means of conducting design. The book is a tour de force in terms of subjects tackled, as well as the variety of contributors. Articles come from architects, academics and photographers. The contributors are on the whole more cautious than the editors, however. Many examples given deviate only slightly from conventional photography, a point which is made clearly by recent publications by Elias Redstone which I shall address in the final section of this discursive map.

Editors Higgott and Wray are bolder in their introduction. They state in no uncertain terms that "the narrowness of photographic vision has had a powerfully negative impact upon the way architecture is understood and developed" (Higgott & Wray 2012: 2). This narrowness, they claim has produced a conventionalised image which fails to harness the creative potential of the meeting place between architecture and photography (ibid 3). Art practices are a clear means of breaking from convention and providing new and different interpretations of architecture (ibid 3, 10-14). Still more telling is their conclusion that architecture (architects and editors) have resisted change in lieu of myths about transparent images which simply reveal architectural merits. This myth is adhered to, they conclude, because "architects are more dependent upon the photographer for their renown than they might care to admit" (ibid 9). It is here in the introduction that Higgott and Wray address the fact that a photograph is not a transparent window one looks through, but something made, as the title suggests, much like the building photographed. Moreover, they construct this argument through their choice of contributors and articles. *Camera Constructs* is the first step towards removing the notion of transparency from the vocabulary of this discourse. I hope to argue along similar lines with this dissertation and eventually make a small contribution to the development of that position.

8 Rules

The eighth rule is that you must know the rules and follow them. Whilst many are presented as helpful guidelines, or suggestions, I claim that they are in fact rules. This is for the simple reason that failure to follow such guidelines results in failure to publish. So they are not guides or suggestions but gatekeepers. These gatekeeper rules differ greatly from the ones presented by academics.

The American Institute of Architects and ASMP have jointly developed documents 'to describe today's best practices for architectural photography'. They claim their 'purpose is not to prescribe any particular actions, but rather to establish a set of shared expectations and a common vocabulary so that the professional goals of both architects and photographers can more easily be met.'[6] The content and tone of the advice given is vastly different from the rhetoric repeated by architects that write about photography. The guidelines state: 'Image quality relates to persuasion. You aren't merely documenting your work but are actively trying to convince other people that yours is the best of its class'. They go on to claim: 'Images play a major role in defining how we come to know architecture and interior spaces. Because photography is pivotal in understanding the built environment, choosing a professional to photograph your project is a most important consideration'. The full set of guidelines

[6] *https://asmp.org/commissioning/overview.html*

provided by the American Society of Media Photographers on Commissioning Architectural Photography can be found in the appendices section of this dissertation.

The Finnish Architectural Review also provides architects with a set of guidelines for submitting photographs. 2009 Guidelines state:

— Attention should be paid to vantage points and atmosphere.
— For interiors, the inclusion of fireplaces, flowers, and living environments is suggested in lieu of empty spaces.
— For exteriors, photos taken from all sides, during different times of day and throughout the year are requested in order to give readers a complete picture.
— Detail shots are additionally requested.
— Images should be submitted without cropping where possible, so as to give more options for the editorial images.
— Submissions comprised of several images are requested, but the architect is welcomed to suggest which images are preferred.

Many of these guidelines are not followed by the journal itself. I will address this point in the first article presented in this dissertation.

A final set of rules comes from the UK based agency that represents my work. It describes itself as "the leading global image, stock photography resource for all aspects of architecture, interiors and design." In their submission guidelines for what they call 'the world's most prestigious architecture photography awards', they write: 'The Arcaid Images Architectural Photography Award aims to put the focus onto the skill and creativity of the photographer. We ask the judges and the viewers to look beyond the architecture to the composition, light, scale, atmosphere, sense of place and understanding of the project'[7]. Doing so is necessary, they claim, because although 'the experience of architecture for the majority of people is via images. The architecture itself is the focus and the image regarded only as the medium'. How can it be possible to focus on the skill of the photographer if architecture itself is the focus? They claim the awards is an opportunity to do so — to get beyond standard practice. However, a review of the successful competition entries suggests this has not been the case at all. Images might well be compelling, as such a definition is subject to taste determined by rules beyond the scope of my current research. However, on the basis of that research, I can claim that most of the images chosen followed the rule book for the conventional architectural photograph, as do most of the images published in the Finnish Architectural Review or featured by Arcaid on their website.

[7] *http://www.arcaidawards.com/about*

9 Change

The ninth rule is that change is the only certainty. The rules of architectural photography have not always been the same narrow set of conventions currently taken for good professional practice. Whilst there is a great deal of continuity from drawing and watercolour illustrations through early photography right up to 3d renders, exceptions exist. Many of the authors surveyed have pointed out that the twenties and thirties were particularly dynamic, revolutionary decades in which a new sort of photography was sought to match with a new sort of architecture. Over time, many of those new ways of seeing were discarded in favour of older pre-photographic traditions (in terms of vantage points, line and form) and correct photographic practices (such as shooting clean, empty spaces under clear skies) which were codified to meet with architectural discourse. But perhaps we are once again in a similar moment, where artistic practices of the sort argued for by Higgot and Wray are beginning to achieve critical mass in the architectural world. That achievement is due in part to the work of Elias Redstone.

Redstone, independent curator, editor and writer, has recently produced three highly influential projects that purposely alter the centre of focus by mixing genres or by bringing marginal practices to the attention of viewers and readers. The first of these, *Archizines* (Redstone 2011) is a print and online compilation of zines about architecture. Some of these 'alternative' publications, such as *Mark* or *Apartamento*, have gone on to become mainstream. All have no doubt benefitted from strength in numbers and the value of publicity. *Archizines* was based on a desire to discuss what is happening now in periodicals that 'share a common interest in documenting and discussing the spaces we occupy in ways not found in existing mainstream or professional publications' (Redstone 2011: 22). The next project, a book entitled *Shooting Space* (Redstone 2014), looks at 'the changing influence of architecture on photographic practice, and the influence of artists on how architecture is read and understood' (Redstone 2014: 7). It consists of the work of 50 artists spread over five chapters. Unlike the *Archizines* project, the focus is largely on celebrated artists. However, what sets this book apart from other books about architectural photography is its focus on the reciprocal relationship between photographers and architects and the circularity of influences each practice has on the other. This is a clear, direct means of redefining that relationship as normally understood by the architectural press and its practitioners. It is this lack which I highlighted in the introduction of this text; it is for that reason I claim Redstone is bringing about a sea change through critical mass and the contamination of categories that is long overdue. As Redstone himself puts it 'The power to photograph architecture and broadcast it to the world has, at least in theory, shifted from professionals to the people' (ibid 7). Lastly, Redstone together with Alona Pardo, curated an exhibition at the Barbican in London in 2014 entitled 'Constructing Worlds'. The exhibition and its 280 page catalogue unite different strands of architectural photography to present a richer, more complex understanding of that photographic practice. The exhibition and book are comprised of four genres of work: the rise of modernism, the 1960s–70s celebration of the vernacular, reflections on architecture made by architectural photographers such as Helene Binet who do not fit the standard mould of anonymous but promotional documentation, and lastly photography of cities in change by photographers such as Nadav Kandar and Iwan Baan.

So, to sum up, architectural photography is a universal style based on mythologies of optical truth that are enforced as rules of professional practice. There is no room for interpretation, innovation or diversity. At least, that is the impression one gets when reading grammar books of the *Académie de la Langue* of architectural photography — the rules for conventional, commercial architectural photography. *I Quattro Libri Della Architettura*, containing the nine rule sets for the grammar of

architectural design which Palladio invented, is probably the foundation of that *Académie* known as *architectural photography*. Tellingly, Palladio's nine rules are for parametric equations, the same equations which have inspired the only recent architectural manifesto to surface: Parametricism. Hence there is a nice circularity, here. Contemporary ideas about the correct way of seeing architecture have their basis in Renaissance texts about perspective; contemporary software[8] has created a new kind of image and a new kind of architecture based on the ability to create parametric curves. Put academic rules together with photography and contemporary software and you come up with a new set of rules for the right way of seeing architecture — rigid and developed from the centre as ever.

But other ways of seeing exist. By looking at marginal practices in the world of architectural publishing and mainstream practices in fine art, Elias Redstone points out the significance and sheer number of those other ways. He is also creating new centres. In both the conventional architectural image and the kind put forth by Redstone, WJT Mitchell is proven right once again — the ontology of an image is defined by what you want from it.

That there are default behaviours and beliefs that inform any form of language or communication goes without saying. Ultimately a language shapes its users just as its users shape it. The earlier mentioned Sapir/Whorf Hypothesis posited that reciprocal relationship to language. For that reason, it is clear that conventions are neither bad nor good, nor are they avoidable. However, pretending that they are axiomatic truths is avoidable. It seems timely to question the use of doing so and also ask who needs such truths to exist.

[8] Grasshopper is a powerful plugin for the 3d rendering program Rhino famous for the parabolic curves it allows a designer to create. This sort of design has been called Parametricism by Patrick Schumacher and popularised by Zaha Hadid.

3 RESULTS

Because this is an compilation thesis, the results are spread across four articles. It would be misleading and confusing to fuse them into a single set, as in the case of a monograph, for the sake of simplicity. However, some general remarks can be made in terms of results. As stated previously, the overall aim has been to understand conventions and atmospheres, in theory and in practice, where they concern the production and use of architectural photography. Beliefs which inform best practices are the result of taste, not a means toward objective representation. They are a style. The research put forth in each of the four articles has contributed towards that conclusion. However, the results are specific to each. In a sense, each can be said to answer a separate research question. Hence, each article must be dealt with separately.

I will both summarise the articles I have published and engage with them here. What one can actually say in a journal article is rather limited due to the space provided. Hence this introduction is an opportunity to add certain things that were omitted at the time. Additionally, there are things I wish I had thought of writing at the time but didn't. It is here I shall do so where needed in hopes that it will improve the research, clarify some of the writing, and provide a solid ground for each of the articles.

3.1. One: What would a short-list of conventions in architectural photography include?

The obvious place to start my research was with the *Finnish Architectural Review* (*ARK*). Newly based in Finland, I was eager to immerse myself in the traditions of local architecture and learn about its long-running journal. It was perhaps also serendipitous that *ARK* is an ideal place to learn about conventional practices in architectural photography. Decades of images blurred into each other. I spent some weeks browsing the period from 1912 to 2012 looking exclusively at the photography until categories suggested themselves to me. Eventually I decided upon a nearly even split between when I recognised as editorial decisions — size and number of photographs per page or per journal — and photographic decisions such as composition, depth of field, the weather and the exclusion or inclusion of people. Of course, each of these could be the result of editorial decisions made from a selection of photographs. Equally the photographs might have been conditioned by the editorial decisions. But what I was interested was how many of each appeared in the journal over time. Were there any patterns, trends or changes that could be extracted from the data?

The application of Grounded Theory was a crucial first step for the development of the research shared in this article. This method for working with open coding and moving to selective and finally theoretical coding meant it was possible to work with images without a hypothesis (Corbin & Strauss, A. 2008). Rather than seeking to prove or falsify a hypothesis, Grounded Theory states that you should spend timely becoming familiar with the subject at hand — in this case images published in a journal. From there, codes, concepts and categories will suggest themselves. Only then comes the hypothesis.

But how to test it?

The methodology arrived at is content analysis, developed at great length in the Handbook of Visual Analysis (Van Leeuwen & Jewitt 2001). Content analysis is applied exclusively to the images of the a century of the *Finnish Architectural Review*. From that data I will produce nine categories of images with charts visualising the frequency of each image. From this work emerges a rather strong claim: the only significant change in the history of architectural photography is the shift from black and white to blue and white photography. That claim is developed further through practice-based research (Barrett & Bolt 2007) explored in subsequent articles and in the photograph section of this dissertation.

Grounded theory and content analysis meant that starting from a blank slate was possible. I was able to eschew assumptions about the framework employed by the editorial team (Goffman 1974), letting conclusions emerge later from purely photographic evidence. This naiveté was important in order to let the evidence form the hypothesis and not the other way around. As a spectator to Finnish society and new arrival to Finland, this position enabled me to engage critically without having to first undertake extensive sociological research into the culture of the country and company I was about to study. It allowed me to focus on my work as a practitioner, viewing photographs through the lens of an architectural photographer.

3.2 Two: What would a photographic interpretation of 'atmosphere' mean, and how would architects receive it?

I was unaware of the prominence atmosphere as a subject of debate in contemporary architectural theory before starting this research. It cropped up repeatedly in the reading, particularly in the work of Mark Wigley, Gernot Bohme, Peter Zumthor, Jean Baudrillard and Juhani Pallasmaa. These theoreticians and their work is covered in the Discursive Map.

Academic architects write extensively about 'atmosphere', and commercial architects use the word liberally to discuss their work. Yet the visualisation of atmosphere through photographs as part of the human condition and the experience of architecture appeared to be completely unexplored territory. One atmosphere was seen to suffice in commercial publishing: the clinical atmosphere of conventional photography. With an idea of conventions clearly established, it was time for fieldwork into the reception of unconventional images.

A central concern of the fieldwork is the representation of atmosphere in place of the standard depiction of objects. Important also is an attempt at co-design through an interview process with architects based on the notion of the dialectic, not only for this experiment itself but is also for analysing the scalability of practices pursued in this investigation. Data includes excerpts from interviews[9] and examples of photographs. An early finding is the lack of atmospheric variance in architectural photography. More than just a project about photographic practices, however, this study is part of a larger investigation into the relationship that has developed between photography and architecture, focussing especially on Finland and Denmark, and the institutional practices of architects, publishers and photographers working in collaboration.

Much remains to be extracted from the interviews, and I will attempt to correct that problem now. Firstly, the overall process is perhaps not made entirely clear in the article. Secondly, a simple analysis of formal aspects of the first interview is needed. Those aspects should include: duration of the interviews and time spent answering each question, lexicon, frequency of keywords, tone and body language (recorded at the time but not shared in the article). Lastly, an analysis of the answers to the questionnaire which served as a follow-up to the preliminary interview and subsequent photographs is lacking from the article.

[9] *With Vesa Oiva of AOA, Samuli Mietinen of JKMM, all three partners of K2S, Kim Nielsen of 3XN, Torben Hjortsø of PLH and Mikkel Beedholm of KHR*

First Round of Interviews — Face to face

All participants were given the same semi-structured interview, found in the annexes section of this dissertation. My principle references for this stage of the research were handbooks on qualitative research (Denzin & Lincoln 2005) and papers written to clarify practices and define terminology when conducting these kinds of interviews (DiCicco-Bloom & Crabtree 2006). Interviewing was done partially to amass quantitative data shown in the chart below. However, this was also a form of qualitative research, conducted with a small number of experts in a scenario where being in the room together was as important as their quantified word choice. This was an opportunity to explore the views, beliefs and possible contradictions espoused by these individuals as well as an opportunity to visit them in their work environments. Putting together responses from this sample of prominent architects in Copenhagen and Helsinki enabled me to do at least two things. Firstly, to test their verbal and corporal responses to notions related to atmosphere as an integral part of the visualisation of architecture through photographic practices. Secondly, it meant an opportunity to check for statistical significance in the repetition of keywords. This was crucial because no such interviews existed in the literature, hence this was not information I could derive from previous research.

Due perhaps to different personalities of the people I interviewed, the nature of a semi-structured interview, and my own lack of an imposing character, the duration of each interview varied greatly. Of equal significance was the variation in the lexicon of each interviewee and the general tone / body language of participants recorded at the time of the interview in field notes. This first interview was a chance to test 6 successful architects verbal response to the notion of atmosphere as a means of showing their work through photography. Additionally, it served as a means of meeting these professionals face to face and cementing their partnership in this project. Doing so meant I was able to observe each individual as a human being, studying their body language and particular linguistic idiosyncrasies. The following table is a breakdown of the interview with definitions below.

Interview	Duration	Lexicon	Keyword Freq.	Tone/B.L.
A	44:32	Concept, complex, spatial, floor, basic, value, angle, design, faster, time.	11,0,11,10,5	Technical, uneasy due to language & suffering from a cold.
B	1:12:05	Web, media, light, material, space, feeling, spirit, life, documentary, story, renderings.	29,0,70,82,4	Friendly and engaging (one of three had a language barrier).
C	32:02	Yeah, clients, media, people, motion, audience, weather, light, diversity, scale.	7,0,10,19,2	Business leader in a hurry.
D	34:31	Aims, language, diversity, background, target, substance, questions, discussion.	3,0,17,19,6	Friendly and thoughtful, but slightly uneasy due to language.
E	1:40:07	Nice, horrible, views, caves, window, brick, glass, colour, layer, volume, height, façade, stairs, cosy.	5,0,62,32,0	Friendly, engaging, and passionate about his building.
F	34:22	Concept, complex, spatial, floor, basic, value, angle, design, faster, time.	6,5,4,34,0	Friendly at first; mildly hostile and bored by the end.

— Keywords (in the following order):
- o Atmosphere/Ambience/Environment
- o Conventional
- o Building/Architecture
- o Photography/Image/Picture/Shot
- o Magazine/Publication.

Keywords are clustered into thematic groups where possible for the sake of concision.

— Lexicon: particular words other than keywords characteristic to the person interviewed.

— Tone/B.L.: terms combine notes made about vocal and body language Atmosphere/Ambience/Environment

With this interview I was hoping to compare responses in relation to my research question and test the frequency of words like 'atmosphere' and 'convention' in order to judge the relative importance of each. As can be seen from the chart, architects speak mostly about architecture and photography. This comes as no surprise in an interview about architectural photography. However, the frequency of 'atmosphere' ranging from 3 to 29 instances per interview suggests the interest in the notion varied from architect to architect.

Significant also is that fact that only one architect used the word 'conventional' during the interview. My analysis of the information presented in this table is hence that keyword frequency shows that atmosphere is a central concept in architectural discourse but is often left out in the day-to-day running of commercial practice. It is perhaps not on the tip of everyone's tongue at the moment of commissioning, but comes out at the right moment: for example when prompted in an interview. Prior to such prompting the words were less frequent. By that I do not mean to imply the use of leading questions. The questions were open-ended. Rather that the inclusion of the word atmosphere in the question acted as a kind of prompt to switch into that mode of discourse. I think this is particularly significant because it suggests that image and text are operating as different discursive spaces on the literal level. However, as I will later argue, that does not mean that atmosphere is not an operating principle in commissioning practices. It is used to determine what is right and wrong: there is a predictable repeated atmosphere — received as the neutral atmosphere. In this way atmospheres remain an operating principle, albeit a tacit one. But more of that anon.

After the first round of interviews was completed, I began the process of photographing six sites for the duration of one year. Half of this work took place in or near Helsinki. The other half was photographed in Ørestad, a near suburb of Copenhagen. For the purpose of shooting I moved there on three separate occasions for periods ranging from two weeks to two months.

Architectural photography normally takes place over the course of one to three days, hence this was an opportunity to try out a completely different way of working and see what would emerge. This was important as I was trying to learn about photography through photography — discover my own default beliefs and conventional practices, challenge them through new practices, and hypothesise about their origins. This process is discussed further in the article itself.

Second Round of Interviews — Questionnaire

Upon completion of shooting, architects were sent a questionnaire. The design for the questionnaire benefitted greatly from the insight of Professor Joaquin Roaldan, at the University of Granada, who has done research into the practice of photo-elicitation,explained the methodology and directed me to key reading (Margolis & Pauwels 2011,Roaldan 2011, Harper 2002, Van Leeuwen & Jewitt 2001). Photo elicitation is 'based on the simple idea of inserting a photograph into a research interview' (Haper 2002). The reason for doing so, claims Harper, is that people respond differently to images than to questions framed through words — the standard vehicle

through which most interviews are conducted.

Responses to images were recorded instead of responses to texts. Therein lies the key difference between the first and second interviews. The questionnaire included images. However, it was not purely image based as respondents were also asked simple questions regarding which images they preferred and which images they would purchase. Another means of testing the importance placed on certain images was to ask respondents to select a number of images (first six, then four, then two) in order to tell the story of their building. A sample of a completed questionnaire can be found in the annexes section. There it will be seen what is meant by terminology, apart from the definitions provided below.

Interview	P/P agreement	conventional	atmosphere	± feedback
A	2	5	6	left blank
B	2	5	7	positive
C	4	2	2	positive
D	1	3	3	positive
E	4	7	7	positive
F	5	6	0	negative

— P/P agreement: frequency of correlation between images selected as 'purchase' and 'preference' [10]
— Conventional: number of images coded as 'conventional' selected as purchases.
— Atmosphere: number of images coded as 'atmosphere' selected as preferences.
— Feedback: participants were asked to comment on the notion of atmosphere as a successful or unsuccessful means of producing architectural photography based on the fieldwork they participated in. The negative feedback was from the editor of an architectural book publisher who was asked to substitute for one of the three Danish architects who did not manage to return the questionnaire due to technical problems. [11]

Outcomes of this research are several, seeping into subsequent articles. Significantly, a binary similar to the Pictorialism / F64 debate which pitted two styles of photography against each other emerges (Heyman, Alinder & Rosenblum 1992, Jeffrey 1997). The Pictorialist tradition came from painterly conventions supposedly transferred to photography through the use of props and conventionalised poses together with soft focus and diffused focus printing technique. The F64 school argued that photography had no need for these conventions and should seek its own rules on the basis of photographic technology. The name derives from the maximum depth of field achievable at the time in large format lenses, with the idea being that maximum sharpness should be sought in opposition to Pictorialist conventions. This opposition of styles and approaches extends itself to commercial vs. artistic photography of architecture for example. Commercial, conventional photography means turning the world into a kind of photographer's studio in which to perfectly light a designer object: a newly unveiled building. On the other side of that divide are fine art practices, of course, together every other photographic practice available to explore and depict architecture. It will be seen that this article argues that is easier for architects to talk about atmospheres than commission images which focus on atmospheres because whilst they claim to prefer non-conventional images (coded as 'atmosphere' photos in the questionnaire) ultimately their purchases are mostly conventional.

[10] Variance may indicate blank answers from respondents.

[11] This architect could not save the pdf.

3.3 Three: What is the best way to visualise photographic assertions arrived at through practice-based research in architectural photography?

This article represents a synthesis of former results and shares a breakthrough in visualising data. As stated, this research starts with the question: do images make buildings? From there the research undertakes to question how this making might take place. An opposition between conventional — 'neutral or transparent' — images and 'atmospheric' images is offered as the answer. This article seeks to show a range of atmospheres, situating the conventional approach to architectural photography and its black and white antecedent within a range of potential atmospheres. For that reason, this article is central to the dissertation and shares its title with it.

This article clearly invokes a dialogue with Rosalind Krauss, whose famous essay is referenced in the title and throughout. As that territory is covered within the article itself, I would opt to further develop the link to Feyerabend. The notion of Paratactic Aggregates developed in *Against Method* (Feyerabend 1993) is instructive here in two ways. Firstly, Feyerabend takes hold of Whorf's idea that the 'grammar of each language is not merely a reproducing system for voicing ideas, but rather is itself a shaper of ideas, the programme and guide for the individual's mental activity, for his analysis of impressions, for his synthesis of his mental stock in trade' (ibid 164). I have applied this idea to the notion of visual communication, the rules of professional, published architectural photography being its grammar. Secondly, this theory is appropriate to the use of grids because they produce an image compose of parts. Feyerabend claims that archaic pictures are paratactic aggregates, not hypotactic systems (ibid 200 – 208). They represent a world-view made up of parts, later replaced by a unified belief. This transition is historicised in the move from pantheism to monotheism. Significantly, the repetition of stereotyped creations is a key characteristic of paratactic aggregates. Lastly, it is important to note these two kinds of worldview is incommensurate and incompatible. Feyerabend uses the example of perspective drawn on a piece of paper to illustrate this final point. The same drawing can be taken alternately as three lines meeting at a central point or as the representation of the corner of a room, with the lines of the floor converging to meet the corner of the two walls.

Photography was used as both warp and weft: the visual groupings of photographs by kind were used to reveal gestures directed by architectural discourse. The photographs and categories were of my

own making, unfamiliar territory for a commission-based photographer. I discovered the emergence of values not clearly legible through individual images through the editing process. I learned that the visualization of multiple images can be used effectively to show gaps between image and text which point towards a certain inconsistency in text-based and pictorial communication. Equally this process of selecting organising a years worth of images revealed my own default practices, unknown to me and heretofore unanalysed. Photographs are used in this article to argue that photography might have an extended role within architectural practice were practitioners to demonstrate the value of that role.

Data was equally divided across images and the patterns their categorisation revealed. Taxonomies of atmospheres visualised in grids have been presented as a means of doing practice based research. In order to see the *taking place* that is architectural photography, repetition and comparison of typologies can be achieved by placing images in a grid. In doing so, taxonomy is revealed visually as well as textually. An idea is repeated which reveals the idea named. Credibility is achieved through repeated investigation and demonstration of categories – visually or physically constructed. Buildings thus become an area of enquiry; photography, the method of investigation. Using the metaphor of statistics, images can be taken as the sample, the grid its analysis and visualisation. Lastly, these grids are unique because they concentrate on the atmospheric envelope around the building as a key but under-interpreted part of the story of architecture that photography can tell.

In short, the outcome was an analysis of architectural discourse together with an exploration of photography's role in the creation of that discourse revealing a gamma of rejected colours and scenarios.

3.4 Four: Why do practice based research, and can such research be repeated and generalised?

This final article is both summary and verification of my earlier articles. Here I shall cover three reasons for that claim, which went beyond the journal's remit. The first of these reasons is to question a disconnect: why teach architectural photography in parallel courses in two separate departments? What would happen if this subject were as interdisciplinary as my research? The second reason was my interest in the Nordic model — why I chose Helsinki over London. The final reason was to apply what I had learned about atmospheres to the 'Grey Matter' teaching exercise: local rather than international-style photography of place.

Let us begin with the interdisciplinary question. Bridges and tunnels can be formed through a slightly adjusted view of what teaching is for and how it should be undertaken. That is not to say that this is a model for all teaching. Rather, this specific juncture of two different disciplines provided the opportunity for a different way of teaching the specific subject of architectural photography. Bridges spanned the gaps between architecture & photography, industry & academia, fine art & commercial art practices. In short, they connect theory to practice across two-disciplines, allowing observers to become practitioners and vice-versa. Tunnels bore their way under ideological impasses based on adherence to one economic model or another. In such an environment, the role of a teacher

shifts also. No longer the sole source of (approved) information, a teacher becomes project manager-cum-team-leader-cum-cultural liaison in addition to working as a lecturer sharing research and a professor of practice, sharing real-world skills. In this environment, everyone is expected and allowed to contribute to the process of creation. The success or failure of the project is everyone's responsibility — everyone has something at stake. This dynamic creates a wheel with spokes connecting at a central node: the work. That structure is radically different from the top-down management of the standard classroom. However, the idea is not new. It was developed and implemented by the Pragmatists over a hundred years ago: The teacher is not in the school to impose certain ideas or to form certain habits in the child, but is there as a member of the community to select the influences which shall affect the child and to assist him in properly responding to these. Thus the teacher becomes a partner in the learning process, guiding students to independently discover meaning within the subject area (Dewey 1897). Learning while doing is a familiar, respected method of teaching; however, the tweak on that idea comes from the notion of embedded or entrepreneurial learning.

At the heart of that update are two main ideas: that education should not take place in an ivory tower, and that everything should conform to the logic of the markets. I support the former claim and abhor the latter. It is here we arrive at my interest in the Nordic model. The idea is not that students must pay their way, earn their keep, by working for a company. Rather, the company got free R & D, because the students conducted experiments in photography which would be too costly and time consuming to conduct within a marketplace. Many of those experiments were too radical to be of interested, but some were not. All architects expressed interest in the photographs produced; three images were purchased, and an order for several more was placed. The architects were asked for information and input about the projects photographed, however, the students were asked to consider that information as a starting point to explore and develop further. All of this could equally have been done in London[12] but I was interested in taking money completely out of the equation. In Finland education is free. Furthermore, I was able to secure funding which meant that none of the partners were asked to contribute to the project. This would have been significantly harder to achieve in the UK.

Finally, I saw this experimental course not only as an opportunity to apply notions of learning while doing in a classroom but also as an opportunity to test the validity of my own practice based research. I wanted to see if it could be scaled up, with a team of students testing some of my hypothesis and a variety of experts judging the final products. Could others use atmospheres as a system for classifying images? Is it useful to look at conventional photography as an atmosphere? Could the classroom be used as a research lab to test the viability of non-conventional atmospheres in the world of architecture? In order to explore these questions, the nine-month course ended in a highly successful exhibition and talk at the Finnish Museum of Architecture. The course and exhibition were called 'Grey Matter' because images sought to reflect the lived experience of autumnal Helsinki, testing claims that good architecture must be shown in good weather. In doing so I was able to further my research into the viability of unconventional atmospheres as a means of exploring

[12] *I chose Aalto University over the London Consortium when deciding where to do this research.*

and promoting contemporary architecture. The outcome was confirmation of the validity of atmospheres as epistemological device for understanding architectural photography as well as a verification of the potential for unconventional atmospheres within the market place. This might be a teachable moment.

For the reader's convenience I have repeated the table from page sixteen here.

Article	Theory	Methodology	Data	Outcome
1	Grounded Theory	Content Analysis	9 Charts	Insight into Conventions
2	Phenomenology	Interviews & Photography	6 Case Studies	Insight into Atmosphere
3	Modernist vs. Postmodern	Photography & Edition	9 Grids	Visualisation Method
4	Effectuation & Existentialism	Teaching & Curating	Coursework & Exhibition	Applications of P.B.R.

4 DISCUSSION

4.1 General Remarks

In this research, I have worked to clarify what fits into the frame of architectural photography, and what is left out. By doing so, it has been my goal to add a missing perspective to an interesting discussion, as well as study the validity of practice based, interdisciplinary studies. Because architectural photography consists of the work of two distinct but imbricated disciplines, it requires research and publication from each side.

The belief that one sees a building, rather than an architectural discourse, when one looks at a photograph in an architectural publication is counterproductive to the understanding of architecture and photography. In making photographs less transparent and more visible, I have effectively argued two crucial points. Firstly, architects would not commission photographs, but would publish their own pictures, if the knowledge and skills of a photographer were not needed. Hence, it is untrue to say that photographs are wholly the visual expression of the architectural way of seeing. Secondly, if photographers had a free hand at architectural photography, the photographs would look quite different, because architects and photographers are the products of different ways of seeing. Hence architectural photographs are the visual expression of many architectural values and a consistent architectural discourse. On the surface, the second point seems to contradict the first. But appearances are deceiving. The points are tangential and intersect in the product that is the architectural photograph, the sum of architectural and photographic skills and beliefs. They are something like a dialectic synthesis of the two. Photographs of architecture are not the same thing *as* architecture, though they are a key chapter in its story. But if you ask what is meant in countless architectural publications by the word *architecture*, you find, surprisingly, that the answer is quite often *photography*. However, if you ask why the photographs look the way they do, you must look to architects for the answer.

This research was partially based on my own practice, but it is as hybrid as it is interdisciplinary. Thus its design required inputs from disparate sources in order to incorporate established methodologies from distinct disciplines into an emergent set of research practices. But this is not hybridity for the sake of novelty. As Edward Tufte would say, it is content-driven rather than form-obsessed (Tufte 34, 51, 64, 90). There were certain things I wanted to know, each stage of research being dependent on the former. I applied whatever method of investigation seemed most appropriate for the knowledge I sought. Each article was treated as a separate project with unique and specific questions. Overall this research is qualitative, relying heavily on interviews and the reflective practice of image making. Yet the quantification of data did prove useful and necessary early on for the analysis of images appearing in the Finnish Architectural Review. The methods employed for that investigation were later useful for the classification and content analysis of my own photographs. This is a perfect example of how research cycles from one step to the next, and how separate methods wind up creating feedback loops in a sort of productive contamination. Whilst it is clear that the most concrete contents of this research are the many hours of interviews and hundreds of photographs selected from thousands, a new view of architectural photography, with conventional practice classified in a system of atmospheres, is the most significant finding.

This study was predicated the following assumptions that contradict default beliefs about architecture:

— Architectural photographers work with physical, three-dimensional spaces to produce flat images; architects work with flat images to design three-dimensional spaces.
— Architects have defined photography in such a way that limits its role within their practice.
— Architects say very different things with words and pictures: eidos and logos are at odds and often contradict each other on the same page of a publication.

These points are important because they cause problems in the reading of architecture for specialists and non-specialists alike. Equally, it has emerged during the course of this research that photographic studies have been:

— articulated mainly by people with little commercial experience as practitioners
— centred on fine art and snapshot images
— operating on the assumption that the commercial photograph comes under the remit of media studies

This second set of assumptions is crucial because it adds to confusion about photographic practices of the sort I am conducting. A more com-

plete understanding of photography "will require a rich and thorough understanding of the myriad decisions that precede production [...] ranging from the conceptual and obtuse to the mundane and pragmatic" (Bedford 2007: 11). This sea change will not occur if architects, artists and academics, not architectural photographers, do most of the thinking and writing about architectural photography. This fact emerged first through gaps in the literature, which were the starting point for my research. They were also indicated certain deficiencies in commercial practice, discovered through fieldwork and my analysis of architectural photographs. My final assumption was that research and development conducted in academia — but connected to industry — is the best way to fill some of those gaps and investigate ways to bridge the several divides causing practical and theoretical disconnects.

4.2 Theoretical Implications

I said in the introduction that that the knights of faith and resignation might serve as a model or leitmotif for this study, where no one unifying theory is put forth. I would like to quickly return to that notion now. Creative capital is one of so many terms that make up business jargon that often sounds meaningless. The idea is that there is money to be made in art. Alternately, it is the ideal that everyone is an artist — with untapped creative abilities that should be developed. I wish to suggest neither. Rather, I choose to look at Kierkegaard's knights as an example of the wasted opportunity in the move from personal to professional creative work. Fine artists, the knights of faith, are obsessed with their work and compulsive in their drive to produce it. Famous examples abound and are the stuff of legend. Total devotion is the common denominator amongst artists. All the money in the world couldn't buy that dedication, which is why commercial artists so rarely have that quality — at least, not by the time they are successful. For that reason I have chosen to call them knights of resignation, keeping with Kierkegaard's schema. Resigned to their existence, they carry on as believers in what they do but without the divine madness that energises the knight of faith. There is an enormous loss of creative capital there.

Beyond that theoretical ground for this work, I hope to have made my contribution in the still emergent field of practice-based research. It is here that I believe I have participated in current developments in scientific enquiry and will continue to do in order to make a small contribution to the work of the scientific community in years to come. There is currently very little practice-based research in the literature on architectural photography. Hence, I hope my contribution there is obvious. Theorists have written extensively about phenomenology and embodiment through the notion of atmosphere, all which calls for research into new modes of seeing architecture through photography. I hope there too to have made a contribution. I believe this sort of research will sit well alongside previous research, which has come largely from architectural historians, many of which are specialised in the subject of architectural photography. A more complete picture will emerge when photographers and architects research the field, equally.

4.3 Practical Implications

Existing modes of representation from other disciplines could serve as models for an expanded view of architecture through photography. Conventional modes of architectural representation are a crucial starting point. However, I have tried to argue there that they need not be its endpoint. Several fine art and commercial photographic practices can be used to reconceptualise and reconsider the role of photography within the architectural community.

Existing discourses within the architectural community suggest there is good reason for doing so. Interest in atmosphere can be traced back to the late 1970s and has been frequently voiced during the past fifteen years (the main focus of the literature review of this thesis). Yet that interest cannot be seen in architectural photography, which relies, I have argued, on one atmosphere which is continually repeated around the world, like a song stuck on repeat for a century. In this way, practice and theory suffer a disconnection. But there is a gap also at the other end of the spectrum, where marketing must be considered. The need to brand oneself is taken as a given, today. However, several experts interviewed during this study voiced concern for the fact that architects (in Finland) have neglected to share qualities and beliefs unique to their practices. Architects seem eager to appear more similar than they really are. This is nowhere more apparent than through the kinds of images they commission and publish.

The success of architectural conventions for conveying architectural works and discourses to members of the architectural community is evidenced by 150 years of publications. However, online publications which reach a far greater audience than journals, will mean that audience will change. How those changes will alter the editorial practices of print journals and hence photographers remains to be seen. Photography and architecture are in a transitional moment widely overlooked by the commissioning practices of many editors and architects, hence also by many architectural photographers. This oversight has created a gap between word and text, one of the motivations for this study. Additionally, in an economy increasingly geared towards selling experiences over objects, the practice of beautified documentation of architectural form must come into question as the sole means of seeing architectural visions.

For architects there are three main implications from this research. Brand differentiation might be had by a reappraisal of architectural photography as standardised technique for objective documentation. The notion of atmospheres increases the experiential range of choices that can be contemplated when photographing architecture. Regional specificity would also emerge through attention to the multiple possibilities that atmospheres present. A spectrum of atmospheres could be used as a form of Pantone in order to determine the right project specific photograph in line with both the program and the mood of an architectural creation.

For photographers these findings imply the opportunity and the need for an expanded role of skills both practical and critical. Whilst architectural photography is a highly skilled, demanding practice, it is not as difficult as it once was. The conventional sort of image which emerged in part due to the technical demands of large format film photography are

not longer present. The style of image they produced, however, continue to be the benchmark for successful publication. That might change if photographers had more to do with the sort of images of architecture that are widely viewed and appreciated.

For educators the implications of this research are less certain. It is a fact that contemporary photographic education has moved away from vocational training to a focus on art education that started in the 1980s (Burgin 1982 et al). The development of conceptual thinking through cultural theory means that photography studies are largely removed from commercial constraints. My interpretation of such facts is that this presents an interesting opportunity in the coming years. If we stick to the example of architecture, interdisciplinary learning would offer practical applications for photography students without a substantial alteration of the curriculum. Additionally such interdisciplinary programmes would give needed input to the methodologies and values which produce images currently in architecture departments.

By researching the meanings of architectural photography, the practices by which it is produced, the work of operators in the network that professionalise and theorise it, I have availed to make a contribution to the field of architectural photography. In doing so, I have greatly enriched my own practice and have come to better understand the practices of other actors in this network. By sharing this research, can I hope to make a contribution to the understanding of photography in general. In a small way, I hope to have shown how architectural photography presents the example of two disciplines that intersect. It is a complicated relationship, and as with all relationships, it would be ideal to arrive at a point where neither side has more power than the other, but each recognises the value of being together.

4.4 Validity of this Research

Teaching has provided a means of testing repeatable experiments conducted in this research. Photography, I have found, is a good medium for analysing architectural beliefs and practices, yet is an undervalued research and development tool. This is true both for design practices and theoretical systems. Architectural photography is a means for sharing ideas and works as well as a sense of place and time. Yet it is often bound by questionable beliefs. I have sought to argue that notions of transparency are based on false premises about objective truth — instead of being one of many styles, narratives and atmospheres. However, it needed to be tested whether or not these interpretations were the result of my own interpretations based on my feelings, or if in fact others would reach the same conclusions when presented with the same set of facts. The fourth article presented here presents evidence that they did.

4.5 Limitations of this Research

The goal of this research was to add a new perspective on existing practices of architectural photography, not replace them. Problems are the raison d'être of research, hence I have availed to address them where I

saw fit. The conventional architectural photograph meets with the requirements of a great number of commissions, and it is not the purpose of this research to advocate innovation purely for the sake of innovation.

It is important to consider whether change will bring about improvement. While such a decision will ultimately be subject to taste, systems are in place for testing the effectiveness of a tradition. Adhi Nugraha discusses this in his doctoral thesis, *Transforming Tradition*, where he writes:

> According to Joedawinata (2009), when designing a new object or product inspired by tradition, it is important to carefully identify four aspects in the very early stage of the conceptualising process:
>
> — What element/s should be preserved or unchanged?
> — What element/s could be replaced?
> — What new element/s could be added?
> — What element/s could be discarded? (Nugraha 2012).

These four questions are fundamental when looking at the design of an object, he claims, but they can just as easily be used to test whether or not an existing convention in photography is better than any alternative. In the hypothetical case of a commission brief or section of text from a publication that discusses a Nordic building, the human scale, the presence of nature (all common elements in Nordic architectural discourse) answers might be as follows.

— What element/s should be preserved or unchanged?
o Required views of the building (elevations and corners of exteriors / interiors, significant elements, etc.)
—What element/s could be replaced?
o Actual weather conditions at the time of shooting could replace the perpetual Mediterranean blue skies.
o What new element/s could be added?
o Sensitivity to overlooked atmospheres also created by: time of day, daily life, particular events and curious idiosyncrasies.
o What element/s could be discarded?
o Any clichés that are not specifically needed but held on to for the sake of conventional beliefs and practices

There are, moreover, cases where the atmospheres method should not be applied. An example of the former would involve a misreading of my critique of conventions. The work of architects Aires Mateus, for example, and many of their Portuguese counterparts is the epitome of a certain Mediterranean ideal which arguably has evolved from a long vernacular and sacral tradition, and is a reflection of common atmospheric and cultural conditions to which that architecture continues to respond. Hence the blue and white photography I have written about is not so much a cliché or myth as a reflection on local traditions, values and the experience of being there. Seeing such work in the rain, snow or under grey skies would be an interesting alternative, not a discursive convention with little basis in physical reality. I am not advocating the replacement of one set of conventions with another. One of the purposes of this research is simply to question the validity and effects of such conventions. I am offering a

critical look at architectural photography and examples of alternative practices. I am not suggesting we replace a blue world with a grey one, or other sort of recipe.

There were other cases where the atmospheres method failed. Because I was trying to discover what atmosphere would mean in architectural photography, I took thousands upon thousands of unused photographs. Many of these were blind alleys, or failures. By attempting to work without a rulebook, I produced many photographs which I and the participants in my research found unattractive. While working with architects during the initial six case studies (3XN, PLH, KHR, AOA, JKMM and K2S) I was searching for a new kind of photograph. Hence, I included chance operations (such as setting the camera up to fire automatically) intentional mistakes (such as not focussing the lens, pointing the camera up or down to converge vertical lines) and embraced ugliness. In doing so, I unwittingly missed an opportunity to sell images. I was concerned with discovering what would and wouldn't work, hence as a researcher failure was as interesting if not more than success, because it was there that I could test assumptions and make discoveries. However, as a photographer these decisions proved bad for my career. I sold images to each architect, but missed the opportunity for advancement that was placed before me. Does this revelation perhaps contradict my entire undergoing? I don't think so, because architects did still buy several unusual photographs. The point was that they could be different, but still needed to satisfy notions of quality and beauty. Where I was not myself convinced of these (because they were not my points of interest in the photographic experiments I was conducting) I did not convince the architects either. And a more literal notion of convincing is also worth mentioning here. In the course of my discussions I spoke about the atmosphere caused by people, events weather. In doing so I was able to interest the architect in such things where perhaps no interest previously existed. Invariably, images, which visualised those concepts were the ones which caught the eye of each architect when images were submitted for evaluation. At times they were purchased, at times not. But in the second round of interviews they were indicated as the sort of image the architect liked, personally, and would like to purchase in a perfect world. Ultimately, the greatest limitations were due to the need for research teams and more time in order to further pursue some of the bigger questions at issue. Both kinds of limitation are addressed in the following section.

4.6 Suggestions for further Research

Based on my research results, I can see that ample further research is needed both to falsify certain claims and extend nascent methods of enquiry. Additionally, there are questions that arose which I had to put aside for fear of taking on too many subjects with too many methods. However, I would like to start off by mentioning them here, as I am certain that experts in those fields would have much to offer this research question.

Research into conventions of beauty suggests three such fields. Studies in fashion may reveal existing work and a new perspective, just as my focus on atmospheres over objects has done. That beauty is an elusive but pervasive quality of fashion photography suggests that there would be good reason to collaborate with experts in this field in order to further develop an understanding of conventional beauty in the architectural photography. For similar reasons, feminist studies would be of great value in order to better understand the connection between hegemonic discourses and conventionalised ideas about beauty. The Beauty Myth (Wolf 1991) is perhaps one of the more famous of such studies. Lastly, cultural studies on marginalised people and practices could do the same: Queer Theory, African American and Chicano Studies, for example. All have considered the power of the centre and expulsion to the margins. Each brought those margins into focus and argued their validity. Some of the arguments I have made here are tangential with arguments made by researchers in those areas, hence my research would benefit greatly from insight from those areas.

Extended research into global publications in print and online is needed. The method for analysing the *Finnish Architectural Review* (*ARK*) offered here could be extended to global publications. An obvious candidate for such an analysis is a deeper study of *The Phaidon Atlas of 21st Century World Architecture*. The look into one Finnish publication is deep, but the reach of that journal relatively narrow (some 4000 subscribers) as is its focus on a small country at the edge of Europe, albeit a significant one. A look at global publications to do content analysis of architectural photography around the world is a worth research project for a dedicated team. I have taken the first step, I hope. However, in doing so, I realised that for a sole researcher it is too much to take on. Equally, blogs are important and tell another story, at times. They have the advantage of daily publications without the limitations of page number dictated by the costs of print. The work of Elias Redstone has highlighted significant examples new architectural press, both online and in print. Further research in this direction will become increasingly valid.

Along similar lines, further study into iconic vs mundane images would shed much light on the history of architectural photography. Yet the methodology for doings so remains unclear at present. How to test the impact of each? Upon whom? At what period of time via which publications? I was criticised by a peer-reviewer for not considering the greats in the profession: the icon makers. Yet I have chosen to overlook them in order to focus in the other side of the equation: the mundane, the conventional, the standard. This is because I wanted to look at standard operating procedures and their impact on my work. But also because the story of the greats has already been told. A study that would measure the impact of each and weigh their relative strengths and weaknesses has not.

Additionally, technological changes have made possible representational changes not looked into. A cursory glance at architectural photographs and 3d renders from the nineties shows clearly that the former has altered little whilst the latter has changed to the point where it is difficult to consider them both the same kind of image. 90s CGI looks like primitive product photography of architectural models; currently it looks like images of buildings in the world. Strangely, though, architectural renders feature a great variety of moods and settings, extreme vantage points from above and below and vast crowds of semi transparent people. Architectural photos look like blue and white versions of their nineteenth century predecessors. Yet photography has gone through the same technological revolution in that period as computer software. In the 1990s

cameras were very similar to their Victorian counterparts: two metal frames, a bellows for focussing, a fixed lens at one end and expensive 4x5 inch film sheets at the other. Now digital capture is the norm, and a panoply of systems are deployed.

Development of online technology is essential for this suggested method of image analysis to become a useful tool for architects, photographers and educators. To make the extant website more than just an online portfolio but a tool as well as a means of exploring critical visual thinking would require sophisticated coding. The ability to manipulate images and create layouts for the sake of comparison and contrast are two obvious functions that are currently lacking. The development of such tools are a first and necessary step, as the world is increasingly about transparency and sharing, even if intellectual property remains important to legal and creative industries.

Finally, developing the university as a site of R & D, not in the service of industry, but rather through the implementation of the feedback loop, is a crucial goal for the future of education in this field as I see it. Architecture departments of universities do not embrace photography as a means of conducting research and development in architectural design — this is a missed opportunity. At present photography is still often viewed as a form of documentation (albeit one which adheres to clear visual codes), which is used at the very end of the design and build process in order to show the architect's work. This view overlooks the fact that photography is seminal to the design process from the beginning — before a project has begun, in fact. Because every architect looks at images, and many of those images are photographs, photography is the means through which buildings are shared, the language through which architecture is most commonly expressed. It is for this reason I have identified photography as architecture's discursive space. But will the architectural community take the imaginative leap required in order to do so as well? Likewise, this is an opportunity for photography departments to explore commercial training. Vocational training in photography is at an all time low because the focus is on educating photographers to become artists. But how many artists can find work? Alternative careers in photography are thus wanted and needed, indicating an opportunity for the (re) development of such studies within photography departments. In short, both architecture and photography departments have the opportunity to develop theory and skills training and it remains to be seen whether or not they will do so via interdisciplinary programmes such as the course described in this thesis, or as separate entities. Connectivity between practice-based research, work done in creative industries and education needs further development. I am optimistic about the first trial I have run. But for conclusive evidence that this model can and should be scaled up, it would need to be tried elsewhere and by others. To do so is not only important for the sake of falsification, but also for the sake of education. The amount of literature signalling the need for a rethink in the education of art, photography and architecture, together with the ongoing demand that practice based research justify its existence and clarify its ontology indicate that this is so. But there is yet another, final reason. The loss of creative capital: the Knights of Faith and Resignation.

I have interpreted Kierkegaard in a way that is neither about religion or ethics or logic. Love, vows, calling are the central topics which make a discussion of his theory relevant to arts education. A natural progression from love to resignation informs default beliefs about maturation and professionalism and explains the separation between school and work without recourse to economic perspectives. I believe Kierkegaard's binary provides the opportunity to consider a different sort of transition from love to vocation. Answering to a calling, even in the face of evidence that it is not practical to do so can be so satisfying that you are willing to devote all of your energy to it. That is what I mean by creative capital. Letting people do what they love and viewing the classroom and the workplace as spaces for developing that vocation means the shift from a world of Knights of Resignation to one populated with Knights of Faith. It is equally important in order to question what direction we are heading in art schools. Are we educating for boldness, collaboration and innovation or are we educating tomorrow's knights of resignation? Both will emerge, but what is the discourse behind the way we work, research and teach? If photography is architecture's discursive space, what do we want the atmosphere of that space to feel like?

5 SUMMARY

It is now finally time to return to the research question and the four points it rests upon. Images make buildings from a certain point of view. This idea was established in the discursive map presented at the beginning of this study. But it soon emerged in the literature that photography (as a practice) and photographs (as products) are mostly understood and defined by observers, not practitioners themselves. As a result, historians look at the history of iconic images and architects often write about photographs of buildings as though they were the buildings themselves. Historians have tended to filter out the bulk of images produced over the years, thereby overlooking the conventions they reproduce. They look at the great works of genius, the high points, the exception rather than the rule. The architect's analysis often treats photographs as a means to an end — they are windows for looking at architecture. Hence the words 'architecture' and 'photography' are often conflated, causing confusion.

I have attempted to offer a different point of view upon this subject. A fascination with architectural imagery and theory brought me from the marketplace to the halls (and mostly libraries) of academia. However, it struck me as wrong from the outset to pretend to be an architectural historian or theorist. If I have something to add to existing studies on architectural photography, it is a different point of view. A practitioner myself, I have tried to focus on photographic characteristics of both purchased and rejected photos. This focus has been applied to my own work as well as to the published work of other architectural photographers. But in both cases I have tried to ask questions that emerged through reflection upon my own practice. That reflection, in turn, came from existing research in the field and analysis of established conventions. This is just one of the many beneficial feedback loops that have resulted from doing research. For a more specific and detailed look at the results of that research, a four-part look at the answer to my research question now follows. There I will consider how each of the four articles answers the main research question.

The first answer

Images make buildings by following a tiny rulebook. By applying grounded theory and the methodology of content analysis I was able to use the images appearing in the Finnish Architectural Review as a means of understanding architectural photography and categorising some of its practices. This was an important first step.

On the whole I find the methods of enquiry used in this article were suitable, producing valid and reliable results. I set out to get a clearer grasp on architectural photography in Finland, where I was newly based. I used this technical / historical enquiry as a means of understanding contemporary practices. Furthermore, I used the categories from the article as a means of classifying architectural images, which could be applied elsewhere. The very notion of classification was essential for arriving at a visual, grid-like coordination classification of images according to different variables such as colour and atmospheres they present. However, as this was also an investigation into publishing and photographic practices, it was not without problems.

For example, crucial to photographic practice is the category of focal length. Most architectural photography is shot with wide-angle lenses. It would be helpful to quantify the use of such lenses and compare findings with the use of mid-focal-length and telephoto lenses. Equally, the notion of the frame — both in terms of cropping and orientation — should be addressed. Framing is crucial to both photographic and editorial practices, and should be taken into consideration in future studies. Notwithstanding these problems, this method enabled me to apply a simple technique for analysing photographs.

The second answer

A focus on atmospheres revealed that words and images make buildings — define the ontology and metaphysics of buildings — in different ways. In fact, research suggested that these two means of communication were often at odds with each other, quite frequently in the same page of a given publication. This is not an entirely rare phenomenon considering the media and publication of varied means of communication simultaneously [examples from elsewhere?]. But it is one that demonstrates the importance of raising fundamental questions in the representation of a given field. Prior to the methodological scrutiny of linguists in the eighteenth century, words were regularly spelled with in a variety of different ways on the same page[13]. No one minded because no one, presumably, had ever questioned this inconsistency. Similarly, I found in interviews and reading that architects and publishers would often say the same thing in different or contradictory ways when communicating through images and texts. Human scale was mentioned in the title of a book in which no people appeared in the cover shot, thereby making it difficult to judge that scale (Tiainen 2011). Examples of this sort were plentiful in my reading and fieldwork. Hence it became clear there was room for continued research here. The methods of reporting in this article were limited and problematic, but those problems have already been addressed in the introduction. Importantly, however, the results, which the article produced, were seminal for the rest of the work carried out over the course of this research.

[13] *I know this from my studies in 18th century English literature, the main subject of my Bachelor's Degree.*

The third answer

To develop the ways in which images make buildings, practice-based research was needed. In my work, this meant learning from photographer artists and architects to use repetition and structure. Taxonomies of atmospheres visualised in grids were presented as a means of doing practice based research. Colour-coded categories refocused the architectural photograph as a gamma of atmospheres instead of a window upon the world of buildings. In order to see the *taking place* that is architectural photography, repetition and comparison of typologies was achieved by placing images in a grid. In doing so, taxonomies were revealed.

Repetition was an appealing option as methodology, because I was able to use certain repetitive practices here in order to critique other repetitive practices. I had earlier established that architectural publishing relied on the constant repetition of a limited number of tropes or conventions. It is in that way that meaning was established. By repeating these conventions, other visual modes could eventually be forgotten or discarded, allowing for claims of neutrality about what would be better described as styles or techniques for the deployment of a single atmosphere. By repeating atmospheres created by or located in my own practice, I was able to similarly create meaning through repetition. Credibility was achieved through repeated demonstration of parts, which formed whole categories: the set of atmospheres shown at in the image section of this dissertation. Atmosphere thus becomes an area of enquiry, photography the method of investigation. Using the metaphor of statistics, random images would be taken as the sample, with the grid then becoming their analysis and visualisation.

I have applied the idea that the grammar of each language is programme and guide for the individual's mental activity. It is not merely a reproducing system for voicing ideas, but rather is itself a shaper of ideas, the, for his analysis of impressions and the synthesis of his mental stock in trade (Feyerabend 1993). This idea was applied to the notion of visual communication, the rules of professional, published architectural photography being its grammar. Feyerabend's development of this principle of paratactic aggregates (ibid 1993) was instructive here in two ways. I have applied this idea to the notion of visual communication, the rules of professional, published architectural photography being its grammar. Secondly, this theory was appropriate to the use of grids because they produce an image compose of parts. As stated earlier, archaic pictures are paratactic aggregates, not hypotactic systems (ibid 1993), which means that they represent a worldview made up of parts, later replaced by a unified belief. This transition is seen clearly in the move from pantheism to one god of later religions. Significantly, as I have claimed in the case of architectural photography, repetition of stereotyped creations is a key characteristic of paratactic aggregates. I have tried to reveal overlooked options through the tesserae that are the separate cells of each grid, suggesting the idea of parts that comprise a whole but also the notion of multiple narratives. This panoply of options creates a system of representation, which might be compared with the pantheistic religions of

ancient societies. Compared to this, conventional photography might be likened to monotheism. In short, have you got one god or many?

The fourth answer

Teaching was an effective means of both scaling-up practice based research and repeating some of the experiments of that research. Bridges and tunnels were formed through an adjusted view of what teaching is for and how it should be undertaken. That is not to say that this was arrogantly posited as a new model for all teaching. Rather, this specific juncture of two different disciplines provided the opportunity for a different way of teaching the specific subject of architectural photography in the specific location of my university.

Due to the large, ever-increasing number of students studying photography and architecture, it is important that at least some of these students receive exposure early on to real-world (meaning commercial) practices. Some students will prefer to pursue exclusively fine-art practice, others may choose to go into theory or various careers in the cultural sphere. But at the moment, photographers are trained to become artists and architects are trained to think of architectural photography as independent of photography studies. This gap provides an opportunity for an update where this juncture connects the two areas of study. Photographers can learn about architecture and architects can learn about photography. They have everything to gain from working together. A commission from an architect supervised by a photographer provides the real world environment. However, we avoided a situation where the classroom became a service-provider for the commercial sector. The idea is not that students must pay their way and earn their keep by working for a company. Rather, the company benefitted from unpaid research and development (R&D) because the students conducted experiments in photography, which would be too costly and time consuming to conduct within a marketplace. Many of those experiments were too radical to be of interest, but some were not. All architects expressed interest in the photographs produced; several images were purchased at the exhibition, and commissions for several more were made. Architects were asked for information and input about the projects photographed; the students were asked to consider that information as a starting point to explore and develop further. Here was another beneficial feedback loop, connecting academia and industry, making each practitioners in the learning / working environment instead of spectators.

The spectator view of knowledge was denounced by Dewey and is still at the heart of debates about theory vs. practice. Since photography theory is a spectator view of spectators' views, the issue is twice as complex and urgent, here. However, I have argued that architectural photography provides an opportunity for dialogue between spectators and practitioners about spectacle and practice. Such a teaching environment resists hierarchies which privilege theory or practice and place photography and architecture on equal footing. It also places teachers and students on similar levels, each challenging, questioning and aiding the other.

In this article I did not imply that architects should cease to expect a service, and simply put their faith in the work of inspired artists.

Rather, I argued that the creative impulse, which leads photographers and architects alike to university studies need not be cast off completely once it is time to join the workforce. Within the marketplace the use of images is extremely conservative, within academia more so, yet the bridged space might offer a way out.

A final word on conventional norms

In 1960 the *Compañía de Santa Teresa de Jesús* published a slim volume titled simply *Urbanity*.[14] It is a rulebook for *urbane* people. The table of contents comes as some surprise. It lists duties to God, including entering the temple, genuflexion, postures, during mass, of the sacraments, other religious solemnities, song and prayer, and ministry to God. Is this what it takes to be urbane? Further reading raises eyebrows higher. For example, the section on rules of conduct at school:

[14] *Original title: Urbanidad. This and all subsequent translations are mine.*

> Upon entering, you will kiss the hand of the Mother Superior and will respectfully explain the reason for your visit. Upon finishing, you will thank the Mother Superior for her time and you will once again kiss her hand. Upon seeing the Mother Superior you must stop to greet her, let her pass and do not continue on your way until she has passed.

Clearly, this book grants a glimpse at another world — one which teaches the obvious lesson that rules change. The conventions of one time and place are not necessarily those of another. Take the following admonition: "You will take care to ensure your underwear is in perfect order [...y]ou will change it frequently, every day if possible." If possible? This is no longer an option for the urbane.

Books of this sort abound, make one laugh and put us in mind of that well-worn saying: the past is a foreign country. But what can they show us? To begin with, it seems, a book such as this might induce us to look critically at some of our own social conventions. Religious differences are regularly discussed in contemporary society as key components of culture, but what about artistic and commercial practices? Are they less a part of the world we live in? How long have the default beliefs that inform such practices been around? Have any become outmoded or appear absurd when viewed from through foreign eyes? Who is the mother superior in this scenario? Is the atmosphere in their school conducive to learning or must we still bow our heads to kiss their hand?

6 REFERENCES

Addis, Bill. 2008. Building: 3,000 Years of Design, Engineering and Construction. London: Phaidon Press Ltd.
Ahlava, Antti. 2002. Architecture in consumer society. [Helsinki]: University of Art and Design Helsinki.
Alexander, Christopher. A Pattern Language: Towns, Buildings, Construction (Center for Environmental Structure Oxford University Press (1977)
Althusser, Louis. 1971. "Ideology and ideological state apparatuses." In Lenin and Philosophy and Other Essays. New York: Monthly Review Press.
American Society of Media Photographers: Commissioning Architectural Photography. https://asmp.org/commissioning/overview.html#.U_3iHGSSz70
Andersen, Michael Asgaard. 2008. Nordic architects write: a documentary anthology. Abingdon [England]: Routledge.
Arnheim, Rudolph. 1974. Art and Visual Perception: A Psychology of the Creative Eye. Berkeley: University of California Press.
– The Power of the Center. 1988. Berkeley: University of California Press.
Arendt, Hannah. 1998. The Human Condition, 2nd ed. Chicago: The University of Chicago Press.
Bachelard, Gaston, and M. Jolas. 1992. The Poetics of Space. Boston: Beacon Press.
Barrett, Estelle, and Barbara Bolt. 2007. Practice as Research: approaches to creative arts enquiry. London: I. B. Tauris.
Barthes, Roland. 1981. Camera Lucida: reflections on photography. New York: Hill and Wang.
– Barthes, Roland, and Stephen Heath. 1978. Image, music, text. New York: Hill & Wang.
– Barthes, Roland, and Annette Lavers. 1972. Mythologies. New York: Hill and Wang.
Bate, David. 2009. Photography the key concepts. Oxford: Berg. http://public.eblib.com/choice/publicfullrecord.aspx?p=472587.
– "The Memory of Photography", Photographies Volume 3, Issue 2, 2010
– 'The Real Aesthetic: Documentary Noise', Portfolio Contemporary Photography. no 51, May 2010
Baudrillard, Jean. 2005. The System of Objects. London: Verso.
Bazin, André. "The Ontology of the Photographic Image" In: Trachtenberg, Alan. 1980. Classic Essays on Photography. New Haven, Conn: Leete's Island Books.
Bedford, Christopher. "Qualifying Photography as Art, or, Is Photography All It Can Be?" In: Klein, Alex. 2010. Words Without Pictures: [November 2007 – February 2009, Los Angeles County Museum of Art]. New York: Aperture Foundation.
Belt, Pekka, Möttönen, Matti, and Härkönen, Janne. 2011. Tips for writing scientific journal articles. Oulun yliopisto, Teknillinen tiedekunta, Tuotantotalouden osasto. http://urn.fi/urn:isbn:9789514293801.
Benjamin, Walter, and J. A. Underwood. 2008. The Work of Art in the Age of Mechnical Reproduction. London: Penguin.
Benjamin, Walter. 1936. Illuminations. http://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm
Berger, Lynn, 2011. "Snapshots, or: Visual Culture's Clichés," Photographies, 4:2,175-190
Biggs, Michael & Karlsson, Henrik (eds.) 2011. The Routledge Companion to Research in the Arts. London: Routledge.
Böhme, Gernot. 2013. "The art of the stage set as a paradigm for an aesthetics of atmospheres". Journals:Ambiances.
– 'On Beauty', Nordic Journal of Aesthetics, 21 Aug. 2010. <http://ojs.statsbiblioteket.dk/index.php/nja/article/view/3001/4595> (accessed 27 Nov. 2012)
– 'The Space of Bodily Presence and Space as a Medium of Representation'<http://www.ifs.tu- darmstadt.de/fileadmin/gradkoll/Publikationen/space-folder/pdf/Boehme.pdf> (accessed: 27 Nov. 2012)
– "Atmosphere as the Fundamental Concept of a New Aesthetics," (1993), Thesis Eleven 36, p. 113-26
Bolt, Barbara. 2004. Art beyond representation the performative power of the image. London: I.B. Tauris. http://site.ebrary.com/id/10132929.
Bryson, Norman. 1983. Vision and painting: the logic of the gaze. New Haven: Yale University Press.
Buchanan, Peter. 2012. 'The Big Rethink Part 9: Rethinking Architectural Education' The Architectural Review.
http://www.architectural-review.com/academia/the-big-rethink-part-9-rethinking-architectural-education/8636035.article?sm=8636035
Burgin, Victor. 1982. Thinking photography. London: MacMillan Press.
Carnap, Rudolf. Logische Syntax der Sprache (English translation: 1937. The Logical Syntax of Language, New York: Humanities.
Cazeaux, Clive. 2000. The Continental aesthetics reader. London: Routledge.
Čeferin, Petra. 2003. Constructing a legend: the international exhibitions of Finnish architecture, 1957-1967. Helsinki: SKS.
Choisy, Auguste. Histoire De L'architecture .. Paris: Gauthier-Villars, 1899. Print.
Chomsky, Noam. 2013. "Noam Chomsky Slams Žižek and Lacan: Empty 'Posturing'" Open Culture. http://www.openculture.com/2013/06/noam_chomsky_slams_zizek_and_lacan_empty_posturing.html
Colomina, Beatriz, and Jennifer Bloomer. 1992. Sexuality & space. New York, N.Y.: Princeton Architectural Press.
– Colomina, Beatriz. 1994. Privacy and publicity: modern architecture as mass media. Cambridge, Mass: MIT Press.
Comazzi, John. 2012. Balthazar Korab, Architect of photography. New York: Princeton Architectural Press
Compania de Santa Teresa. 1960. Urbanidad. Barcelona: Altés, S.L.
Connah, Roger. 2001. How architecture got its hump. Cambridge, Mass: MIT Press. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=61104.
Corbin, J. A., & Strauss, A. 2008. Basics of Qualitative Research, 3rd ed. Thousand Oaks, CA: Sage.
Cotton, Charlotte. 2004. The photograph as contemporary art. London: Thames & Hudson.
Cotton, Charlotte, and A. Klein. 2010. Words without pictures. New York: Aperture.
Debord, Guy. 1995. The society of the spectacle. New York: Zone Books.
De Maré, Eric. 1961. Photography and Architecture. London: The Architectural Press.
Denzin, Norman K., and Yvonna S. Lincoln. 2005. The SAGE handbook of qualitative research. Thousand Oaks: Sage Publications.
Dewey, John. 1959. Art as experience. New York: Capricorn Books.
DiCicco-Bloom, Barbara, and Benjamin F Crabtree. 2006. "The qualitative research interview". Medical Education. 40 (4): 314-321.
Eco, Umberto. 1984. Semiotics and the philosophy of language. Bloomington: Indiana University Press.
– 1994. The role of the reader explorations in the semiotics of texts. Bloomington, Ind: Indiana University Press. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=23201.
Elkins, James. 2007. Photography theory. New York: Routledge.
Elwall, Robert. 2004. Building With Light. London: RIBA Press.
Feyerabend, Paul. 1993. Against Method. London: Verso.
Flusser, Vilém. 2011. Into the universe of technical images. Minneapolis, Minn: Univ. of Minnesota Press.
Foucault, Michel, and Michel Foucault. 2010. The archaeology of knowledge ; and, The dis-

course on language. New York: Vintage Books.
– 1971. The order of things: an archaeology of the human sciences. New York: Pantheon Books.

Frampton, Kenneth. "Towards a Critical Regionalism: Six points for an architecture of resistance", in "Anti-Aesthetic. Essays on Postmodern Culture." Seattle: Bay Press, 1983

Fried, Michael. 2008. Why photography matters as art as never before. New Haven: Yale University Press.

Frizot, Michel. 1994. Nouvelle Histoire de la photographie, Paris, Adam Biro / Bordas.

Gibson, James Jerome. 1950. The perception of the visual world. Boston: Houghton Mifflin. http://books.google.com/books?id=dEFRAAAAMAAJ.
– A Theory of Direct Visual Perception. http://jraissati.com/PHIL256/03_Gibson_ATheoryOfDirectPerception.pdf

Goffman, Erving. 1959 [1990]. The Presentation of Self in Everyday Life. London: Penguin Books.

Goffman, Erving. 1974. Frame Analysis. An Essay on the Organization of Experience. Boston: Northeastern University Press.

Gregory, R. L. 1970. The intelligent eye. New York: McGraw-Hill.

Griffiths, Gareth. 2004 'Minimal information content in Finnish architecture'. Nordic Journal of Architectural Research. http://arkitekturforskning.net/na/article/viewFile/216/179

Gursky, Andreas, Ralf Beil, and Sonja Fessel. Andreas Gursky: Architecture. Ostfildern: Hatje Cantz, 2008. Print.

Hagen, Margaret A. 1980. The Perception of pictures. New York: Academic Press.

Hale, Johnathan. 2000. Building Ideas: An Introduction to Architectural Theory. Hoboken: Wiley-Academy.

Hall, Edward T. 1981. Beyond culture. Garden City, N.Y.: Anchor Books.
– 1966. The Hidden Dimension. Garden City, N.Y.: Doubleday.

Hannula, Mika, "Catch Me If You Can: Chances and Challenges of Artistic Research." Art & Research, Volume 2. No. 2. Spring 2009. http://www.artandresearch.org.uk/v2n2/hannula1.html

Harper, Douglas. "Talking about Pictures." Visual Studies, Vol. 17, No. 1, 2002 http://www.nyu.edu/pages/classes/bkg/methods/harper.pdf

Hayes, K. Michael (ed.). 2000. Architecture Theory Since 1968. New York: Columbia Books of Architecture.

Heidegger, Martin, and David Farrell Krell. 2010. Basic writings: Martin Heindegger. London: Routledge.
– 1977. The question concerning technology, and other essays. New York: Harper & Row

Heiferman, Marvin. 2012. Photography changes everything. New York: Aperture.

Herman, Elizabeth. 1993. Rapid assessment procedures (RAP): to improve the household management of diarrhea. Boston, MA: International Nutrition Foundation for Developing Countries (INFDC).

Heyman, Therese Thau, Mary Street Alinder, and Naomi Rosenblum. 1992. Seeing straight: the f.64 revolution in photography. Oakland, Calif: Oakland Museum.

Higgott, Andrew & TimothyWray. 2012. Camera Constructs: Photography, Architecture and the ModernCity, Farnham: Ashgate.

Hostetler, Lisa. 2000. "The New Documentary Tradition in Photography". In: Heilbrunn Timeline of Art History. New York: The Metropolitan Museum of Art. http://www.metmuseum.org/toah/hd/ndoc/hd_ndoc.htm (October 2004)

Hunter, Will. 2012. "Alternative Routes for Architecture." The Architectural Review. http://www.architectural-review.com/academia/alternative-routes-for-architecture/8636207.article?blocktitle=Architectural-Education&contentID=11522

Iloniemi, Laura. 2004. Is it all about image? Chichester, West Sussex, England: Wiley-Academy.

Jay, Martin. 1994. Downcast eyes: The denigration of vision in twentieth-century french thought. Berkeley: University of California Press.

Jeffrey, Ian. 1997. The photography book. London: Phaidon.

Jetson, Sirkkaliisa, 2003. "Along the Years", ARK 2/2003. Helsinki: SAFA.

Laine, Leenamaija, 2003. Houses built with ink: A century of the Finnish Architectural Review, visual history and spatial narratives. Helsinki: Helsinki University of Technology.

Kant, Immanuel, Kant's Critique of Judgement, translated with Introduction and Notes by J.H. Bernard (2nd ed. revised) (London: Macmillan, 1914). 2/21/2015. http://oll.libertyfund.org/titles/1217

Kierkegaard, Søren, and Alastair Hannay. 1985. Fear and trembling. Harmondsworth, Middlesex, England: Penguin Books.

Klee, Paul, and Jürg Spiller. 1961. Paul Klee: the thinking eye; the notebooks of Paul Klee. New York: G. Wittenborn.

Krauss, Rosalind E. 1985. The originality of the avant-garde and other modernist myths. Cambridge, Mass: MIT Press.

Kress, Gunther R., and Theo Van Leeuwen. 1996. Reading images: the grammar of visual design. London: Routledge.

Leach, Neil. 1997. Rethinking architecture: a reader in cultural theory. New York: Routledge.
– 1999. The anaesthetics of architecture. Cambridge, Mass: MIT Press. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=24396.
– 2006. Camouflage. Cambridge, Mass: MIT Press.

Le Corbusier, Le Corbusier, and Le Corbusier. 2012. Vers une architecture. Paris: Flammarion.
– 2012. Quand les cathédrales étaient blanches voyage au pays des timides. Paris: Bartillat.

Lefebvre, Henri. 1991. The production of space. Oxford, OX, UK: Blackwell.

Louekari, M. 2013. Personal interview. Interviewed by M. Goodwin. Helsinki, March 2013.

Marchán, Simón. Perception of Architecture through Photography. Exit 37.

Margolis, Eric, and L. Pauwels. 2011. The SAGE handbook of visual research methods. Los Angeles: SAGE.

Mason, Jennifer. 2002. Qualitative researching. London: Sage Publications.

Merleau-Ponty, Maurice, and Claude Lefort. 1968. The visible and the invisible; followed by working notes. Evanston [Ill.]: Northwestern University Press.

Miles, Matthew B. & A. M. Huberman. Qualitative data analysis: an expanded sourcebook. Thousand Oaks: Sage Publications.

Mitchell, William J. 1994. The reconfigured eye visual truth in the post-photographic era. Cambridge, Mass: MIT Press. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=24400.

Mitchell, WJT. Iconology: Image, Text, Ideology. Chicago: U of Chicago P, 1986.
– Mitchell, W. J. T. 1994. Picture theory: essays on verbal and visual representation. Chicago: University of Chicago Press.
– Mitchell, W. J. T. 2005. What do pictures want?: the lives and loves of images. Chicago: University of Chicago Press.

McLuhan, Marshall. 2001. Understanding media: the extensions of man. London: Routledge.

Morris, Rosalind C., and Gayatri Chakravorty Spivak. 2010. Can the subaltern speak?: reflections on the history of an idea. New York: Columbia University Press. <http://www.maldura.unipd.it/dllags/docentianglo/materiali_oboe_lm/2581_001.pdf> (accessed: 27 Nov. 2012)

Mørk, A. 2012. Personal interview. Interviewed by M. Goodwin. Copenhagen, 17 May 2012.

Naef, Weston J. "The Art of Seeing: Photographs from the Alfred Stieglitz Collection." In: The Metropolitan Museum of Art Bulletin, v. 35, no. 4

Nelson, Robin. 2013. Practice as research in the arts: principles, protocols, pedagogies, resistances. Palgrave Macmillan.
Norberg-Schulz, Christian. 1980. Genius loci: towards a phenomenology of architecture. New York: Rizzoli.
Olivares, Rosa. Exit 37. Architecture II. The Artist's View. Olivares y Associados, 2010.
Pallasmaa, Juhani. 2011. The embodied image: imagination and imagery in architecture. Chichester: John Wiley & Sons.
- 2010. The thinking hand: existential and embodied wisdom in architecture. Chichester, U.K.: Wiley.
- 2005. The eyes of the skin: architecture and the senses. Chichester: Wiley-Academy.
Panofsky, Erwin. 1991. Perspective as symbolic form. New York: Zone Books.
Pascal, Blaise. 2013. Pascal's Pensées New York: Tribeca Press.
Pérouse de Montclos, Jean-Marie. 2011. Architecture description et vocabulaire méthodiques. Paris: Éd. du Patrimoine, Centre des monuments nationaux.
Pevsner, Nikolaus. Reith Lectures 1955: 'The Englishness of English Art, Lecture 6: Constable and the Pursuit of Nature' http://downloads.bbc.co.uk/rmhttp/radio4/transcripts/1955_reith6.pdf
Rasmussen, Steen Eiler. 1962. Experiencing architecture. Cambridge [Mass.]: M.I.T. Press, Massachusetts Institute of Technology.
Rattenbury, Kestner. 2002. This is Not Architecture: Media Constructions, New York and London: Routledge.
Redstone, Elias. Redstone. 2014. Shooting space: architecture in contemporary photography. London: Phaidon Press.
- Pardo, Alona, and Elias Redstone. 2014. Constructing worlds: photography and architecture in the modern age. Munich : Prestel Art.
- 2011. Redstone, Elias. 2011. Archizines. London.
Roaldan, Joaquin. Personal interview. Interviewed by M. Goodwin. Granada, 2012.
Robinson, Cervin, and Joel Herschman. 1987. Architecture transformed: a history of the photography of buildings from 1839 to the present. New York, N.Y.: Architectural League of New York.
Rosa, Josph. 1994 A Constructed View: The Architectural Photography of Julius Shulman. New York: Rizzoli International Publishers.
Rose, Gillian. 2001. Visual methodologies an introduction to the interpretation of visual materials. London: Sage. http://site.ebrary.com/id/10080966.
Rubinstein, Daniel. 'Towards Photographic Education' Photographies Vol. 2, Iss. 2, 2009
Saint-Martin, F. (1990). Semiotics of visual language. Bloomington: Indiana University Press.
Shore, Stephen. 1998. The nature of photographs. Baltimore: Johns Hopkins University Press.
Shulman, Julius. 1977. The photography of architecture and design: photographing buildings, interiors, and the visual arts. New York: Whitney Library of Design.
- 1962. Photographing architecture and interiors. New York: Whitney Library of Design.
Shulman, Julius, Peter Gössel, and Frank O. Gehry. 1998. Architecture and its photography. Köln: Taschen.
Sobieszek, Robert A. 1986. This edifice is colossal: 19th century architectural photography. Rochester, N.Y.: International Museum of Photography at George Eastman House.
Sontag, Susan. 2003. Regarding the Pain of Others, New York: Picador/Farrar, Straus and Giroux.
- 1994. Against interpretation. London: Vintage.
- 1977. On Photography. London: Penguin.
Stimson, Blake. 1 April 2004 Tate Papers Issue 1 http://www.tate.org.uk/research/publications/tate-papers/photographic-comportment-bernd-and-hilla-becher

Stroebel, Leslie D. 1999. View camera technique. Boston: Focal Press.

Szarkowski, John. 1966. The photographer's eye. New York: Museum of Modern Art; distributed by Doubleday, Garden City, N.Y.
Tafuri, Manfredo, 'Toward a critique of architectural ideology' in Architecture Theory Since 1968 ed. by Michael Hays (Boston: MIT Press, 2000)
The Phaidon Atlas of Contemporary World Architecture. London: Phaidon, 2004. Print.
Tiainen, J. (2011). Human scale in Finnish architecture Humaner Massstab in finnischer Architektur = Arquitectura Finlandesa a escala humana. Helsinki, Parvs.
Tidwell, Philip. (ed.), Architecture and Atmosphere, with contributions from Gernot Boehme, Tonino Griffero, Jean-Paul Thibaud and Juhani Pallasmaa, Tapio Wirkkala-Rut Bryk Foundation, Espoo, 2014.
Tufte, Edward R. 1990. Envisioning information. Cheshire, Conn. (P.O. Box 430, Cheshire 06410): Graphics Press.
Traub, Charles, Steven Heller, and Adam B. Bell. 2006. The education of a photographer. New York: Allworth Press.
Van Leeuwen, Leo and Jewitt, Carey. 2001. Handbook of Visual Analysis. London: Sage Publications.
Varto, Juha. 2012. A Dance with the World. Helsinki: Aalto University Publication series.
Walton, Kendall, 'Transparent Pictures: On the Nature of Photographic Realism', Critical Inquiry Vol. 11, No. 2, Dec. 1984, pp. 246-277.
Walton, Kendall L. 2008. Marvelous Images: On Values and the Arts", Oxford: University Press.
Wells, Liz. 2003. The photography reader. London: Routledge.
Weston, Richard. 2011. 100 ideas that changed architecture. London: Laurence King.
Whorf, Benjamin Lee, and John B. Carroll. 1956. Language, thought, and reality: selected writings. [Cambridge, Mass.]: Technology Press of Massachusetts Institute of Technology.
Wolf, N. (1991). The beauty myth: how images of beauty are used against women. New York, W. Morrow.
Venturi, Robert, Denise Scott Brown, and Steven Izenour. Learning from Las Vegas: The Forgotten Symbolism of Architectural Form. Cambridge, MA: MIT, 1977. Print.
Whitehead, Alfred North. Process and Reality (New York: The Free Press, 1978)
Wigley, Mark. "The Architecture of Atmosphere," (1998), In Daidalos 68, p. 18-27.
-1995. White walls, designer dresses: the fashioning of modern architecture. Cambridge, Mass: MIT Press.
-1993. The architecture of deconstruction Derrida's haunt. Cambridge, Mass: MIT Press. http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1377.
Zell, Mo. 2008. Architectural drawing course. Hauppauge, NY: Barrons Educational Series.
Zimmerman, Claire. 2014. Photographic architecture in the twentieth century. http://public.eblib.com/choice/publicfullrecord.aspx?p=1762169.
Zumthor, Peter. 2006. Atmospheres: architectural environments, surrounding objects. Basel: Birkhäuser.
- Zumthor, Peter, Maureen Oberli-Turner, and Catherine Schelbert. 2006. Thinking architecture. Basel: Birkhäuser.

7.1

9 FACTS ABOUT CONVENTIONS IN ARCHITECTURAL PHOTOGRAPHY

Abstract

This study is one of the first to use content analysis of images as a means of interpreting architectural discourse. Nine facts were extracted from a detailed analysis of images that appeared in 3493 pages of the *Finnish Architectural Review* (*ARK*) between 1912 and 2012. Close attention was paid to the types of images used repeatedly in order to focus on key editorial and photographic decisions. Editorial decisions consisted of type, size, chromatic scale and number of images. Photographic decisions consisted of human presence, weather, depth-of-field and camera orientation for interior and exterior photographs. Data, which quantifies the frequency of each type of image, indicates that there is a strong reliance on visual conventions in *ARK*. When considering the limited range of images used in the publication, it becomes clear there is little correlation between the complexity of architectural language and environments and the simplicity of its depiction. That discrepancy suggests there is a need for research and development in the field of architectural photography in order to better inform readers about the diversity of architectural practices. This argument will be unfolded in this paper and supported both by data and practitioner insights.

Introduction

Research in architectural photography is often focused through the lens of cultural theory favoured by architects who write. Whilst such writers have done much to contribute to the study of a specialized branch of architectural representation, they have often done so to the detriment of photography's ontological status as a practice in its own right. In doing so, they have frequently obfuscated the analysis of photographs by treating them as transparent windows via which the subject matter — architecture — can be seen. Such accounts fail to consider the steps taken to construct a photograph and disregard the conventions that determine those steps. Therefore, architects' *observer* based analysis of images made by photographic *practitioners* has led to the development of a debate about the use of photography without sufficiently considering photography as a practice. The debate centres too often on normative thinking about photography *en masse* instead of adopting methodology for analysing the form and content of photographs themselves. Arguments are often overly reliant on binary oppositions — the positive and negative aspects of photography within architectural practice — lacking a nuanced interpretation of photographs.

In order to look at both the discursive practices of architects and the effects of commission and publication standards on photographs, an analysis of images could provide a fruitful source of information. Such an analysis would not only recognise the constructed nature of photographs but would also take a step towards increased dialogue between architects and their commercial partners. Architectural photography is recognised as a constituent part of architectural practice, yet it is poorly understood as a practice in itself. Less still is known about the ways in which commission and publication practices have led to the development of conventions in architectural photography. Steps taken to analyse the content of images used, the frequency of publication of certain images, and the discursive practices and values those statistics reveal would replace the current black box scenario with an information rich area of enquiry. If, in addition, more information were obtained from photographers about their practice, then judgment could be based on image content and participant testimony instead of cultural theory and observer speculation. Such an analysis is needed both for the

Keywords: architectural photography, content analysis, editorial practices, conventions, Finnish Architectural Review

clearer reading and understanding of architecture through photography as well as to provide a means for better understanding the collaborative nature of architecture with other professions.

The Finnish Architectural Review (*ARK*) has proven a useful source of data for this type of analysis. This is so not only because of the countless charts, sections and plans published in the pages of the journal; its photographs can also be mined. They say much about the photographic and editorial decisions made by the Finnish sector of the architectural community for approximately one hundred years. In addition, a brief interview with the current editor and chief of *ARK*, together with research done by editorial staff, provide a response and counter-balance to the independent research conducted.

This paper was written to identify the editorial and photographic decisions and the conventions that inform them. The paper will first address some previous literature on architectural photography. Then the focus will narrow to Finnish architecture and the specific material provided by *ARK*. Key concepts will fall into two categories: the first consists of editorial decisions, the conventions they establish and their potential effects on the variety of architectural images published; the second will look at the limited role photographers have played in the establishment of conventional practices. Ultimately, this paper induces nine facts about photographic conventions, questions the current role of architectural photography in the understanding of architecture, and argues that a rethink of its convention-based limitations is overdue.

Literature review

Before moving further into the specific research in this article, a brief overview of salient publications on the subject of architectural photography[1] is provided below. As stated already, most of the publications about architectural photography have been by architects. A chronological shortlist of significant publications may help to situate the reader in this field of enquiry before arriving at the research question.

1. *Anaesthetics of Architecture* (Leach, 1999) is a direct attack on the use (abuse, misuse, overuse) of imagery in architecture. Professor Leach, himself an architect, claims images have a mind numbing effect on their viewers. This short book is a vitriolic outburst from cover to cover, designed to associate imagery with the death of grey matter and good architecture. A product of its time, the book relies heavily on Baudrillard's notion of the simulacrum as support for its many assertions.

2. *Privacy and Publicity* (Colomina, 2000) is a seminal work on the use of images by two celebrated architects. The focus of Professor Colomina's, critique ranges from gender studies to media theory, but is heavily weighted on two architectural archetypes: the anti-image architect and the image-friendly architect. This is achieved through a close and thorough account of the work of Adolf Loos and Le Corbusier, and the relation of each with photography and related media.

3. In 2002 Kester Rattenbury, reader in Architecture at University of Westminster and Architectural Critic, edited *This is Not Architecture: Media Constructions*. It evolved out of her doctoral thesis, offering reflection on the intersection between architectural, photographic and editorial practices.

4. *Constructing a Legend* (Čeferin, 2003) looks at how Alvar Aalto, the Museum of Finnish Architecture and the *Finnish Architectural Review* constructed a brand of Finnish architecture based on a carefully crafted image used to promote Finnish architecture internationally in the 1950s and 60s. The work of architect Petra Čeferin focuses specifically on architecture and its photography in Finland. The museum was the main source of photographs sent to foreign curators, architects, critics — it was the 'gatekeeper and guardian' of the identity of Finnish architects and architecture (Čeferin, 2003, p. 37). Before long, a self-referential language emerged in the press, which established a standard vocabulary for discussing buildings seen only in photographs (Ibid., p. 143), this vocabulary soon became stereotyped and repeated en bloc by critics and scholars. Crucially, Čeferin points to arguments constructed by professional writers (journalists and critics) on the basis of established professional conventions rather than through personal analyses derived from first-hand knowledge. In order to appear professional, conventional language must be used in journalism, even where the writer has no idea about the veracity of certain statements they make. The purpose of writing becomes to follow established norms, not reveal new information. Tellingly, Čeferin argues that architects and the state supported this constructed and confined way of seeing in post-war Finland (Ibid., p. 148).

5. *Is it all About Image?* (Iloniemi, 2004) is intended as a toolkit to be used by architects rather than as a critical analysis of their practices. However, Laura Iloniemi, PR specialist, offers first-hand accounts taken from her personal experience as a PR agent for various architecture firms. This practice-based reflection provides critical insight into industry uses of images.

6. *Building With Light* (Elwall, 2004) is the work of a celebrated RIBA historian of architectural photography. In this work, Elwall repeatedly argues that architecture would not exist in its current form without photography. The book is heavily reliant on historical, 'iconic' architectural photographs to tell the story of architectural photography, though the texts are also critical and engaging.

7. *How Architecture Got its Hump* (Connah, 2006) makes a similar argument to Elwall's, but nuances it by saying that the architectural photograph is limited in terms of what it shows and how it shows it — the same position is taken in this paper. Connah is critical both of architecture's limited use of photography and of photography's stunted contribution to the reading of architecture.

8. Architect and theorist Juhani Pallasmaa ended a fifteen-year exploration of the subject with the publication of *The Embodied Image* in 2011 (Pallasmaa, 2011). His point is similar to Connah's; however, the distinction lies where Pallasmaa opposes the commercial image to the poetic image, arguing in favour of the latter. Like Leach, he believes that a heavy reliance on images, especially photographs, has been bad for architecture.However, Pallasmaa's argument is centred around Gaston Bachelard's notion of the poetic image.

The general tone of these books is one of dissatisfaction. Architects argue that over-reliance on images has had a negative impact on architecture. Some think the type of images used need to change. But none of them seem ready to consider that well-intentioned criticism by architects for architects is not an effective means of opening up this debate. If architects wish to reach a broader public with their work and ideas, perhaps they will also need to consider a wider range of voices to listen to, outside their community.

[1] *For more on this topic, see the Canadian Architectural Archives: http://caa.ucalgary.ca/bibliography.*

Photographers have had little to say about the work they do or how it is used by other industries, and architectural photographers are no exception. Typically, photographers write manuals explaining certain procedures commonly followed, but rarely do they take the time to analyse their practice or how their work fits into a larger context. Exceptions are as follows:

1. *Photography and Architecture* (De Maré, 1961) is the work of a celebrated architectural photographer of the fifties and sixties Part of the book is a manual for aspiring photographers which explains some of the basic technique and equipment required. Most photographers stop there, in terms of writing. In the introduction, however, Eric De Maré states that his purpose is to raise the general public's appreciation for architecture. He argues that the practice of photography is a good way to develop an eye for seeing architecture.

2. Julius Shulman published several books about his career and one about architectural photography: *The Photography of Architecture and Design* (Shulman, 1977). He is the most detailed and forthright photographer writing about his own thoughts and practices, and thus is important to the topic for far more than the interest his fame has brought to it. *Photography and its Architecture*, a title which suggests a response to De Maré's book, was released by Taschen in 1999. It is essentially a celebration of Shulman's long, successful career, offering neither a reflection on architectural photography nor a critical review of Shulman's photography.

3. *Architecture Transformed, A History of Architectural Photography from 1839* to Present (Robinson and Herschman, 1990) offers a comprehensive photographic history punctuated by textual arguments about key components of that history, similar to Elwall's more recent book. Cervin Robinson is a celebrated photographer, though he refrains from any reflection on his own practice, nor does he choose to offer insight into the industry in general. His task in this book is clearly that of a historian.

4. Most recently John Comazzi published a monograph, *Balthazar Korab: Architect of Photography*, in 2012. The book is essentially a collection of photographs, though the twenty-page biography offers some quotes and insights from Korab himself. Significantly, Korab preferred to be thought of as an architect who takes pictures, and not as photographer.

Research Questions

The research discussed in this paper is one of four sections of a doctoral thesis currently in its final stage. The thesis analyses the role of photography in architecture by identifying conventions, addresses the theme of atmosphere in architectural and photographic discourse, visualizes each in practice led research, and finally tests the response of photographers and architects to conventional and atmosphere-based photography through embedded learning.

This paper focuses on conventions. It does so by examining the types of images used in an architectural journal over a period of one hundred years to identify trends and standards within that publication. Doing so has made it possible to test the assumption that architectural communication is increasingly reliant on images, as is asserted by all of the writers in the literature review. The experiment involved tracking the number and size of images used in the journal, as explained in greater detail below. This quantification allows for qualified assertions about the rhetorical devises routinely used by that publication.

When considering the limited range of images published, it becomes clear that there is little correlation between the complexity of architectural language and environments and the simplicity of its depiction. That discrepancy suggests there is a need for research and development in the field of architectural photography in order to better inform readers about the diversity of architectural practices. Hence it is also the goal of this research to question architects' reliance upon a small set of conventions as the metrics for determining the viability of architectural photographs for purchase and publication.

Research Method

Research employed content analysis of images appearing in the *Finnish Architectural Review* (*ARK*) — one year per decade — from 1912 to 2012. From a sample of 1/10 of the overall material it may seem difficult to draw conclusive evidence, yet the number of pages and images looked at was so vast.[2] Content analysis was done under strict conditions. Pictures were viewed under the same light in the same room for several months to reduce variables and outside influences to a minimum. Procedures for content analysis followed guidelines provided by *The Handbook of Visual Analysis* (Van Leeuwen and Jewitt, 2001) and *Basics of Qualitative Research* (Corbin and Strauss, 2008).

Research centred on *ARK* for several key reasons. It is one of the oldest publications of its kind (appearing for the first time in 1903), after *Deutsche Bauzeitung* (1866) and the *Architectural Record* (1891). (Jetsonen,2003, p. 25) The first photograph was published in the first journal of the sort in 1856, the *Revue générale de l'architecture et des travaux publics* (Sobieszek, 1986, p. 4), which places it some forty years earlier than the beginnings of *ARK*. The *Revue* ceased publication in 1870 and *ARK* is still active. *ARK* was immediately one of three candidates for the study. The other two journals are produced by large, populous, culturally diverse countries, whereas the case with *ARK* is just the opposite. Finland is a small, young, somewhat homogenous country — it is no exaggerationto assert that *ARK* is produced by Finnish architects, for Finnish architects.

Not speaking Finnish was a decisive factor in choosing *ARK* for a case study, strange though it may seem. During the process of content analysis there was no temptation to correlate images with text, because I was not able to do so. Content analysis was therefore focussed entirely on images. This focus provided an ideal limitation of variables needed for a controlled research environment. However, upon completion of the image-data-mining process, short summaries in English provided at the end of the journals were used to provide historical information to check assumptions derived from content analysis. Additionally, the 100-year Anniversary issue of *ARK* 3/2003 and the master's thesis of *ARK's* graphic designer, Leenamaija Laine, were invaluable companions later for cross-referencing this method with more conventional historical evidence about editorial practices at *ARK*.

From the research conducted it was possible to formulate nine separate facts. The following analysis provides a look at the data used to support each of these facts as well as a brief exposition of that data. Facts are the product of original research conducted entirely via the method just explained.

The photographic parameters chosen — human presence, weather, depth of field, composition and orientation of the camera — reflect key decisions taken by an architectural photographer at work. Of course, a limitless number of decisions could

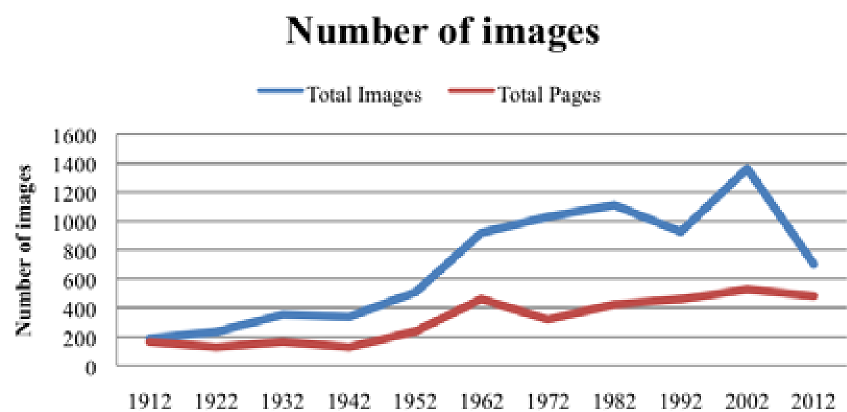
[2] *3493 pages.*

be addressed and discussed. However, Stephen Shore parsed photography into four aspects in his seminal work (Shore, 2007), Szarkowski chose five (Szarkowski, 2007). Hence, four to five were taken as a guideline with significant precedents in photography theory.

The editorial decisions — type, size and number of images, black and white vs. colour — were chosen as the minimum number that might correlate with photographic decisions to produce a total number of key facts. Keeping the number under ten was important to avoid saturation. The resultant number was nine, creating a near balance between the two types of decisions surveyed without forcing the number for the sake of symmetry. It was also a happy coincidence that nine rule sets are established by Palladio in his famous book, *Quattro Libri dell'Architettura* (1570). Coincidentally, architect Peter Zumthor also discusses exactly nine atmospheres in his seminal treatise *Atmospheres: Architectural Environments – Surrounding Objects* (2006).

Analysis of images in the Finnish Architectural Review 1912—2002

Fact 1. Images occupy progressively more of the journal over time[3]



The earliest journals were essentially comprised of written articles illustrated by small images. In contrast, visual culture features more prominently than writing in current editions of *ARK*. That shift is illustrated in figures 2 and 3. Figure 1 shows a general rise over time in the number of images featured in the magazine. The trend towards image over text is not without fluctuations, but the chart clearly marks the rise in the use of images by *ARK* from 1912 to 2002. Since 2002, it will be seen that the trend has reversed. However, if there are fewer photographs in the journal since then, it is mainly because it features large images that take up entire pages, or spread across two pages. The overall trend for the century analysed has clearly been for increased reliance on images to tell the story of architecture.

[3] *Changes in the appearance and layout of the journal may to some degree reflect the changes in the editorial staff over the years. A list of editors-in-chief is as follows: Bertel Jung, 1903–05; Waldemar Wilenius, 1906–07; Sigurd Frosterus,1908–11; Birger Brunila,1912–16; Alarik Tavaststjerna, 1917–19; Carolus Lindberg, 1921–27; Hilding Eklund, 1931–34; Yrjö Laine, 1935–36; Martti Välikangas, 1928–30; Yrjö Lindegren, 1937–40; Aulis Blomstedt 1941-45; Nils Erik Wickberg, 1946-49; Veikko Larkas, 1950–51; Nils Erik Wickberg, 1946-49; Aarno Ruusuvuori, 1956–57; Nils Erik Wickberg, 1958–59; Pekka Laurila, 1960–66; Kirmo Mikkola, 1967–68; Tapani Eskola, 1969–70; Esko Lehesmaa, 1971–72; Jussi Vepsäläinen, 1972–77; Markku Komonen, 1977–80; Marja-Riitta Norri, 1981–88; Kaarin Taipale, 1988–92, Pentti Kareoja, 1992–95; Esa Laaksonen, 1996–99; Jorma Mukala, 2009 onwards. Significant changes to layout and format took place for example in 1968 with sub-editor, Maj-Lis Lappo, and in 1996 under chief-editor, Esa Laksonen (Laine, 2003, p. 55, 65).*

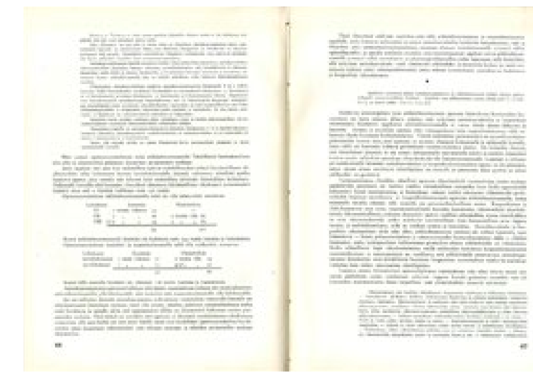
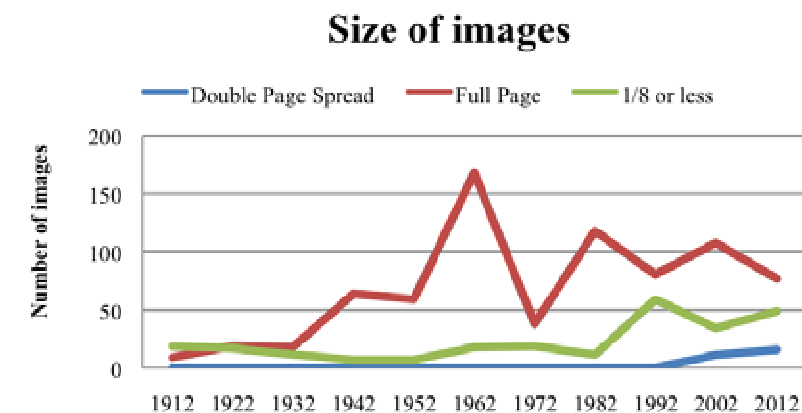


Figure 2
ARK 1/1922, pp. 24–25.

Figure 3, Pasi Aalto
ARK 1/2012, pp. 50–51.

Fact 2. Large images become prevalent in the journal over the same period[4]



Images become not only more numerous but also larger over the course of the period analysed in the present study.[5] The presence of true, single-image, full-page bleeds and double-page spreads comes particularly late in the history of the journal, and is essentially a contemporary phenomenon.

[4] *According to Laine (2003, p. 24), the size and number of images in the early 1900s was often determined by the amount of space left over after the space text was calculated. She also writes that because of a shortage of other material, they started to give more space to plans in 1918, and that in the 1950s greater attention was paid to international publications, and their layout conventions were often followed. Photographers Simo Rista and Heikki Havasken are quoted as saying that black and white presents a more harmonious image but also requires more work from the photographer (Ibid., p. 27, 50, 77).5 One year per decade.*

[5] *One year per decade.*

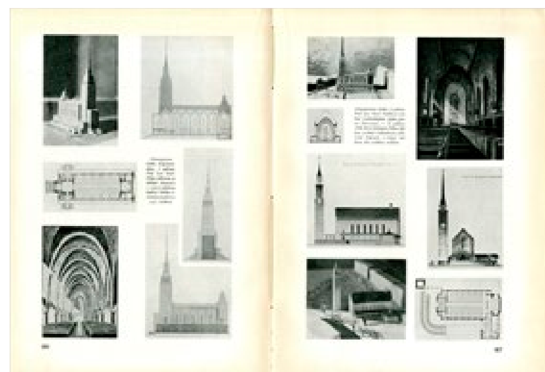
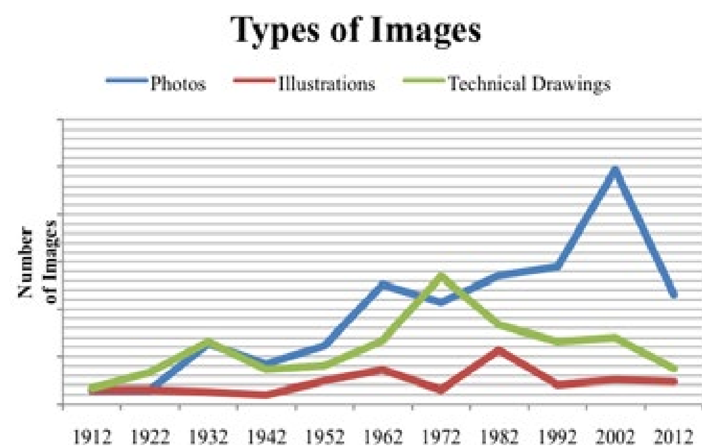


Figure 5
ARK 12/1932, pp. 186–187.

Figure 6
ARK 11/1962, p. 241

Earlier publications opted for a combination of image and text on most pages, or a mosaic of smaller images used to fill the pages with considerably more empty space around images than currently found. An example of this is the 1932 page layout seen in figure five, where small images are tiled and large borders are left between images. This *passe-partout* style of image presentation is used until the 1990s. Pages in the journal were filled with text and small images for the first three decades; that format later became far less common as larger and more numerous images made their way into the publication. A notable exception is 1972, however, which proved a reversal of this overall trend.

Fact 3. Photographs become the images of choice in the journal[6]



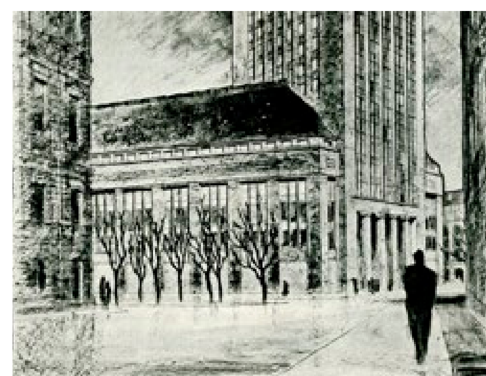


Figure 8
ARK 1/1922, pp. 12–13.

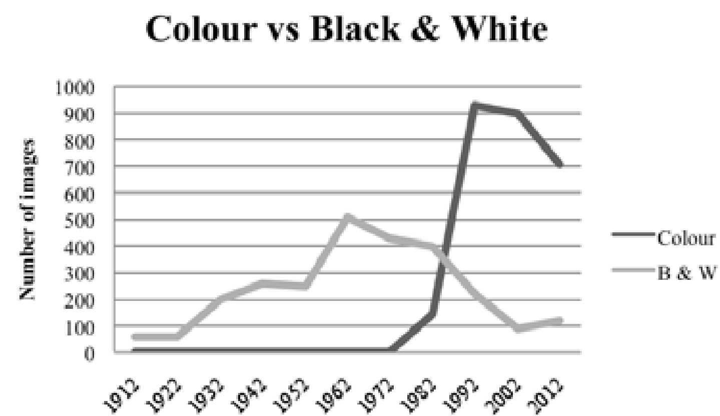
Images have been divided into three categories for this study: technical drawings, illustrations and photographs. At the outset, photographs were

[6] *The quality of technical drawings went into decline in the 1930s; hence other mediums gained popularity (Laine 2003, p. 35).*

the smallest and rarest of images used. That relationship with other images clearly inverts over time. Production and reproduction costs had much to do with the change. It became cheaper, faster and easier to make photographs and print them in journals like this.[7]

It seems fitting to point out here that ARK does not commission photographs, but receives a selection directly from architects. However, they do have suggested guidelines they ask contributors to follow.[8] So whilethe editorial team of the journal is to some degree at the mercy of the architects in terms of submissions, they both request a certain type of image and of course have the final word on what makes it into print. At the outset of the journal's history, the low incidence of photographs meant illustrations were often the means of rendering buildings to the reader's imagination. Photographs and photo-realistic renders have almost entirely replaced those drawings, as can be seen in figure seven. The data-centric world of 1972 is clearly revealed in that chart, where both the number of photographs and illustrations drops whilst the number of technical drawings increases. Moreover, during that year photographs were reduced to the quality of line-drawings, having their grey-scales removed in favour of ultra-high contrast black and white images.

Fact 4. Black and white is replaced by colour in the 1980s[9]



It is no surprise that images were exclusively black and white in the be-

[7] *In 1880 the half tone-process became economically viable, and the new technology was fully exploited by many journals in the 1890s (Robinson and Herschman, 1990, p. 2).*

[8] *The 2009 Guidelines include: attention paid to vantage points and atmosphere. For interiors, the inclusion of fireplaces, flowers, and living environments is suggested in lieu of empty spaces. For exteriors, photos taken from all sides, during different times of day and throughout the year are requested in order to give readers a complete picture. Detail shots are additionally requested.*
Images should be submitted without cropping where possible, so as to give more options for the editorial images. Submissions comprised of several images are requested, but the architect is welcomed to suggest which images are preferred. The last point is telling, for many of the guidelines are not followed according to the data produced by this study.

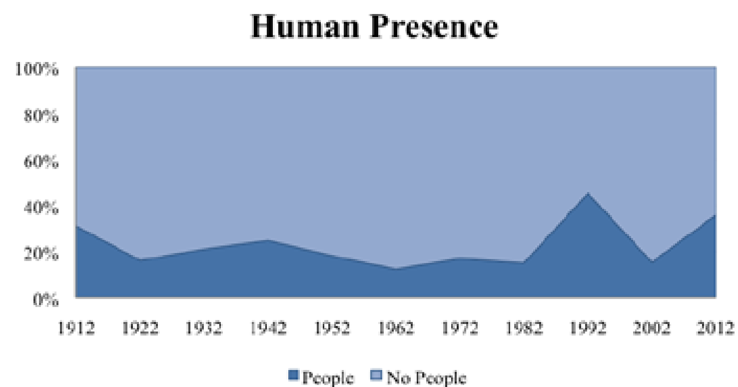
[9] *The first colour photograph I came across in this study was in 1982, other than advertising photographs in colour in the 1972 editions. However, Laine (2003, p. 24, 49) points out that occasional colour illustrations were included as early as 1906 and a rare colour photograph was printed in 1956.*

Figure 10
ARK 8/1982, pp. 36–37.

ginning, and that they were replaced by colour photography at a later date. It might, however, surprise some to see that change does not occur until the 1980s. It was technically feasible though more expensive to reproduce colour much sooner than that. Laine (2003, p. 24, 49) points out that a colour illustration was featured once in 1906 and a rare colour photo appeared in the review in 1956. But in addition to budget, there is reason to believe resistance to change and architecture's alignment with fine-art practices are also reasons for the late arrival of colour into the pages of the journal. It was not until the late 1990s that galleries started exhibiting colour photography. Prior to that, only black and white images were considered artistic.[10]

Equally interesting is the small but significant rise in the use of black and white images in the 21st century after 40 years of a constant decrease in number. Likewise, it is important to mention that the journal has always featured small black and white portraits of architects in a directory at the end of the publication. Were the instances of these removed from the data sets, the number of black and white photographs would be reduced by at least 25% from the 1990s onwards.

Fact 5. People come and go in this publication



There is no clear evidence to suggest a trend towards putting more people into photographs. The graph fluctuates over the hundred years analysed. However, human presence peaked in 1992 and has been on the rise for the past decade.[11] This fact parallels

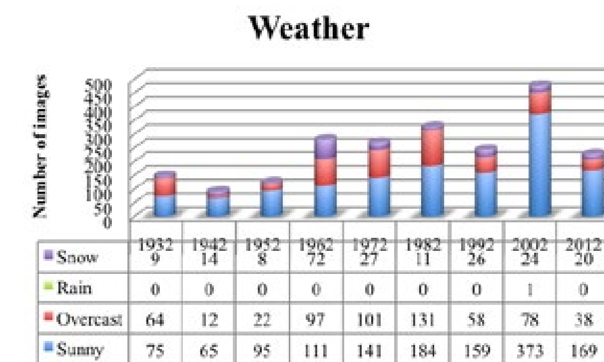
[10] *Charlotte Cotton writes in The Photograph as Contemporary Art: «it was not until the 1990s that colour became the staple of photographic practice» in the fine art world (2004, p. 12).*

Figure 13
ARK 1942, p. 1 of yellow pages at end of publication (133).

textual references to 'the human' in this and other architectural publications: human scale, a sense of place, user-friendly design, etc. However, photographic conventions established in the 19th century are still being followed today. This is due in part to the technical nature of equipment used[12] and partly to the established visual conventions of drawing and painting discussed in the literature review. As a result, people are almost never included in architectural photos. But when they are, it is as a blur, a smear, or a swarm of ants. This issue is often discussed. Indeed it receives as much attention as the values of human scale.

Yet with the exception of the work of Iwan Baan, whose work can be seen in the *ARK* 1/2012 edition, as well as in most architectural publications, few photographers feature people in their photos. Again, as mentioned in section four, black and white portraits shot in studios were included in the tally for this data set. If those photographs were removed from the data, the incidence of people would drop almost to zero.

Fact 6. Finnish weather is not represented in the journal



	1932	1942	1952	1962	1972	1982	1992	2002	2012
Snow	9	14	8	72	27	11	26	24	20
Rain	0	0	0	0	0	0	0	1	0
Overcast	64	12	22	97	101	131	58	78	38
Sunny	75	65	95	111	141	184	159	373	169

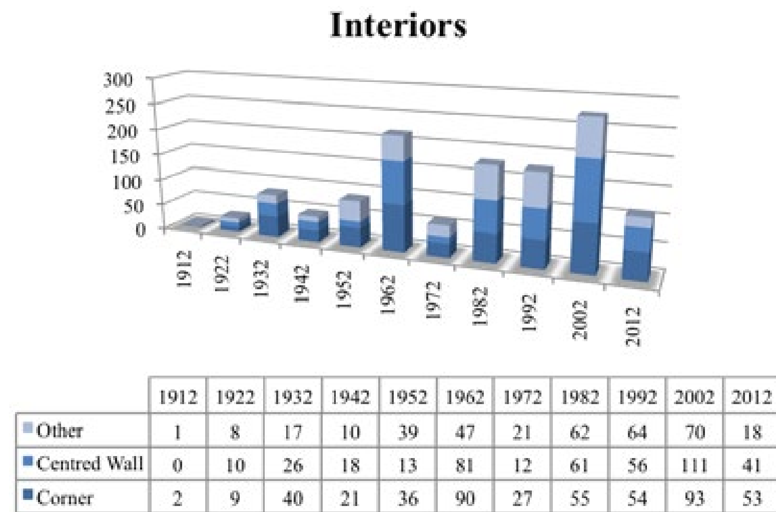
[11] *Many of those people appear in portraits and travel photography, not as actors in an architectural setting. The 10–20 portraits found in the directory at the end of the journal which potentially give a misleading view of the number of black and white images in the journal do the same with data regarding human presence.*

[12] *Large, cumbersome cameras holding glass plates with low sensitivity, causing long exposure times which effectively removed pedestrians from pictures. It could be argued that technical cameras such as the Alpa, Cambo WDS or Arca Swiss used by some architectural photographers, are nearly as heavy and difficult to use. None allow you to look directly with a viewfinder, and they have to be focussed with a laser. However, many are now using DSLR cameras with Tilt/Shift lenses. Moreover, ISO is no longer a problem, and shutter speeds only need to last several seconds for nocturnal photography.*

Figure 15
ARK 8/1982, p. 25.

As with the vast majority of architectural publications, ARK publishes images of buildings and urban settings almost exclusively under ‘Mediterranean skies’. For half the year, Finland is cold and dark, and during much of that time it is pelted with rain or covered in snow. That kind of weather is not represented in the journal by the architectural photographs selected, which opts almost exclusively for fair-weather photographs with the occasional picture of a snow-covered building under blue skies. Architects say much about the need for strong shadows to give the impression of volume and bring out surface detail and colour saturation. However, does that mean that fine photographic work more representational of the countless places around the globe where architecture is envisioned and depicted is not possible? One look at fine art, documentary photography of the built environment will provide an answer.

Fact 7. Interiors are shot with very limited compositional variation



	1912	1922	1932	1942	1952	1962	1972	1982	1992	2002	2012
Other	1	8	17	10	39	47	21	62	64	70	18
Centred Wall	0	10	26	18	13	81	12	61	56	111	41
Corner	2	9	40	21	36	90	27	55	54	93	53

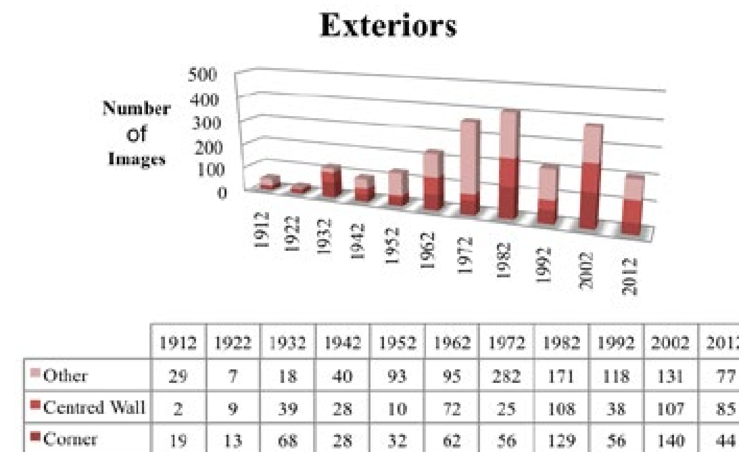
Architectural photographs can be divided easily into two basic categories: interior and exterior. The logic behind this division is both architectural (the design of indoor and outdoor spaces) as well as naturally photographic (weather and vantage points for exteriors, lighting and composition of people and elements such as furniture and props for interiors). A goal of this section was to determine the number of interior shots typically in use. It became evident from looking at repeated images that a subdivision into two main shots was possible: the centre shot and the corner shot. The third category — ‘other’ — was not statistically significant, on the whole.13

Figure 17
ARK 1/1922, p. 83.

Figure 18
ARK 8/1982, p. 59.

In short, from a compositional point of view, there are only four shots: axial images which centre the corner of a room or joint of two façades, or axial images which place the camera in the centre of that interior wall or façade. The majority of interior shots do not deviate from that pattern during the 100 years examined. Here is an example of a stylistic reduction that reduces the way space is perceived. It is another example of limiting discursive possibilities to a very small number. Figures 17 and 18 show how this technique of depiction spans the decades, eroding to some degree one’s awareness of the passing of time when looking at such images.

Fact 8. Exteriors are shot with more compositional variation



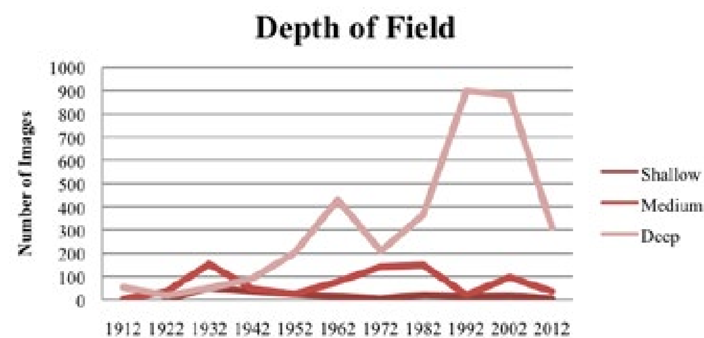
	1912	1922	1932	1942	1952	1962	1972	1982	1992	2002	2012
Other	29	7	18	40	93	95	282	171	118	131	77
Centred Wall	2	9	39	28	10	72	25	108	38	107	85
Corner	19	13	68	28	32	62	56	129	56	140	44

Figure 20
ARK 1/1992, pp. 54–55.

13 Notable exceptions are 1952, 1982 and 2002. However, on the whole it was clear that particularly interior but also exterior photographs featured compositions centred

on the corner or centre of a building. Numbers do not reflect a similar bifurcated set of images with a negligible third category when exteriors are scrutinised with the same method. Any shots which did not satisfy the requirements of the four specific categories were placed in 'other'. If the camera was not level with the vertical plane and either parallel with the horizontal plane of a wall or aimed at a corner (internal in courtyards) it was placed in 'other', for example. Equally, if there were people or objects placed in front of the building in such a way as to confuse the subject matter in a given image, it was placed in 'other'. The same is true for aerial shots and street photography seen in figure 20. Hence it is not surprising that a large number of images fall into the third category. Rather, it was the number of images that still fit perfectly into the binary opposition of corner and centre shots that was a source of amazement to this researcher.

Fact 9. Depth of field is maximised in this type of photography



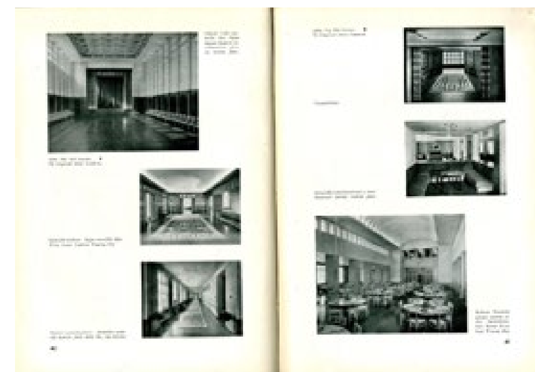


Figure 22
ARK 12/1932, pp. 40–41.

This set of data suggests that architects like things in focus. One of the main characteristics of architectural photography is sharpness and maximum depth-of-field. The practice of applying selected focus through the use of fast lenses, tilt/shift lenses, and post-production simulations of either/both effects is a common practice in commercial and fine art photography.[14] The lack of such images in a publication such as ARK might indicate a reluctance to follow ephemeral or even long-term trends; conversely, it might evince also reluctance to embrace pluralistic means of representing architecture. As with the categories for weather, composition, colour and the inclusion of people, a singular solution is applied repeatedly with little exception for the period of one hundred years.

Discussion

Architectural theorists have written a lot about how images have hijacked architecture, but who gives the hijackers orders? Taking up the photographer's perspective, this paper suggests that editorial decisions determine in the kinds of images specialists and non-specialists alike are familiar with. We are supposedly living in an innovation driven world, yet this study suggests there is reason to believe the case is otherwise in the architectural community. Is it possible to speculate why? Panofsky writes, in his famous book on perspective, that «*the result [of the discovery of Renaissance perspective] was a translation of psycho-physiological space into mathematical space; in other words, an objectification of the subjective*» (Panofsky, 1991, p. 66). As with the discovery of vanishing points and the application of the grid to drawing, certain techniques in architectural photography appear to have provided a clear, satisfying system for the realistic depiction of buildings that deploys a code from one architect to another.

Perhaps, as Čeferin (2003) observed of architectural journalism, it is simply quickest, safest and easiest to follow established conventions. Robert Sobieszek asserts in his book on 19th century architectural photography, *This Edifice is Colossal*, that «*what had become pictorial convention during the 1850s still obtains [sic] today in the photography of most corporate headquarters and government buildings*» (Sobieszek, 1986, p. 7).

The findings presented in this paper support that assertion, but it is not entirely clear why. First hand experience as a photographer may shed some light. I have found that, as with most commercial practices, time and cost are key factors. Each are kept to the minimum required in order to produce a product that meets the professional standard. Little thought is given to the meaning of such activity or the cyclical effects of commissioning a certain type of image. A limited circle of people is commissioned to produce a limited type of pictures. The images are a kind of code amongst specialists — that code determines the 'professional looking' quality recognised by architects. However, in practice the repetition of that code is produced because ultimately little time is spent on the research and development of other types of images. Established conventions are followed, not questioned.

Results produce a clear picture: professional architectural photography relies upon the implementation of standardised, stereotyped imagery with little deviation from formulaic practices. Whilst photographs have come to occupy more space in the journal over time, the type of phoISSUEtographs has varied little. We see the same angles, the same light, the same weather, the same empty spaces over and over again. We see time frozen; life is placed somewhere between a museum and the still-life photographer's studio.

The duration of this practice suggests it has been successful. But do these conventions communicate effectively to non-specialist readers? *ARK* has limited circulation[15], and most of the copies goes to members of the Finnish Association of Architects and to institutions, such as libraries, where the next generation of designers are educated. In the 100 year anniversary issue of *ARK*, historian, writer, architect, member of the Finnish Board of Antiquities, and editor of *ARK*, Sirkkaliisa Jetsonen, writes: «*The Review takes it as its greatest responsibility to advance the public's knowledge of architecture and architectural taste*» (Jetsonen, 2003, p. 27). Doing so via an extremely limited discourse of stereotyped images is a practice that must be scrutinised further.

In response to these and other questions, Jorma Mukala, the current editor-in-chief of *ARK* had much to say in an interview he granted me in February 2014. Firstly, he was staggered by the news that analysis turned up only one picture in the rain during the period scrutinised. He enthusiastically suggested a special issue of ARK dedicated to rain and the appearance of a selection of building materials under varied weather conditions. When pushed further about the lack of varied weather conditions, he said «*It tells quite a lot about the Finnish mentality. There's too much rain outside. We*

[14] *An almost inexhaustible number of examples could be produced, but a short list would include the tilt shift aerial photographs by artists like Vincent Laforet, the «miniature faking» work of Olivo Barbieri, and the popularity of Lensbaby and Insta- gram which have democratised the technology as well as the technique.*

[15] *According to Miina Blot, the current assistant editor of ARK, the circula- tion is 4400 copies, of which some 3000 go to SAFA members, the rest being regular subscriptions.*

don't want to see it in ARK! Finnish people want to go to Italy where there's nice people and sunlight. So we try to invent Italy here.» When pressed to answer why the practice of using pictures shot in sunny conditions is not a Finnish phenomenon, but a widespread and perhaps universal practice, he answered that: «*it is quite a narrow culture – architecture – we know what is happening all around.*» Taking out a copy of the British Architectural Review (AR), he continued, «*I take influences from abroad. I look at the reviews from different countries and of course I try to bring in things which influence me*» Presumably, many editors have done the same in the past and continue to do so.

Mukala was in agreement that architectural photography has not changed much over time. He believes that pictures taken of Aalto's works at the time of completion would be published if submitted to contemporary journals today. Not only has the photography altered little, he went on to say, «*The way journals use photography have not changed much. Maybe architecture tries to give a concise description: landscape, exterior, main interior spaces – and that's it.*» With regard to the kind of photographs one sees repeatedly he said: «*the problem is we try to give a kind of neutral, objective kind of photo. Expressive photos are too expressive.*» When pushed on the meaning of words like expressive and objective, he recognised that: «*Objectivity is one expression. For me objectivityis not real. It's a style, absolutely – the architectural review style.*»

As with many cultural practices, the implementation of conventions over time creates a sense of what is natural and real. Art historian WJT Mitchell discusses the idea of the natural versus the conventional in his book *Iconography*. He writes that Ernst Gombrich, one of the most notable art historians of the 20th century, tried to argue the existence of a dichotomy of natural signs (images) versus conventional signs (language). Mitchell concludes in opposition to Gombrich that the natural is elided with the conventional — they are one and the same (Mitchell, 1986, p. 88). As Blaise Pascal once said, custom is our nature; hence, any assertions about objective, optical truth must be placed in doubt.

The belief that certain images are objective rather than conventionalised styles has serious implications, both societal and commercial. Firstly, because it raises an obvious question: what are the effects of this limited vocabulary of images on design? As we are talking about the designers of the built environment, the question is worth serious consideration. For when asked a different way, the question is whether or not standardised images with little variation limit the number of design concepts that are eventually built. Secondly, there is the question of brand identity. One wonders why the architectural community is saying so little as separate companies through the photography they commission and publish. What is it about architects that make them favour similar, undifferentiated images — a practice that appears to span a century of trends and economic, sociological, governmental and technological changes?

Moreover, why do they tend to work with just one or sometimes two photographers in each country? Isn't that a sure way of making everyone's work look the same, when focussed through the same lens? Perhaps, there is the default assumption that it doesn't matter, since professional architectural photography produces objective, neutral photographs that allow the individual designs of each architect to shine through. But if neutrality is just another style, and international style in architecture went out of fashion a long time ago - why is the same not true of the international style of architectural photography? Conventions appear to provide the answer.

There clearly is a rulebook which stipulates specifically what is and isn't good architectural photography. Just as the 19th century was all about Greco-Roman Orders or Gothic windows; the 20th century avant-garde was essentially a dogmatic, systematised response to the nineteenth century riot of styles, putting a modern universalised system in its place. Similarly, contemporary architectural photography reveals an adherence to a system based on conventionalised beliefs about the right way of doing things — the only way. The amusing thing about those rules is how silly they seem in retrospect.

A book which illustrates that point perfectly, written in Barcelona in 1960, is simply titled: *Urbanity*. A rule book for the would-be urbane, it starts off by listing duties to God, including: «*entering the temple, genuflexion, postures, during mass, of the sacraments, other religious solemnities, prayer and song*». (1960, p. 9) These are not perhaps the key issues that concern the contemporary reader of *Monocle* or the *New Yorker*. The rules are several, precise and of the following sort (Ibid., p. 36):

> When visiting the Mother Superior you must remove your apron.
>
> Before entering her room, ask permission, and if the door is closed, tap lightly, waiting for an answer.
>
> Once inside, you will neither examine nor look at what is on the table, and will maintain a respectful distance, without sitting unless indicated by the Mother Superior.
>
> Upon entering, you will kiss the hand of the Mother Superior and will respectfully exposit the reason for your visit. Upon finishing, you will thank the Mother Superior for her time and you will once again kiss her hand.
>
> Upon seeing the Mother Superior you must stop to greet her, let her pass and not continue on your way until she has done so. It is not correct to telephone people who warrant respect.

Clearly, we are privileged here to a glimpse at another world. It is one that teaches an obvious lesson: rules change. That fact is key because it means that what seems like optical truth today becomes tomorrow's flat earth. When the book was written, Spain was governed by a dictatorship, and society's rulebook was written largely by the church. Things have certainly changed since then. Countless research projects has been done on both the mechanisms and results of such change. Whilst I prefer not to stretch the dictatorship comparison too far, I do see the architecture community's use of photography as limited by its adherence to a short list of conventions. I think photography could serve architecture very well as a means of doing research into these sorts of conventionalised practices, contributing to the reading and appreciation of architecture by specialists and non-specialists alike.

Conclusions

Content analysis of the images in *ARK* has served as a means of addressing the broader issue of conventions in architecture and some of the default beliefs that have helped to establish such conventions. Words like as 'objectivity' are often used by architects to explain and justify those conventions. Hopefully this paper has caused the reader to question the objectivity of statements about objectivity.

Equally in doubt, perhaps, is the methodology of this study. Sample size and scope are significant limitations, amongst a host of others.[16] Future research would require an increase to the number of issues analysed. By doing content analysis of one year out of ten, one can only speak with certainty about that year. Each year does not necessarily represent the other nine years of each decade that were omitted from study. However, continuity across the decades in several areas suggested this was less

of a problem than a future challenge.

In terms of scope, this is a regionally specific study, and it would be equally worthwhile to correlate or falsify these findings in other regions. If this analysis of ARK can be taken as the vertical component of a study, deep in time but narrow in scope, an architectural encyclopaedia such as the *Phaidon World Atlas of Architecture* falls naturally onto the horizontal axis. Applying similar methods to that publication would produce a fuller picture about the editorial practices of a broader architectural community. It would be interesting to the resultant data about a global publication. A cursory glance suggests the *Phaidon World Atlas of Architecture* erodes the sense of place via its selection of photographs in the same way *ARK* does.

It is of course tempting to end on a strong statement like that, but it paints an unfair picture. This paper is not an attack on *ARK* or the broader architectural and publishing communities. An architectural photographer myself, I think it worthwhile to point out the obvious: that photographers have absented themselves from the debate and bear much of the responsibility for the problematics discussed here. However, accountability is surely less at issue than which steps are viable and suitable to address the problem and improve the current state of affairs.

Investigation into the reasons behind the conventions followed in architectural photography as well as the success or failure of other options are two obvious directions to follow. Increased dialogue between editors, architects and photographers will address the elephant in the room by asking whether or not uniformity and repetition are really the best way to get a sense of place. Furthermore, it will expose the problematics of several default beliefs raised in this paper which can only create new opportunities for architects, academics, critics and photographers alike.

Photographs are frequently treated as transparent windows on the world. But it is easily argued that they are actually constructed via the application of specific decisions to do one thing and not another. What those things are can be intuitive and unconscious, as in the case of the snapshot, or specific, conscious and codified through training and experience. The nine facts selected here are a way of identifying some of those decisions in order to make them visible to the reader.

Editorial decisions are subject to the range and number of images supplied by the architect and/or photographer. Photographic decisions are conditioned by the current brief supplied during the job, as well as by prior commissions, by current and past publications the photographer has seen. The point here, however, is that editorial and photographic decisions have much to do with the appearance of architectural photographs and those images have much to do with the comprehension of architecture. The decision to follow conventions is a decision. Architects, photographers and editors alike have agreed to do so for over a hundred years with little deviation from established norms, as evidenced by this study of one of the world's oldest architectural reviews.

To make that point has been the first goal of this paper. The second is to postulate some of the potential causes of that decision. A third, more idealistic one, would be to ask the reader to consider effects of that decision. What does it mean to represent the world in such a narrow way? What does it do to architecture? Architectural photographs and the journals they are published in are not neutral documents; rather, they must be taken as part of the design process that ultimately shapes not only the world of the media, but also the built environment we live in, due to their role as the source book and rule book for the way things look.

[16] *Space Occupied was a key issue, and it proved one of the hardest to deter- mine because conventions in graphic design changed drastically over time. Full-page bleeds and double-page spreads are a recent invention. But what is to be made of pages where images do indeed cover a double page spread, but with ample empty space around each, as seen in figure 1? Ultimately, it was decided that mosaics of images would be counted as full pages of images. Early use of orthochromatic film renders all skies overcast in early publications. This problem means some degree of guesswork is at times required. It was not possible to determine the weather with any degree of accuracy for the period from 1912 to 1932 or in 1972, due to poor image quality. Images from those years were not counted in the weather section. In order to minimise the problem, of human error, images were itemised four times: twice by myself and twice by an assistant. For the most part numbers corresponded, but where this was not the case the discrepan- cy was never more than ±5 images per category.*

LITERATURE

Čeferin, P., 2003. Constructing a Legend: The International Exhibitions of Finnish Architecture 1957—1967. Helsinki: SKS (Finnish Literature Society).
Colomina, B., 2000. Privacy and Publicity. Cambridge: MIT Press.
Comazzi, J., 2012. Balthazar Korab, Architect of Photography. Princeton: Princeton Architectural Press.
Compañía de Santa Teresa de Jesús, 1960. Urbanidad,. Barcelona: Altés, S.L.
Connah, R., 2006. How Architecture got its Hump. Cambridge: The MIT Press.
Corbin, J. A., & Strauss, A. 2008. Basics of qualitative research, 3rd ed. Thousand Oaks, CA: Sage.
Cotton, C., 2004. The Photograph as Contemporary Art. London: Thames and Hudson.
De Maré, E., 1961. Photography and Architecture. London: The Architectural Press.
Elwall, R., 2004. Building with Light. London: RIBA.
Iloniemi, L., 2004. Is it all About Image? London: Wiley-Academy.
Jetsonen, S., 2003. Along the Years. Finnish Architectural Review, 2, pp. 25—27.
Laine, L., 2003. Houses built with ink: A century of the Finnish Architectural Review, visual history and spatial narratives. Helsinki: Helsinki University of Technology.
Leach, N., 1999. Anaesthetics of Architecture. Cambridge: The MIT Press.
Mitchell, W.J.T., 1986. Iconology: Image, Text, Ideology. Chicago: University of Chicago Press.
Mukala, J., 2014. Personal interview. Interviewed by M. Goodwin. Helsinki, 5 February 2014.
Pallasmaa, J., 2011. The Embodied Image: Imagination and Imagery in Architecture. Chichester: John Wiley & Sons.
Panofsky, E., 1991. Perspective as Symbolic Form. New York: Zone Books.
Rattenbury, K. ed., 2002. This is Not Architecture: Media Constructions. New York: Routledge.
Robinson, C. and Herschman, J., 1990. Architecture Transformed. A History of Architectural Photography from 1839 to Present. New York: Architectural League of New York.
Szarkowski, J., 2007. The Photographer's Eye. New York: The Museum of Modern Art.
Shore, S., 2007. The Nature of Photographs. London: Phaidon Press.
Shulman, J., 1977. The Photography of Architecture and Design: Photographing Buildings, Interiors, and the Visual Arts. New York: Whitney Library of Design / Watson-Guptill.
Shulman, J., 1999. Photography and its Architecture. Cologne: Taschen.
Sobieszek, R.A., 1986. This Edifice Is Colossal: 19th Century Architectural Photography. New York: Intl. Museum of Photography at George Eastman House.
Van Leeuwen, L. and Jewitt, C., 2001. Handbook of Visual Analysis. London: Sage.
Zumthor, P., 2006. Atmospheres: Architectural Environments — Surrounding Objects. Basel: Birkhäuser.

BIOGRAPHICAL INFORMATION

Marc Goodwin
Department of Media, Photography
Aalto University School of Art, Design and Architecture
Address: Hämeentie 135 C,
00560 Helsinki, Finland
Tel: +358 465 886 566
www.archmospheres.com
www.marc-goodwin.com
E-mail: marc.goodwin@aalto.fi

Marc Goodwin is a doctoral student at Aalto University School of Art, Design and Architecture where he also teaches courses in architectural photography.

He is an architectural photographer with ten years of experience working with architects and publishers in Finland, Denmark, Spain, Italy and the UK.

Recent publications include the Finnish Centre for Architecture (2014), the Finnish Architectural Review (ARK 2/2013, ARK 5/2012), The Journal of Artistic Research (JAR 3/2013), Pro Interior (3/2013), A+U magazine (2012).

In addition to his dissertation, he is currently working on an extensive, interpretive, photographic project for a book titled Event Space by Professor Dorita Hannah (Routledge, 2014), is co-editing an anthology of photographic essays with Professor Merja Salo and Doctor Mika Elo, and curated a recent exhibition at the Finnish Museum of Architecture titled Grey Matter (May 2014).

7.2

A HINGE: FIELD-TESTING THE RELATIONSHIP BETWEEN PHOTOGRAPHY AND ARCHITECTURE

Abstract

This article seeks to share the methods and preliminary results of an artistic research project in the field of architectural photography. A central concern is the representation of atmosphere in place of the standard depiction of objects. Important also is an attempt at co-design through an interview process with architects based on the notion of the dialectic. This aspect of the study is important not only for this experiment itself but is also crucial for analyzing the scalability of practices pursued in this investigation. Findings include excerpts from interviews and examples of photographs. More than just a project about photographic practices, however, this study is part of a larger investigation into the relationship that has developed between photography and architecture, focussing especially on Finland and Denmark, and the institutional practices of architects, publishers and photographers working in collaboration.

Introduction

Atmosphere might be compared to the *genius loci*, a benevolent spirit who has been demoted over time. Can it protect us if we cease to believe in it? What will happen when the jinn is forgotten altogether, vanishing into thin air?

This question is posed to the reader regardless of his or her background, and is hence ironically placeless. Ironic, for it will soon become clear that place is a crucial issue addressed within this exposition: the representation, consumption, production and reproduction of particular places seen in photographs (loci qua foci, to be more concise). Architectural practices are particularly central to the author's perspective on photography. Of interest also are photographic practices and what they have done to construct the way we see architecture. Of course, perspective is an old trick used to reduce points of view to the singular – but in this case that singularity is bifurcated and the author is stuck in the middle.

The mechanics of such tricks, it will be seen, are perhaps more important still for an understanding of the broader issues addressed here. What, I have availed to ask, are the conventions (received as correct, professional practice by a particular clique) used to deploy spaces and places? Those conventions and the spaces they connect to, will be addressed together with the notion of place – a particular nuance of space. But first it must be stated at the outset that this research question (which the patient reader will find articulated clearly at the end of this introduction) was not directed to or from a supposed universal. It was initially aimed at people in one profession and constructed from the specific perspective of another. I am referring to architects and photographers, as the reader will no doubt have realised, six of the first and one of the latter (me). But first we must look at another pair of practitioners, as historical context and background must be established before present specifics can be addressed.

Architects and philosophers have examined the notion of atmosphere as a communicable aspect of the phenomenological experience of space, a social construct and a means to an end in the design of spatial experiences. Their work forms much of the context for this study and informed to a large extent the content of the interviews conducted. Atmosphere, it is hypothesised, allows for a shift in the focus of the architectural photograph.

Jean Baudrillard addressed atmosphere in his early work, *The System of Objects*. The work looks at the world "no longer given but produced.constructed" and asserts that, acting as an "engineer of atmosphere" [1] mankind has converted space into a system into which cultural meaning is projected. The bourgeois engineering of one sort of space is central to his argument. Atmosphere is defined as the "systematic cul-

tural connotation at the level of objects" [2]. This notion of atmosphere has proved an important part of the background for this study — a means of questioning the principal concepts and a possible explanation for the uniformity of architectural atmosphere as found in publications.

Another key component to the enquiry is Gernot Böhme's understanding of atmosphere. In addition to depicting material objects removed from their context, photographs might be used as a method to explore and represent Böhme's term "space of moods" [3]. His discourse is particularly a propos as it addresses the subject "both from the side of subjects and from the side of objects, from the side of reception aesthetics and from the side of production aesthetics" [4]. Aside from being expressed in terms strangely Cartesian for a phenomenological discourse, the production/reception binary opposition is significant for the representation of space. It is not architecture but scenography which Böhme uses as a testing ground for thought experiments into atmosphere. He writes: "It is the art of the stage set which rids atmospheres of the odour of the irrational: here, it is a question of producing atmospheres. This whole undertaking would be meaningless if atmospheres were something purely subjective. For the stage-set artist must relate them to a wider audience, which shall experience the atmosphere generated on the stage in, by and large, the same way" [5]. The idea that you can identify and synthesize distinct atmospheres and deploy them with predictable results to an audience (implying interpersonal agreement in reception) is the second motivation for this experiment. You can make and receive atmospheres in a way that is intrapersonal and reliable he says; as proof he offers the work of scenographers. Could the same be said of architects and photographers?

An architectural vision of atmospheres is provided by Peter Zumthor, bringing us even closer to the focus of this photographic project. Zumthor presents the idea of a set of component parts crucial to the production of atmospheres in his work. He argues that "we perceive atmosphere through our emotional sensibility — a form of perception that works incredibly quickly, and which we humans evidently need to help us survive" [6] The point is that if atmosphere is part of the way we encounter the world, shouldn't the spaces we inhabit take it into account? His talk is instructive as it centres on methods and means, "the task of creating architectural atmosphere comes down to craft and graft [...] processes and interests, instruments and tools" [7] he says, giving nine specific examples of things he uses to produce atmospheres. I will argue that the representation of such spaces ought to raise similar questions because much of architectural space is represented and hence understood through photography. Shouldn't what we write about space and how we depict it through images have atmosphere as part of the core vocabulary? One is almost tempted to ask here, can the subaltern not speak? [8] What are the consequences of banning, avoiding or overlooking this aspect of our views on the world?Trying to establish the atmospheres of a selection of photographs (and document the reception of each as commercially viable or not) might also allow for an investigation into certain institutional practices largely ignored by architects, photographers and publishers, at present [9].

Finnish architect, Juhani Pallasmaa has recently addressed the subject as part of his exploration into the embodied image and haptic architecture in the Finnish Architectural Review [10]. He is an interesting point of reference for this study, as he has spent several years writing against the use of photographs in the deployment of architecture [11]. Building on my understanding of his arguments about architecture and images, established through several written works, I was fortunate to interview Mr Pallasmaa and discuss these issues with him. From the outset he took a far less black and white position on photography than expected. Statements like, "I cannot think what architecture would do without photography, and I respect good architectural photography," were abundant. It seems, in fact, that his argument points more to the need for a deeper and richer understanding of the world through the images that represent it rather than eliminate image making from certain fields. Images must awaken the imagination, not shut it down: "There is always more to a photograph than the picture. It conveys because of our fantastic sense of imagination [sic]." Pallasmaa's argument for the sort of poetic image discussed by Gaston Bachelard strikes a chord: all spaces have an atmosphere, so presumably do all photographs.

Photographers, however, appear to have neglected atmospheres entirely. Given the dearth of commercial photographers reflecting on and writing about their practices, such silence is not surprising – but no less alarming. What if doctors said nothing about medicine, leaving the articulation of that practice to those that might achieve it from the safe distance of theory? That type of specialised articulation of practices in photography is sorely needed, according to Christopher Bedford in the Aperture publication, Words Without Pictures: "If photography is to be understood.... this will require a rich and thorough understanding of the myriad decisions that precede the production of the photographic image, ranging from the conceptual and obtuse to the mundane and pragmatic" [12]. Indeed, it is difficult to think of anything of critical substance written by architectural photographers since Eric de Maré and Julius Shulman's expositions of their work in the 1960s and 1970s [13]. All the while and to this day, architects and academics from diverse backgrounds have had much to say on the topic. But rarely if ever have they done so with any photographic understanding. For that reason, this exposition attempts to make a step towards one such articulation, and focusses on atmosphere in the photography of architecture as a means of doing so. In order for that to happen the following questions must be addressed:

Given the diversity of the world architectural photography represents, is it not strange and intriguing how often the same atmosphere is repeated in such photographs?

What would happen if new options were pursued as a means of representing an architectural work instead of sticking to conventional practices? What would the images look like and how would the architectural community react?

What might these atmosphere-centred photographs be called? Are they *Atmographs* or *Archmospheres*? These are two clumsy neologisms in need of definition [14]:

> Atmographs: via this means of depiction connotation creates the atmosphere perceived in a photo. This sort of photograph might attempt to reveal the invisible or overlooked, challenge or confront statements made by the architect or simply reinterpret existing forms of representation [15]. Here the goal is to look beyond the clues given by the architect in the interview.

> Archmospheres: denotation and standard architectural photographic tropes are employed here but the focus has shifted somewhat. Might it not be possible to centre the photograph less on the material object depicted and more on the atmosphere the architect indicated as relevant and significant in the first interview of this process? The intention of the architect is relevent here because their commercial practices are significant to this study – this is not fine art work but rather a fusion of commission-based art practices with artistic research practices.

Finally, are we really stuck with one type of photograph or the other? Or can we synthesize the photographer's and the architect's propositions to create a third? Can we perhaps extend the working relationship extant between client and commissioned artist by applying this method? Might it prove possible to create a new sort brief influenced by the method of the dialectic?

Field-testing was conducted on the basis that such a brief can be creat-

ed — but not without dialogue. Interviews took place before and after photography in search of thesis, antithesis and synthesis. Whilst far from falling neatly into each of the three categories, images were produced with the hope that a half way point between photographic and architectural practices might produce new sorts of images, some atmographs, some archmospheres, surprising to client and artist alike. This idea of a dialogue between architect and photographer, where propositions are synthesized to produce unanticipated images instead of the standard proposition of the commercial brief where novelty, innovation and surprises are anathema to good commercial practice, is the second main idea offered here. I introduce the terms dialectical interview and feedback loop in order to discuss that idea, which will be returned to later. Before that, there is a very present need for a roadmap.

This study is not a view from nowhere – the sort proffered by science – yet as we are still within the confines of academic practice, the standard structure one expects when reading this sort of document has not been all together eschewed. A section on materials and methods follows this introduction. In it one will find a brief description of the concerns behind the medium of experimentation (photography) and methods of inquiry (interviews and photography) as well as commentary about certain unanticipated national conventions (customs) encountered due to the fact that fieldwork was conducted in two countries. Findings take the form of interviews and photographs. They are each presented as separate artefacts that turn the reader into viewer or listener, thanks to the (multi) medium through which this article is accessed. Discussion assesses the value of both method (dialectical interviews and an attempt to produce images with a focus on atmosphere), findings (the work produced and industry response) and the future viability of each. It is there that some value may be found. For it asks what the specific applications of this work outside of this experiment might be. Can research lead to new practices?

Lastly, though it may seem like several questions are being asked in the short space of a few pages, I believe they can all be condensed down to just two: one specific and small, but acting like a centre of gravity, such as the nucleus of an atom, and the other larger large and gaseous like a cloud, in which electrons orbit that nucleus in ways difficult to pinpoint but not impossible to predict. The tiny lump at the core is the question of whether atmosphere might replace material objects as the focus of architectural photographs. It was the specific point of departure in all discussions, the concept at the back of my mind when making images [16], and the concept to which I now return when trying to articulate practices and analyze results. The gas, to use Van Helmont's word for chaos [17], might be described as that cluster of questions whose orbits all describe conventions and practices. Asking questions through photographs and interviews, releases a lot of such gas into the atmosphere. We learn much about two practices – photographic and architectural – which have more in common than might at first be thought, and have been locked together since the invention of the former, which might be said to account for the reinvention of the latter.

Materials and Methods

To field-test the dialectical process, photographic experiments were conducted over the course of a year in order to articulate questions in a visual form and interview architects and publishers about their response to these new techniques. The contact points between photography and research are several, but crucial to the work is the desire to produce questions via photographs. In this way, photography is used as a method to enquire into conventional practices within three intertwined industries: photography, publishing and architecture. The method of investigation combines artistic and ethnographic research with discourse analysis. All of those terms require some unpacking to make sense within the context of this study.

In this project, photography plays three roles: photography as a research object, photography as research method, and photography as research result.

1. Photography creates a focal point to allow for discussions about conventional practices in the architectural press, versus an atmosphere-centred alternative at the earliest stage of field work: interviews with experts. The advantage of using images to this end has been demonstrated by advocates of photo elicitation. In practice, it facilitated discussion, especially where the person interviewed was not comfortable speaking in English.

2. Photography is also used as a research method. The idea is that there is important knowledge stored in artistic practices, knowledge that can be shared through a close study of methods and practices. In order to prove this, new work had to be produced. As commission based photography is the concern, it was understood that the interviews would act in place of standard photographic briefs which stipulate under normal circumstances the number and type of images to be taken by the photographer. The interview enacts the dialectical process normally lacking in commissioned photography. Hence, both the process of commissioning and that of producing commissioned work is altered by the dialectical process. A feedback loop of ideas and interests replaces the one-way street of client/artist commissions.

3. Photography is also an important nexus between artist and viewer at the final stage of the project. In order to continue the process of dialogue with a greater audience, an online gallery, which is currently under development, will allow readers to view the photographs and judge for themselves whether or not they agree with assertions made about the value of atmosphere and the validity of its reification through images produced. The images will be shared both in printed publications and via an interactive website. The link to the website in its current, preliminary phase is: www.archmospheres.com. Fine art exhibition is neither relevant nor sought.

Ethnography is crucial to the study in order to gain additional knowledge about one half of the field of enquiry: architecture. Not an architect myself, the interviews act as method to gain insight from working experts. Ten years of work as an architectural photographer allow me to understand what is expected as a commissioned artist, but do not allow a similar understanding of what is expected of architects. Reading is a useful means of understanding architectural concerns, but is often unsympathetic to photographic practices, as in the case of Juhani Pallasmaa and Neil Leach [16]. In the end it is the interviews that have proved an invaluable method for enriching mutual understanding of practices and points of focus. In order to set them up, an email with a link to a Prezi presentation was sent to approximately ten Finnish and ten Danish architects. Six case studies were eventually selected out of the twenty initial contacts.

Finally, discourse analysis plays a crucial role in the process [17]. Frequently, one encounters differences between what is asserted through text and the images that support them. One cogent example is the frequent discussion of people-centred buildings and the human scale in architecture, illustrated by images without people in them. In this sense too, interviews with architects were a valuable tool to sketch out a map of their work and compile a wish list of ideas about how to represent it. Simultaneously, it was hoped that the sort of rhetoric they were influenced by would emerge

in the course of discussions. In short, it appeared meaningful to ask: what do you believe and how would you show it? The second round of interviews involved questions that would solicit responses to both sort of images: archmospheres (illustrations of asserted interests and wants) and atmographs (images not asked for but possibly of interest). In this way, the client might serve to test the aspirations and the rhetorical field in which the photographer works, and vice versa. It was also hoped that methods to develop a third way would emerge.

Images result from two interviews with Finnish architects AOA, K2S and JKMM and Danish Henning Larsen, 3XN, KHR and PLH. The first round of interviews was conducted before any photography took place, the second after one year of visiting and photographing the chosen site. The first round consisted of four main questions with a series of sub-questions connected to each. They were as follows:

— Do images make buildings?
— What is an atmosphere?
— What was the role of architectural photography in the birth of modernism; what is it now; what do you predict it will be in the future?
— What images of your project would you specifically like to see?

The second round of interviews involved looking at photos of each project and discussing the results. The first part used photo-elicitation techniques for looking at photographs of each project. The architect was asked to do the following:

— Choose the preferred image in a category or theme of architecture from 3 atmospheric options.
— Potentially distinguish between images they liked and images they would purchase.
— Choose 2, 4 or 6 images through which to tell the story of the project.
— Show a favourite image of architecture (not from this project and not from a project of their own).

It is here where attempts are made to analyse potential slippages between the subject's voiced opinions and their, perhaps ingrained, business sense of what is suitable. Drawing attention to preferences versus purchases, it was hoped some light might be cast on core beliefs about the use of images, thereby problematising them and raising awareness about decisions that result from those beliefs.

The interview also included an evaluation of the effectiveness of key concepts: dialectic, conventions and atmosphere.

One such interview is included at the end of this article (appendix 1).

Click on the image to open interview in separate tab

Before moving on to the results section, it seems worth saying a word or two more about the differences of this process as experienced in Finland and Denmark. In the case of the former, it took nearly a year of phone calls and emails before it became possible to speak with anyone from any of these three offices. In the end, it was only through personal contacts used as a form of reassurance that meetings eventually became possible. However, once the initial meeting took place, all architects were extremely open, helpful and dedicated to the project. They were thoughtful and insightful in the interviews and eager to help in any way possible to make the project possible. The experience in Denmark was diametrically opposed.

After a one week visit to Copenhangen, I managed to meet with all of the major architects there: BIG, 3XN, Henning Larsen, SHL, Dorte Mandrup, CF Møller, PLH, KHR and COBE. All were very interested in the project and agreed to collaborate with

me. Then they all disappeared. BIG and COBE eventually took the trouble to email saying there had been a change in their policies, after several inquiries from me; Henning Larsen had a shake up in their staff, Dorte Mandrup and SHL simply vanished. In the end I did half a shoot of Henning Larsen's IT campus, half a shoot of KHR's school (because the staff forbid me to shoot after the architect had agreed) and a great deal of time was spent in 3XN's school and riding the metro from one PLH station to the next.

Ultimately, these factors had much to do with the selection process of partners in this experiment. I mention them in an attempt to articulate the mundane and pragmatic elements that Christopher Bedford calls for, as they have as much to do with the final outcome of a project as any creative decisions. They are all too rarely discussed. Are they considered unseemly or just unimportant?

Results - Images

This page provides links to downloadable pdfs which are offered as sketches used to work out what Archmospheres, Atmographs, or a synthesis of each might eventually look like and what role they might play in the representation (and subsequent understanding) of architecture.

It may be unclear at times what exactly the two categories are taken to mean and how they are evinced in the current use of images. Undoubtedly they slide between different roles. This could potentially lead to some confusion as to whether they are just illustrations or make claims at being methodical tools, or in what sense the images represent results.

For that reason, it may be helpful to return to an attempted definition of these images, clarifying the guiding principal behind their production, selection and consequent division.

Archmospheres — Appendix 2

These images seek to directly represent extracts of interviews, which were centred around the notion of atmosphere. This is therefore the point of departure for each image, as opposed to the depiction of objects from conventional views under conventional light and weather conditions. Nonetheless, these Archmospheres are the more conventionally correct images, on the whole. They are created with a client in mind, they do a job, meet requirements, seek to satisfy and answer rather than pose questions. Where they deviate from the type of images commonly found in architectural publications, they do so because of their focus on people (indicated by nearly all architects as being important), context, function of the building (not the building's functionality, which invariably means modernist architectural tropes attractively depicted via photographic ones), or references to the work of photographers who have made a name for themselves by doing something other than following standard operating procedures. They are, in a word, commissioned work. The difference here is that the commission stems from interviews — negotiation through dialogue — rather than briefs agreed between project architects and PR managers, prior to bringing the photographer in.

Atmographs — Appendix 3

This exposition is part of a larger research project, which investigates institutional practices of architects, publishers and photographers working in collaboration. That project sets out ideas about, and research into, what might be loosely termed the past, present and future of architectural photography, insofar as it examines conventions

and their possible meanings and effects over time.

While the first part studies the past through a careful analysis of published materials, and the third postulates possible future collaborations between academia and industry, this middle part is focused appropriately on the continuous present. The aim is to problematize default beliefs and practices, both those of the photographer and those of the architect. The first step was to enter into dialogues. The second was, of course, to take pictures. But of what sort? How might one become alert to one's own default practices and, more importantly, how might they be sidestepped? One answer has just been provided in the form of Archmospheres — architectural atmospheres - and their potential meaning. But perhaps they will not suffice, at least from the photographer's point of view. Hence, an attempt was made to produce Atmographs — atmospheres photographed — as another means of working. The goal here was a different one: to reveal the unexpected, the unseen, the undiscovered, via photographic practices not normally employed in the production of this sort of photography. Both the photographer and architect engage in an act of discovery through surprises equally able to disgust and delight. It is a bit like going for a walk with your eyes closed. On the one hand it will teach you how to see with your feet, on the other, you may bump into a tree or fall off a cliff.

With my artist hat on, I consider this a work in progress; but upon donning the academic's cap, I see this as research ripe for sharing. Questions that arise through art work are, I believe, valid and vital, as is the process of exploration. Much is written about artistic research from a theoretical distance. What it might mean and offer in terms of subjective knowledge and non-scientific investigation. And such guidelines are interesting to consider and have inspired this current undertaking. But they are nearly always written to argue for the need of such projects and imagine what they might be like: towards, in search of, about... What about the experience as lived, with sleeves rolled up and hands dirtied? Surely that part of the process is as vital as it is missing?

The results were perhaps hit and miss, and the taxonomies are certainly fuzzy at this early stage.

In the next phase I produced grids in order to search for gaps in each type of depiction where annexed to each assignment. I asked myself the following questions: Do all six case studies reflect an exploration into each type of image? Why and why not? Are more images needed or is more reflection on the methodology the order of the day? Have I really found a means of depicting atmosphere? Have I ceased to apply ingrained practices learning through years of repetition? Am I happy with these images? Are they as satisfying as those deemed the product of standard operating procedure? It is hoped that they will at least offer the reader some food for thought and an evaluation of the validity of some of the assertions and methods provided within the text of the exposition. But they are not themselves an endpoint.

Recordings

Thankfully, new mediums often offer new opportunities; such is the case here. An exposition such as this would not ordinarily include recorded interviews due to the limitations of print: medium specificity and space. Neither of these are a problem however, with an online publication. To some it may seem unnecessary listen to hours of interviews; hence, recordings are included only as an appendix to the article so that only interested readers (thenceforth listeners) will have the opportunity to do so. Like links to referenced sources, they act as an additional avenue of investigation, as and where such investigation is deemed useful. They are not, however, crucial to the understanding of propositions, evidence, methods offered here in this exposition. Efforts have been made to extract key parts interviews which may be found alongside images in the pdfs provided, in addition to appearing in their standard place: as evidence within textual arguments.

Discussion

A common element running through all of these interviews is the openness on the part of the architect to ideas presented. Much as with Juhani Pallasmaa, I had expected opposition to atmosphere-centred photography and received instead a nuanced version of my own thoughts and interests. I wondered about a statement made by Pallasmaa during our interview that "[t]he photograph always transcends its essence and becomes a world", and what it might mean in the course of this study. For it suggested that all photographs should be placed on even footing as a sort of document of the world, a source of data that was not merely physical but tied to memory and the senses. Yet, photographs were not viewed in that way at all by the architects who commissioned them (hence, for example, the statement about snap shots made by K2S). Pallasmaa spoke of "the power of certain iconic photographs" that had moved him, and this sentiment was repeated by nearly every architect interviewed. In short, the architects were intrigued, optimistic at the outset, and highly enthusiastic about the results. Moreover, they were critical of the standard depiction of architecture found in the press, nostalgic for the "iconic" imagery of the 1930s and interested in new trends. They claimed to be ready for a change.

It seems safe to assert that there were some contradictions in their way of seeing photography: on one hand as a source of data, an impartial, objective document and on the other a compelling means of persuasion and seduction. Perhaps these contradictions are due in part to the relatively unanalysed nature of architectural photography within the frame of architectural representation and as part of a larger frame-work of photographic media, whether commercial or fine arts in nature. Off the cuff responses often did not match up with commercial practices, suggesting perhaps a slippage between the two. That slippage might open up a space for new practices.

At stake here is a paradigm shift according to the Kuhnian model. That shift is already taking place, as evidenced by the extraordinary popularity of the photo-journalistic elements of Iwan Baan's work and the great success of Dead Pan: the representation of architectural spaces created by countless artists from Andreas Gursky to Agata Madejska [18]. Ultimately, it is a shift from an object centred depiction that is similar to still life photography of commercial products. This shift is important because images not only define professional practices and beliefs, but also shape reality and inform human actions: "the imagined will soon lead us to dictate what others should be imagining" [19]. They are not just models of reality, but models for it: creating ideals. But that they are dependent upon a rhetoric that is already there, prior to the viewing of individual images. Rhetoric is more than representation, it is a system that either assures or denies the force of argumentation before any argument is articulated.

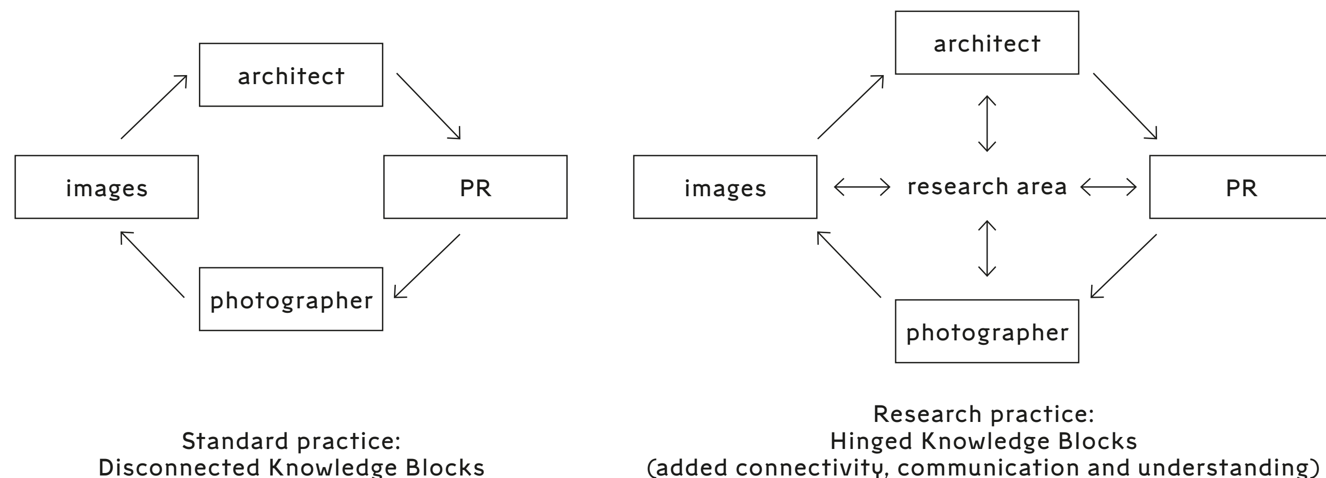
Manfredo Tafuri, in the 1970s, and Roger Connah, twenty years later, addressed the issue of representation that is central and crucial to the practice of architecture. Each is damning in his own way of the isolationist practices of the architectural community, specifically where the creation and deployment of images is concerned. Connah, who practiced in Finland for several years, writes: "Over the last thirty years of the twentieth century, very little in the architectural publishing scene actually helped the nonprofessional reading of images. Mostly, the ways of seeing architecture through photography remained in the private and privileged world of the architects themselves" [20]. Mafuri, sounding much like an angrier version of Connah, continues: "since the

30s architectural culture has preferred to deduce from its own centre what could have only been found by a complete and unprejudiced analysis of the ways in which the mythical society being addressed decodes, distorts, transforms, makes factual use of the messages launched by the builders of images. And this is a sign of the insecurity ofarchitectural culture itself" [21]. Connah focuses the issue specifically on architectural photography:"Altering the way we read architecture, which includes the way photography informs and deforms architectural promise, would help us understand why contemporary architecture is considered inactive and incomprehensible to all but architects themselves.... Rethinking the architectural photograph might accelerate such a speculation" [22].

Is this a call to action? I have certainly taken it as such. But it is reformation not revolution that has inspired this study. We do not need another great clearing of the forest, only to produce a void to be filled by the opportunistic. A feedback loop of artistic and commercial knowledge is sought through a dialectical process. Strengths and weaknesses of that process are several, however, and will be addressed below. One final aspect of the study must be addressed first.

An important motivation for this investigation is the desire to share new knowledge, and new tools are a key part of that process. Through the means of an open website, mentioned earlier, it is hoped that navigation of images will take place instead of the structured sequenced presentation that print and the Internet usually offer. The site will host an interactive tool on the home page that will allow visitors to shuffle categories of images from the outset. Keywording will play an important part in the development of that part of the website. From there, it will be possible to compare alternate representations of a building or site and/or compare similar atmospheres of different locations. Through these means it is hoped it will also be possible to consider the implications of atmosphere in the understanding of space and the deployment of visual rhetorical devices not currently offered via photography and architectural websites. Research must be done into the deployment of images and not just their content.

It is relevant, of course, to question the claim that there is a feedback-loop taking place at all. Is this really a dialectic approach? A limited dialogue through meetings, interviews and subsequent emails has certainly taken place. But is there a synthesis of ideas at the end? It is difficult to measure to what extent that might be true, until you contrast this experiment with conventional practices. The differences between the standard way of working versus the feedback-loop of the dialectic might be illustrated as follows:



Standard practice:
Disconnected Knowledge Blocks

Research practice:
Hinged Knowledge Blocks
(added connectivity, communication and understanding)

The idea is a simple one: dialogue between different professions problematises the default assumptions of each, thereby requiring increased dialogue (hence connections between the different nodes of the illustration) diversifying and enriching the practices of all parties involved. Photographers, publishers and architects give each other more to think about, and through that exchange, richer, more complete depictions of the world are achieved. In this feedback loop where image makers influence designers directly and vice-versa, variety in depiction is achieved by opening up the notion of the brief. In this sense, also, I argue that there is a form of dialectic taking place that goes beyond negotiation as I understand it. In the Socratic tradition, questions are asked to upset core beliefs — in this case industry conventions — in search of a new belief which could not have been arrived at without agreement to enter into questioning those beliefs with the sole intent of examining the position of either side. In this dialogue, both photographer and architect learn from each other; in this negotiation, neither position is at stake (each are relinquished by entering into this process) and only an understanding of core beliefs is sought. Upon the basis of that understanding, each side walks away with a new proposition — in this case a new way of thinking about images. New questions are asked the next time images are commissioned or produced. This feedback loop of ideas is a reconfiguration of a very old, Socratic, method [23]. And photographs are used partly in place of words (though words are clearly also employed during interviews and in this analysis). When asked whether they considered this method viable and useful, all participants replied that they did. The key feature in the "Socratic method" is the suggestive guidance that makes Socrates into a kind of facilitator of discovery and self-learning. Which raises an important question: who is Socrates in this case? The photographer or the architect? I would argue that the answer is neither; much like Plato, we have had to invent him as the raison d'etre of the dialogue. He facilitates discussion and discovery by questioning common sense beliefs and rules of thumb. Whether or not he is real is besides the point, but he is certainly not the voice on either side of the dialogue, but merely the facilitator.

So much for the strengths, what about weaknesses? [24]

Problems are several, but scale and eternal recurrence are two of the most significant. At the scale of a research project, and with the added benefit of funding, neither time nor money — the two limits of all business practices — are particularly pressing. It has taken a year of repeated visits to 6 locations to produce this work. Surely travel, accommodation and time spent working would need to be factored into the cost of a commercial commission. It could easily be argued, then, that this approach cannot be scaled up to meet the needs of companies or to evolve into a viable photographic company. It might also be asked whether the additional costs were justifiable given the results: how will this process avoid eternal recurrence?

Nietzsche's term is used here to raise the obvious question: for all the innovation — new ideas and images — at the outset, you wind up where you started with a repetition of these until they become part of established practices. What is to say one set of images, practices and ideas will not simply replace another? Is that not the end result of all revolutions, scientific or otherwise, even on the scale of reform and paradigm shifts as has been suggested?

To answer each question, one final term and concept must be introduced: the hinge. Apart from a simple machine which connects doors and windows to supporting structures, a hinge acts in this context as a concept for explaining what atmosphere is: in photography, as a dialectic in commercial production, as a connection between education and industry, as a technology — allowing for free, unstructured, personalised interaction with images. In short, with the image of the hinge, we might summarise all of the above-mentioned arguments concerning: established conventions in publishing, atmospheres as an alternative to these, and artistic research as a link between aca-

demic and business communities.

Future practices in architecture and photography, two hinged creative commercial practices with a long history together, are at stake. But beyond that is the issue of whether the built environment should be deployed and defined by the tactics of still life photography and hence understood as a system of objects, or if indeed it might not be possible to represent and share it as part of the lived world with all its richness. It is hoped that a focus on atmosphere might be a step in that direction. The enthusiasm of architects interviewed suggests that step might be possible. The shift from an architectural to an environmental way of seeing is really something more of a great leap. The strength of artistic work when put side by side with the planning work cannot be overestimated. Plans only refer to a world that is two-dimensional in the exact sense: not having an environment nor an arrow of time. Artistic work is able to make the real appear, not only because of colours, lights, and perhaps even plants, animals and human beings, but because of a unique moment that cannot be copied or modelled in anyone's mind. Artistic work is a way to create and share atmospheres through which architecture can be appreciated and understood. But that artistic work needn't exist in a vacuum or be shared exclusively through the gallery system. Where professionals that commission artwork are willing to enter into dialogue instead of holding fast to conventions for the sake of them, artistic creation, artistic research and commercial art may all find themselves tightly hinged together – not nailed in place, but free to swing back and forth.

The idea of the hinge could be just as easily applied to the relationship between architect and developer, architect and town planner or architect and construction company. Indeed, the idea of complicated, collaborative effort is nothing new to the architect or to the commercial photographer. Nor are complaints about the limitations they impose. However, I believe that commission based art offers just as many opportunities for creative exploration and the development of craft as fine art. I have tried to argue here why that is the case.

To my mind, the hinge is the best way of explaining the relationship between the people who commission and those who produce commercial art. The well-oiled hinge can provide a fruitful dialogue between creative individuals and organisations that can hold up a frame through which information flows. On the other hand, there are hinges that do not move, lose their function and require replacement – the rusty sort, of course.

In conclusion I would like to return to the structure of the atom, as I believe the analogy might provide not just an initial point of departure for me as writer, but also a useful after-image for the reader to take away. At the core, it was suggested, lies the question surrounding the utility of atmosphere. The sheer volume of texts produced about this subject indicates an interest that is worth exploring. My contention is that a photographic exploration is an essential method of doing so. Which takes us to the electron cloud – a move from the question of 'what' to questions about 'how': how photography can develop a closer dialectic process with architects and publishers; how doing so might draw attention to overlooked institutional practices of each; how photography can act in the construction of place; how research projects could contribute to expanded understandings of representation and photography; how photography might be recognised for its full potential producing discursive/argumentative statements and not just 'transparent' copies of an architectural original. Recognising lost potential might be used to argue the instrumental value of artistic research such as this. The two dimensional world of photographs is currently commissioned in a unidirectional, one-dimensional line which leads from specifics envisioned by the commissioning architect to their realisation by the technically-able photographer. But since the ideas for new photographs are engendered through looking at old ones, a feedback

loop is really enacted here, not a linear arrow as normally supposed. Increased verbal dialogue between photographers and architects might enrich the feedback. An exploration of ideas through photographs almost certainly will.

Universal style supposedly went out with modernism, yet it is alive and well in architectural photography. If architecture is really about creating a sense of place, why do the photographs of those distinct places look the same? The reason is clear: architects appear to have assumed, like certain academics [25] that photography is transparent. I believe, as much scholarship has shown [26], that this is a mistake. There is no such thing as neutral; there are only styles and conventions. Artistic research projects like the one I have undertaken are a good method for investigating the beliefs that inform that mistake. If architecture is to be understood in terms put forth by textual arguments about place making, the visual arguments made alongside must correspond. That means a shift from universal answers to subjective encounters. The one-size-fits-all-still-life-studio-photography representation of buildings should open up to an exploration of built environments through photography that treats atmosphere seriously. Photographers have much to share with lovers of architecture, given half a chance.

NOTES

[1] Jean Baudrillard. The System of Objects (London: Verso Books, 2005) pp. 26-28.
[2] Ibid., p. 49.
[3] Gernot Böhme. "The Space of Bodily Presence and Space as a Medium of Representation" Available at: http://www.ifs.tu-darmstadt.de/fileadmin/gradkoll/Publikationen/space-folder/pdf/Boehme.pdf Date accessed: 27 Nov. 2012., p. 5.
[4] Gernot Böhme. "The art of the stage set as a paradigm for an aesthetics of atmospheres" Available at: http://www.cresson.archi.fr/PUBLI/pubCOLLOQUE/AMB8-confG-Bohme-eng.pdf Date accessed: 1 November 2012, p. 3.
[5] Ibid., p. 3.
[6] Peter Zumthor. Atmospheres: Built Surroundings - the Things Around Us (Basel: Birkhäuser, 2006), p.13.
[7] Ibid., p. 21.
[8] Chakravorty Spivak, Gayatri. "Can the Subaltern Speak?" Available at: http://www.maldura.unipd.it/dllags/docentianglo/materiali_oboe_lm/2581_001.pdf Date accessed: 27 Nov. 2012.
[9] David Bate is quick to make this point but chooses not to develop it: "A study of photography.conducted through investigating the key institutions that use it.might reveal the systems by which photographs are produced, the arteries of power and decision making, or even the creative space that photographers are supposed to occupy. Such a project is probably urgently needed" David Bate. Photography: Key Concepts (Oxford: Berg, 2009), p. 1.
[10] Where images are used, that is. He also of course argues that images are over used and we are over-reliant upon vision, particularly in the introduction and first chapter of The Embodied Image. Juhani Pallasmaa. The Embodied Image. (Chichester: John Wiley & Sons, 2011), pp 10 - 22.
[11] Juhani Pallasmaa. "Space, Place and Atmosphere — Peripheral Perception in Architectural experience", The Finnish Journal of Architecture, (Helsinki: 5 March, 2011) pp. 21 - 25.
[12] Christopher Bedford. "Qualifying Photography as Art, or, Is Photography All it Can Be?" Klein, Alex (Ed.) Words Without Pictures. (New York, Aperture Foundation, 2010) pp. 4 - 11.
[13] See for example: de Maré, Eric. Photography and Architecture, The Architectural Press, London, 1961; Julius Shulman. The Photography of Architecture and Design: Photographing Buildings, Interiors, and the Visual Arts. Whitney Library of Design / Watson-Guptill, 1977.
[14] Neither category refers to a snapshot, which is what academics normally mean when they talk about photography. The articulation of professional photographic practice (commission based, especially) is almost wholly lacking from theoretical discourse which enters into semiotic debates but often lack first hand knowledge about how images are actually made. This point is made by Sabine T. Kriebel in "Theories of Photography: A Short Story". Elkins, James (Ed.) Photography Theory. (New York: Routledge 2007) pp. 3 - 49.
[15] David Bate writes about still life images in a way one might easily apply to the architectural photograph: "Different objects are shown from different angles but there is hardly much range between products and they are almost always systematically photographed in the same ways". Bate, David. Photography: Key Concepts (Oxford: Berg, 2009), p. 117.
[16] A work flow which starts with visiting physical sites, looking at or remembering other images, continues during the act of photographing these sites, which is a kind of embodied practice, a present enactment of years of prior practice, continues with review and selection of images and then passes on to retouching, re-retouching, and more often re-retouching before going on to the final phase of submission for print, web or archive.
[17] http://www.etymonline.com/index.php?term=gas
[16] For a scathing attack on the evils of photography, read: Neil Leach. Anaesthetics of Architecture. (Boston: MIT Press, 1999).
[17] One might quite rightly ask, how does this differ from iconographic methods or semiotics, particularly as images are not generally considered discursive? However, it is the institutional practices, the core beliefs and the default behaviours that are at issue here. Why do photographers shoot the way they do? Why do architects commission as they do? What influences the belief that one sort of photo, is correct whilst another is not? Are there photographs which the client might like personally but see as unfit for commercial practices? The objective with the second interview was to begin to open up a discussion about potential discrepancies between preference and purchases, and in doing so open up a discussion about the discourses that influences certain commercial practices and the rhetoric that influences them.

Before moving on to the results section, it seems worth saying a word or two more about the differences of this process as experienced in Finland and Denmark. In the case of the former, it took nearly a year of phone calls and emails before it became possible to speak with anyone from any of these three offices. In the end, it was only through personal contacts used as a form of reassurance that meetings eventually became possible. However, once the initial meeting took place, all architects were extremely open, helpful and dedicated to the project. They were thoughtful and insightful in the interviews and eager to help in any way possible to make the project possible. The experience in Denmark was diametrically opposed.

After a one week visit to Copenhangen, I managed to meet with all of the major architects there: BIG, 3XN, Henning Larsen, SHL, Dorte Mandrup, CF Møller, PLH, KHR and COBE. All were very interested in the project and agreed to collaborate with me. Then they all disappeared. BIG and COBE eventually took the trouble to email saying there had been a change in their policies, after several inquiries from me; Henning Larsen had a shake up in their staff, Dorte Mandrup and SHL simply vanished. In the end I did half a shoot of Henning Larsen's IT campus, half a shoot of KHR's school (because the staff forbid me to shoot after the architect had agreed) and a great deal of time was spent in 3XN's school and riding the metro from one PLH station to the next.

Ultimately, these factors had much to do with the selection process of partners in this experiment. I mention them in an attempt to articulate the mundane and pragmatic elements that Christopher Bedford calls for, as they have as much to do with the final outcome of a project as any creative decisions. They are all too rarely discussed. Are they considered unseemly or just unimportant?
[18] For a dicussion of Dead Pan photography, see: Cotton, Charlotte. The Photograph as Contemporary Art, (London: Thames & Hudson 2004).
[19] Varto, Juha. A Dance with the World (Helsinki: Ito University Publication series, 2012), p. 38.
[20] Connah, Roger. How Architecture Got its Hump (Boston: The MIT Press, 2006), p. 57.
[21] Tafuri, Manfredo "Toward a critique of architectural ideology", Hays, Micheal. (Ed.): Architecture Theory Since 1968 ss, 2000), pp. 103 - 104.
[22] Connah, p. 72.
[23] Socrates is chosen over Hegel, Marx, Adorno or other thinkers here for three main reasons: brevity, simplicity and broad familiarity. Any of the others require specialist knowledge and would extend the length of this paper unnecessarily, given the top-

ic at hand. Socrates is perversely so familiar as to seem like common sense to the public at large, more doxa than episteme, no doubt much to his eternal chagrin.

[24] Research involves hit and misses. So many of these photos stick closely to existing, familiar tropes, whilst others fail for the simple fact that they lack the visual impact and appeal that would make them desirable to a client. Hence many of these pictures are not commercially viable. But using them as research has allowed me to take pictures I would never have otherwise considered. That process of opening up to new possibilities is what I believe this approach offers. It means you won't always get the "money shot" that many of the people interviewed mentioned. Aesthetics and spectacle are often the reliable components of such an images, hence the pursuit of such an image amounts the standard formulaic response to preconditioned desires. It is a form of visual morality, for it depends on safe, clearly established mores. Can the world of architecture open up to more than familiar repeated typologies? Can it branch out, and can photographers provide ideas for that growth?

[25] Walton, Kendall. Transparent Pictures: On the Nature of Photographic Realism, Critical Inquiry Vol. 11, No. 2 (Dec., 1984), pp. 246-277. A more recent argument can be listened to on the following podcast:http://llnw.libsyn.com/p/b/0/f/b0fa8cd3423f9e12/Kendall_Walton_on_Photography.mp3?s=1366627287&e=1366628906&c_id=5252916&h=bfa94e357fe1e1c0e3cac8f0ccc2db50

[26] Kress, Gunther & Van Leeuwen, Theo: Reading Images: The Grammar of Visual Design. (London: Sage Publications, 1996, 2006 (2nd ed), p. 18.

LITERATURE

David Bate. Photography: Key Concepts (Oxford: Berg, 2009)

Jean Baudrillard. The System of Objects (London: Verso Books, 2005)

Christopher Bedford. 'Qualifying Photography as Art, or, Is Photography All it Can Be?', in Words Without Pictures, ed. by Alex Klein (New York, Aperture Foundation, 2009)

Gernot Böhme, 'The art of the stage set as a paradigm for an aesthetics of atmospheres' in Cresson Publications, the centre for research on sonic space and urban environment. <http://www.cresson.archi.fr/PUBLI/pubCOLLOQUE/AMB8-confG-Bohme-eng.pdf> (accessed 1 November 2012)

Gernot Böhme, 'On Beauty', Nordic Journal of Aesthetics, 21 Aug. 2010. <http://ojs.statsbiblioteket.dk/index.php/nja/article/view/3001/4595> (accessed 27 Nov. 2012)

Gernot Böhme, 'The Space of Bodily Presence and Space as a Medium of Representation' <http://www.ifs.tu-darmstadt.de/fileadmin/gradkoll/Publikationen/space-folder/pdf/Boehme.pdf> (accessed: 27 Nov. 2012)

Gernot Böhme, 'Die Kunst des Bühnenbildes als Paradigma einer Ästhetik der Atmosphären'. in Inszenierung und Vertrauen. Grenzgänge der Szenografie. ed. by Ralf Bohn &Heiner Wilharm (Bielefeld, 2011) pp. 109-118.

Eric de Maré, Photography and Architecture (London: The Architectural Press, 1961)

Roger Connah, How Architecture Got its Hump (Boston: The MIT Press, 2006)

Gayatri Chakravorty Spivak, 'Can the Subaltern Speak?' (1988) <http://www.maldura.unipd.it/dllags/docentianglo/materiali_oboe_lm/2581_001.pdf> (accessed: 27 Nov. 2012)

Words Without Pictures, ed. by Alex Klein (New York, Aperture Foundation, 2009)

Gunther Kress & Theo Van Leeuwen, Reading Images: The Grammar of Visual Design. (Sage Publications, 2006 (2nd ed)).

Sabine T. Kriebel, 'Theories of Photography: A Short Story' in Photography Theory ed. by James Elkins (New York: Routledge, 2007)

Neil Leach, Anaesthetics of Architecture (Boston: MIT Press, 1999)

Juhani Pallasmaa, The Embodied Image (Chichester: John Wiley & Sons, 2011)

Juhani Pallasmaa, 'Space, Place and Atmosphere — Peripheral Perception in Architectural experience', The Finnish Architectural Review, 5 March, 2011. <http://www.ark.fi/index_eng_article.php?id=917> (accessed: 1 Nov. 2012)

Julius Shulman, The Photography of Architecture and Design: Photographing Buildings, Interiors, and the Visual Arts (Whitney Library of Design / Watson-Guptill, 1977)

Manfredo Tafuri, 'Toward a critique of architectural ideology' in Architecture Theory Since 1968 ed. by Michael Hays (Boston: MIT Press, 2000)

Juha Varto, A Dance with the World (Helsinki: Aalto University Publication series, 2012)

Kendall Walton, 'Transparent Pictures: On the Nature of Photographic Realism', Critical Inquiry Vol. 11, No. 2, Dec. 1984, pp. 246-277.

Peter Zumthor, Atmospheres: Built Surroundings – the Things Around Us (Basel: Birkhäuser, 2006)

7.3

ARCHITECTURE'S DISCURSIVE SPACE: PHOTOGRAPHY, INTELLECT BOOKS

A reconceptualization of architectural imaging through the notion of atmosphere suggests that the diversity of global architectural practice is not well represented by architectural photography, which often takes geographic and atmospheric variety and transforms it into the placeless site of a conventionalised photographic industry. Implications are widespread, ranging from discursive regularity as defined by Foucault (and its consequences for the general public's awareness) and appreciation of architecture to new inroads for photography scholarship and interdisciplinary learning. This article will look specifically at commercial architectural photography to address certain conventions followed by architectural photographers and the atmosphere created in their images. This question has been addressed through analysis of the author's practice-based research correlated with content analysis of *The Phaidon Atlas of Contemporary World Architecture*.

Keywords

Architectural photography, atmosphere, discourse, conventions.

Introduction

Architectural photography fills and surrounds our lives in numerous ways, creating a media space parallel to that of the built environment. As a profession, it produces images used in architectural monographs and trade journals, professional renders, online professional magazines and blogs. Photography is the main medium used by architects in talks and publications to explain what they do. Additionally, of course it goes into the promotional materials of real estate, travel, planning applications for councils and public consultations. When you then factor its role in fashion blogs, automotive commercials and similar genres for general public consumption, the list of its applications is nearly endless. But how does it affect our reading of space and time?

It has been argued that photography has affected the collective memory in ways that are neither neutral nor mechanical (Bate 2010). In recent years, photography has more than any other medium, including writing, been responsible for the collective memory of architecture. Such photographs are not neutral, objective documents, rather they are *Constructed Worlds* (Pardo & Redstone 2014), *Built Legends* (Cefererin 2003), *Constructed Views* (Rosa 1999) or *Camera Constructs* (Higgott & Wray 2012) as that list of book titles about the subject suggests. This notion of a constructed image is in line with Rosalind Krauss' famous argument in 'Photography's Discursive Spaces', where she points out that two images of the same subject matter can operate in different discursive spaces due both to technique and the medium through which they are displayed (Krauss 1985: 131–150). A lithograph and a photograph do not operate on equal levels and are not used for or by the same people to do the same thing. In this way, Krauss disrupts the notion that either was a transparent window upon the world. Rather, each operates according to a system of codes which satisfy the discourse of different professional environments. One is produced with great care and at great expense to meet with the requirements of the art world; the other provides information, inexpensively on the printed page. This argument is not sufficiently addressed when photography is viewed as a means to an end, such as in the presentation of architecture through various media.

Architects have contributed greatly to our knowledge, understanding and appreciation of architectural photography. A short list of the histories on the subject should include: *Building With Light* (Elwall 2004), *Architecture Transformed* (Robinson and

Herschman 1990) and *The Edifice is Colossal* (Sobieszek 1986). It might also extend to the many encyclopaedic histories of architecture starting with *Histoire de l'architecture* (Choisy 1899) as they are heavily reliant on photography. Through extensive and meticulous research, architectural historians have developed our awareness of architectural photography as a practice in its own right. Additionally, they have paid tribute to the great practitioners in the field [1]. Many of the historians who have researched the work of these photographers were themselves architects. They have built, one might say, the library that houses the great works of photographers of the built environment. In doing so, they have written a history largely comprised of the exceptional practices of the elite in the field. When you look at a few extraordinary images taken by the most renowned photographers working with the most celebrated architects, you get the iconic, which is by nature exceptional. Whilst informative and indeed imperative to the study of architecture and its photography, such a study says little or nothing about everyday in architectural photography, which is what I mean to address here. It overlooks the formation of discursive regularity which is constructed through the omission of errors which do not fit within the bounds of standard practice. This presents a new opportunity for photographic studies to enrich the understanding of architecture and operate in an extended field.

Beyond photographic histories, K Michael Hays and Krista Sykes have situated the decline of theory as a productive, critical force in architecture from the nineties[2] (Hays 2000, Sykes 2010). Perhaps that decline might correspond to move from text to image. Such a move would indicate that the space of discourse has shifted, thereby making it widely invisible to an academic tradition focused on written texts. Hence a second point of departure for this paper is to ask if there is still a prevailing architectural discourse, and if it can be seen in images. Several architectural theorists have argued in recent years the architecture has become increasingly reliant upon imagery, principally photographs (Pallasmaa 2005, Leach 1999). Perhaps those two opposed vectors might have similar points of origin. If photography is a discursive frame shaped by art historians, as John Tagg (2009) argues through Foucault, is its rise is possibly coterminous with the decline indicated by Hays and Sykes? Moreover, exactly what might that discourse be, and how could it be traced? Perhaps photography can reveal something about that discourse and the mechanisms behind it. This final aim is not to instrumentalise photography, but rather to suggest its investigative potential, pointing to an opportunity for research into and through photography. If photography is, as this paper will argue, architecture's principle discursive space, much is as stake, and several opportunities stand to arise from such a discovery.

Increasingly, theorists and practitioners have looked to atmosphere as a new means of understanding architecture and its presentation in two-dimensions (Tidwell 2014, Bohme 2013, Zumthor 2006, Wigley 1998). Atmosphere is important because it changes the perspective on architectural representation. As I will argue, that perspective is crucial for reassessing the conventions of the practice. Seen as a curated history of great works, architectural photography appears diverse, challenging and constantly renewed. However there are several commonalities to the practice of even the most renowned photographers that become visible when the focus is shifted to atmosphere. That shift suggests that a certain type of weather — a common denominator of this type of photography — has been read as the means towards transparent, documentary photography of architecture. Perhaps it is here than one particular strain of architectural discourse can be found. But several questions arise from a treatment of architectural photography from this perspective. Are atmospheres related to the actual building, or place in the image, to the aesthetics of the architectural image itself, or to some other affectual register? That is, do photographs of architecture affect human attention and spatial literacy? In this way, are atmospheres therefore biopolitical?

If the answer to the final question is yes, how might it reconceptualise the practice of architectural photography: instead of buildings might we see norms and the normative beliefs behind them? Most importantly, how could you go about testing any of these questions?

So, pulling all of these strands together, I will ask whether the decline of theory in architecture and the rise the image might not be reconceptualised as a movement from word to image as the discursive space of architecture. I will look specifically at the use of commercial architectural photographs to assess, quantify and visualise certain conventional practices in architectural photography. In doing so I will ask what might be the discourse producing that standard. I will argue that conventions which are often seen as the means of producing objective images, might be equally be seen as a recipe (or code of best practice) for limiting the potential of numerous atmospheres to just one or two.

Method One — A look at Global Practice

Part of my research involves the identification and classification of certain conventions in architectural photography. The Phaidon Atlas of Contemporary World Architecture has been a valuable reference tool for obtaining a global view of contemporary architecture. According to a promotional text, The Phaidon Atlas is:

> [t]he only resource of its kind [presenting...] over 1,000 of the most outstanding works of architecture from all over the world built since 1998 [... it] includes every building type and each project has been nominated by a panel consisting of 150 leading names in the international field of architecture[3].

The atlas, which its editors refer to as 'architecture for architects', [4] is indeed an impressive compendium of the global practice of architecture. However, the book is not without its shortcomings. When viewed from the perspective of atmosphere and photographic diversity, a new picture emerges. Because the thousand plus projects are presented through photographs, I conducted content analysis to count the number of projects featuring photographs with blue skies (daytime and evening, interior and exterior) and projects using greyscale images. The following is a count from countries and regions studied:

Australia	97 blue/ 21 greyscale
China	48 blue / 29 greyscale
S. Korea	22 blue / 21 greyscale
Finland	33 blue / 9 greyscale
Denmark	40 blue / 11 greyscale
UK	141 blue / 32 greyscale
Africa	47 blue / 8 greyscale
USA	85 blue /15 greyscale
S. America	62 blue / 6 greyscale

This count provides an overview indicating a preference for, or at the very least a greater dependence on, blue images. Nordic, equatorial, tropical and subtropical climates all appear to be the same in this publication. Of course, this is not a photography book, but rather one which relies upon an objective, standardised picture style to purvey architecture to a niche public and convey it to them in the clearest manner possible. However, I will argue that conventional practices may actually do the reverse, and that

architects would benefit from publishing a more diverse panoply of atmospheres representative of global environments. Once placed in grids, this data presents a very different picture indeed from one of global diversity.

Figure one (following page) visualises content analysis of all of the images appearing in the list above, that is: Australia, China, South Korea, Finland, Denmark, UK, Africa, USA and South America. The columns contain three daytime exteriors (context, elevation/corner, detail), three interiors (general view, single room, detail) and three night-time interiors (also divided up into context, elevation/corner, detail images). The grid visualises all of the projects which used blue skies, dividing them up into these image categories. The numbers serve two functions. Firstly, they follow the academic practice of citation, though they reference images instead of textual assertions. Whilst the images themselves are not shown, numbers are listed so that a reader can check the veracity of the argument offered here[5]. That argument is of course, that blue skies are the atmosphere of choice for global practice. These grids are offered as a simple, visual demonstration of that assertion. The clustering of certain types of images can be seen clearly, particularly daytime images in the left- hand side of the grid. That statement, made though visualised data, becomes clearer through comparison with the next grid.

	Daytime landscape	day facade/corner	daytime detail	Interior general view	interior room	interior detail	Night landscape	night facade/corner	night time detail
Australia 001 - 059	001 002 003 005 012 015 018 019 021 022 025 026 027 028 029 031 032 033 034 037 038 040 042 044 045 048 050 052 053 054 055 056 059	001 002 003 005 006 008 013 015 016 018 019 020 021 022 024 025 027 029 030 031 032 034 035 036 037 041 042 043 044 045 046 048 049 050 051 053 055 056	002 005 006 015 018 021 022 023 028 033 037 040 041 042 043 046 047 048 050	037 040 044 045 052 059	027 030 034 036 044 047 052 059	009 014 027	006 056	007 009 014 015 016 023 024 027 031 034 035 044 045 048 050 055 056	008 016 031 056
China 097 - 130	098 100 101 105 107 108 109 112 116 117 119 122 124 127 128 129 130	098 099 101 103 105 106 109 111 112 115 118 122 127 128 129 130	098 099 102 119 122 128	100 120 127 128	110 126		117	107 126	
South Korea 131-151	131 133 136 144 145	135 136 139 140 141 143 144 145 146 151	131 133 150					132 137 148	138
Finland 282 - 297	285 286 292 293 29 296 297	282 287 288 289 291 292 293 294 295 296 297	284 286 287 288 289 294 295		288		282 287 296	283 290	
Denmark 298 - 322	300 301 302 303 305 307 310 313 32	298 300 301 302 303 305 307 311 312 314 315 316 317 318 319 320	298 301 305 308 314 319	299 301 309 313	310 313		312	299 311 314	313
United Kingdom 322 - 389	322 323 324 325 326 327 329 330 331 333 334 335 336 337 339 341 342 346 350 353 355 358 359 360 365 366 367 369 370 374 382 384 385 388 389	322 323 324 325 326 328 329 330 331 333 334 335 336 337 338 339 340 342 345 348 351 354 355 358 360 362 364 365 366 367 368 369 375 380 382 383 384 385 388 389	321 322 323 325 326 328 329 330 333 336 338 339 340 341 345 346 348 352 353 355 360 364 367 369 370 375 380 382 386 389	324 327 334 336 345 354 356	328 333 341 345 354 356 357 364 367	324 331 333 336 345 354 357	328 331 345 346 348 350 387	345 347 360 362326 370	
Africa 837 - 860	838 841 842 846 849 854 855	837 838 839 840 841 842 846 847 849 850 851 853 854 855 859 860	838 839 841 842 844 847 849 852 857 860	839 840 846 848				843 844 852 857 858	852
United States 872 - 917	872 875 877 879 881 884 885 891 893 896 905 908 909 909 917	873 874 877 878 879 880 881 883 884 886 887 888 889 890 891 892 893 894 895 896 897 900 901 904 905 905 907 908 909 911 912 913 914 915 916 917	872 876 879 880 881 882 886 888 889 890 896 897 898 901 902 907 910 914 916 917	876 880 891 908 909 912	872 910	888 895 913	913	876 878 879 880 884 886 896 898 903 911 916	880 899 912 915
South America 1026 - 1052	1028 1033 1034 1035 1036 1041 1043 1044 1048 1050 1051	1027 1028 1030 1031 1032 1033 1034 1037 1038 1040 1043 1044 1045 1046 1047 1049 1050 1051 1052	1027 1028 1034 1035 1036 1037 1038 1041 1042 1043 1044 1047	1026 1028 1039 1040 1043 1044	1027 1044	1026 1036 1049		1027 10261030 1032 1038 1039 1047 1050 1052	

	grey landscape	grey facade/corner	grey detail	black landscape	black facade/corner	black detail	white landscape	white facade/corner	white detail
Australia 001 - 059	028 033 038 053	047 058		018	040 050		011 012 025	001 004 007 011 024 059	008 013 016
China 097-130	097 111	110	108 114 129		118 119 121 123	129	097 104 113 114 115 116 123 125	113 114 116 123 125	100 106 113 116 117 118
South Korea 131-151	147	131 140 141		132			149	133 134 137 138 141 143 144 147 150	132 133 134 143 144 150
Finland 282 - 297	282		291		291		382 284 285 290 296		290
Denmark 298 - 322		299 306 321			301		304 319	308 309	300 303 312 320
United Kingdom 322 - 389	322 323 361 385 387 388	343 376 378	322 352		333 349	331 371		325 343 344 346 349 352 359 368 381 389	340 344 345 357 359 361 388
Africa 837 - 860	844 849 850	853			843 857			859	843
United States 872 - 917	876	873 902	877 904 908					875 888 889 892 900 906	885 903 908
South America 1026 - 1052	1032						1032 1036 1042 1048	1052	

In figure two (above), the same countries were scrutinised. However, this time projects featuring greyscale skies (white, grey or black) were counted. This was the second step taken to verify whether or not a preference for blue skies in the atlas could be found. Clearly, the numbers here are far lower than in the previous grid. Again, a pattern, visible at a glance allows for comparison between the two grids. I hope to present these grids as pictures of information. A detailed breakdown of the numbers is provided in the notes.

The argument presented in these grids becomes stronger through yet another comparison. The following section contains two more grids, this time of my own commissions.

Method two — Practice Based Research

I have worked as an architectural photographer for over ten years, ample time and cause for reflection into my practice. But it was not until undertaking a doctoral research project in partnership with architects Finland and Denmark in 2011 that I really started to do so. You can know a great deal about your own practice, except whether or not it the result of personal idiosyncrasies or part of a larger field of operations. To answer those questions, the *Finnish Architectural Review*[6] and now *The Phaidon Atlas* have been invaluable research tools. More specifically, they have provided a reason for arranging my own work and that of other photographers into grids to see if a pattern emerges. The correlation between global findings in the atlas with my own praxis acts as the vertical and horizontal axis of this research, producing a new image of the atmospheres of architectural photography.

Figure three (above) contains image preferences indicated by nine clients. Images are ordered into nine vertical columns and nine horizontal rows. The columns consist of: three daytime exteriors (far left columns), three interiors (middle columns) and three evening exteriors (right columns). The rows consist of clients from Denmark and Finland [7]. This conventional grid shows what each client thought was worth saying with images — worth money, in fact. Together they lend visual support to two assertions made by theorist Mark Wigley: that white walls are the most obvious element common to contemporary architecture (Wigley 1995) and that "good architecture is associated with good weather" (Wigley 1998: 20). When viewed in this way, these images suggest a visual convention of blue and white images. This is an idea I will build on — the importance of predominant colours as the main elements of atmosphere in architectural photographs. In short, what is the effect of all of this blue and white? It would be a gross exaggeration to say blue and white photography had replaced black and white. Architectural photography is certainly more diverse than that. But viewed from the perspective of atmospheres, the claim becomes less absurd. One might equally ask what other colours are cropped out of this discursive space. Keeping colours to a minimum is a way of cleaning up and ordering the world visually (Wigley 1998: 25). One might also argue that the lack of full-spectrum colour shows that these photographs are not the photo-realistic, objective documents that were said to be the photographs of choice by the architects I interviewed for my research[8]. Instead they are the decedents of a long line of architectural drawings, a dream about space turned into line and shade (Wigley 1998: 27).

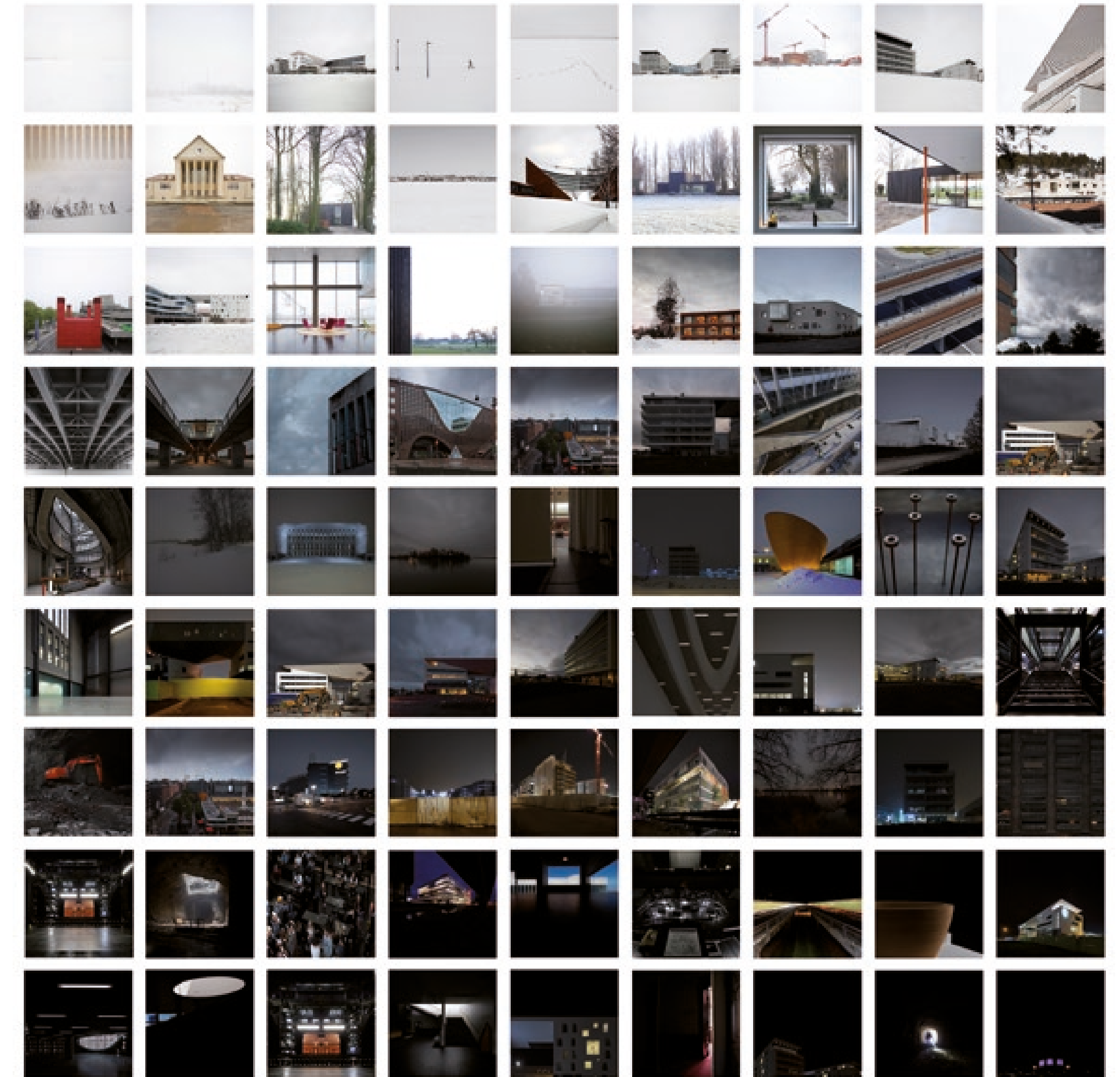
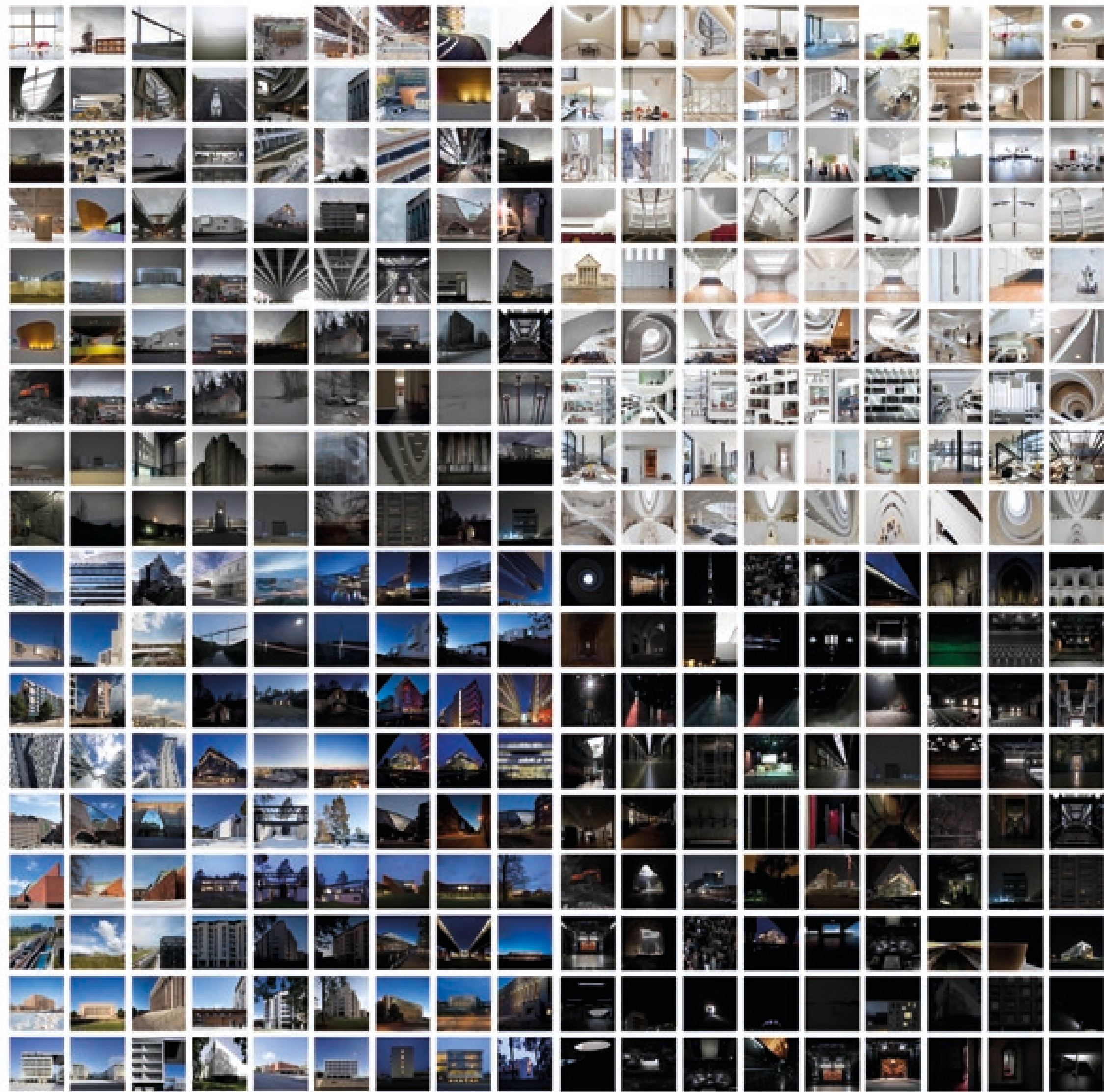


Figure four (above) contains leftovers from the same set of jobs: images not chosen by clients [9]. It shows eighty-one images which nine separate clients thought were unusable. They are monochromatic (but not blue) and feature both empty and populated scenes. These images are organized along a grey-scale from white to black, shot at different times of the day and year. The views are occasionally identical to the ones purchased (figure three), except for the weather. While grey and black images were rejected, it might be argued that the white images are common to this grid and the former

one. However, the white images presented here are of white exteriors; whereas, in the former they were of white interiors. The main difference between these two grids is the weather: rain, clouds, snow, black night skies were all rejected. Because the images in these grids were produced entirely in Northern Europe, the absence of such weather in the photographs is significant, because it shows a preference for a certain kind of atmosphere which is not reflected in the climate [10].



From the previous examples, I hope I have demonstrated how the main colour in an image has a great deal to do with its reading. This final grid, figure five (above), is perhaps an exaggerated means of making that point. I have selected and arranged images taken during the duration of my doctoral. Here the individual images are reminiscent of pixels or perhaps tesserae of a mosaic. The building in each is too small to be seen. Only the predominant colour remains. This approach is in line with Saint Martin's notion of the coloreme as the basic unit of the visual language (Saint-Martin 1990:3) as well has his assertion that 'any work of visual language achieves existence essentially through colour organisations, as does reality itself' (ibid 18). Clearly colour

counts — perhaps it is as much the subject matter of an architectural photograph as is the architecture. Black, White, Blue solid grids show the importance of the predominant colour as determined by the intersection of the building and the atmosphere at the time of shooting.

These grids are presented here both as artwork and as visualised data, for three reasons. On one hand, if practice-based research in photography is to have meaning, it must work through the medium of images in addition to relying on words. That means that images do more than just illustrate the text they accompany. On the other hand, practice based research in photography is an opportunity for photographers to think differently about their work. In this particular instance, that means considering the discursive role of photography in architecture as a both an industry and sector of education. The grids shown here are an attempt to do both, but I have a third and final reason for mapping my practice on to grids: repetition. A key finding of this research has been that there is much repetition in architectural photography when viewed through a lens focused on the colour of atmospheres. That the repetition of specific images (images are repeated across a structure) can be used to reveal systemic repetition across a network of practitioners is particularly satisfying for its neat simplicity.

Why the grid?

Grids have a well-established track record in both photography and architecture studies. Perhaps this is not surprising, as each discipline concerns itself with the production of artistic technical images. The following is a very brief summary of some key deployments of the grid.

The seminal work *Learning from Las Vegas* by Venturi, Scott Brown and Izenour (1977) is an example of architecture theory that uses photography and the grid as an epistemic device. Famous for dividing architecture into the categories of 'duck' and 'decorated shed' as a means of understanding their iconic significations, the authors also break up the built environment into grid of parts. This responds to their 'scale / speed / symbol' argument which, briefly put, states that the Las Vegas strip, when viewed from an automobile, requires a different scale and different symbols than say an eastern bazaar or medieval street viewed at the pace of a pedestrian. The authors look at selection of hotels, motels and petrol stations [11] through photographs of different views laid out in a grid (ibid 32 — 47). The vertical axis contains the locations, and the views (front, side, parts, aerial, oasis, sculpture, sign, aerial) are laid out along the horizontal axis. Significantly, the archives of Venturi and Scott Brown will be exhibited in the 2015 Rencontres Photography Festival in Arles, France. But this work is not, strictly speaking, an analysis of architectural photography or the discourse behind it. It is rather an ingenious interrogation of space through taxonomy and the grid which uses photography as documentary evidence.

Dan Graham's 'Homes for America' (1966-67) is perhaps nearer to the discursive analysis of architecture through photography that I am concerned with. The project features a series of photographs of suburban American homes that emphasizes similarities between the repetitive standardised housing developments and the serial approach of minimalist art of the period. In addition, the work parodies the mores of 'house beautiful' magazines whilst at the same time challenging the hegemony of the white cube gallery as the means of exhibiting fine art. I have attempted to use photography of spaces with this same critical spirit. However, Graham's work is not strictly deployed as a grid, though a matrix of images does appear across the printed page.

Several artists working in the photographic medium have used systems of grids for exhibition and publication. Berndt and Hilda Becher, Karl Blossfeldt and Rich-

ard Avedon are three well-known examples. What is significant about their grids is not so much the layout on a wall or page, but their premeditated fabrication of repetition through the strict application of a set of rules. The Bechers worked out the atmospheric conditions for white skies and soft shadows as well as the correct vantage points for feasible repetition across several locations (Stimson 2004). Blossfeldt's photographs were intentionally taken as documents in order to catalogue plants and flowers. For that reason again you find in his work a reduction of variables in order to show the subject of each image in precisely the same light. Avedon, whether working outdoors with a mobile studio or in a classic photographers studio with lighting equipment was able to do much the same with white backgrounds a set of instructions for his printer (and a previsualisation of his project which informed those instructions). The images are grouped into grids to further underline the notion of truth through paratactic aggregates, which I will return to in the discussion section.

The method is also present in the work of several contemporary photographic artists. Hans Eijkelboom has spent twenty years compiling grids of images that reveal repetition in society. He takes pictures of people who look the same. Often similarity comes from improbable monochrome outfits or shirtless men in crowds of people completely dressed. Eijkelboom seems determined to show that the unique is not unique at all. His method is quite simple: "I take between 1 and 80 photographs a day, almost every day, 12 months a year," [12] *The Photographic Journal*, published by Phaidon, produces a kind of atlas of humanity reproducing his grids as a window on to our world. Similarly, repetition through archival research of photographs as found objects produces grids of series as well. Martina Bacigalupo whose 'Gulu Real Art Studio, 2013', presents a series of images designed to reveal the story left out of the frame. Part of the Typology, Taxonomy and Seriality exhibition curated by Brian Wallis for the Wallis Collection in Arles 2014. The repetition comes from the the discarded frame around passport photographs taken at a photographer's studio for many years. These are gridded to reveal an astoningly rich, untold story of unwanted information cast off because it didn't fit the framework of a specific task: the passport photo with all its strict requirements. Alfredo Jaar's 'Searching for Africa in Life, 2006' also presents a composite picture of images gridded into a macro-image mosaic. The work consists of the cover of every edition of the magazine Life up to that date. The implications of the title of the piece surely speak for themselves, in terms of what was left out of the discursive frame of this picture.

This method that both unifies and subdivides has been selected to visualize some of the most significant discoveries of modern times: the Punnet Square, the periodic table of elements, 'Alberti's window', and so on. But why? Perhaps it is because, as Rudolf Arnheim has claimed, "[v]ision is not a mechanical recording of elements, but the grasping of significant structural patterns" [13] (Arnheim 1974: viii). The grid allows us to see such patterns through regularity and repetition, where complexity or chaos might impede comprehension. It has certainly been the case with images looked at here. This need for regularity and repetition for comprehension is discussed in both the process philosophy of Whitehead (1978) and in Feyerabend's paratactic aggregates (1993). A Pattern Language (Alexander 1977) is but one of many architectural texts concerned with patterns.

Discursive regularity in architectural photography

In addition to its utility in arts and science, the grid allows for the emergence of a pattern that points to what Michel Foucault (1973) would call organized conditions of possibility for certain norms or symbolic codes. Seen from this perspective, grids

potentially take on the aspect of a cage. Are we, as consumers of architectural photography, limited in our freedom by discursive regimes, whereby the visibilities — what we can see — and enunciations — what we can say — about architecture, namely its atmospherics, are always already regulated by complex sets of socio-technical and institutional conditions? Not necessarily. For Foucault (1973), any principle of legitimation also has at the same time the possibility of throwing any discourse into error or contradiction, in which paradoxically lies the possibility of alterations to the history of the formation of knowledge and objects and thus, installing an avenue of freedom from the present. This is why I focus here two archives of my own work: one of commissions and publications and the other of rejected and erroneous photographs. Objects of discourse deemed as errors and rejected become the very surface that points to on one hand the conditions of possibility of the formation of architectural photography as discursive objects; and on the other, provides a reason and means to reconsider my part in a chain of commercial practices. Attention paid only to the successful images, however, will only reinforce the notion that a set of familiar conventions are a form of optical truth instead of a clear instance of discursive formation predicated on a frame whose very ontology presupposes exclusion. One way to view this is that disciplinisation closes our vision as "every discipline is made up of restrictions on thought and imagination" (White 1997:126) confining discourse to certain types of evidence and discourse. These are analytical restrictions, as defined by the historian or genealogist as regulatory mechanisms that produce the discursive object. The ways in which we choose to look at disciplinary discourses and texts are affected by the discipline itself as well as the methodology subscribed to look at them.

This discussion of photography through Foucault leads naturally to the work of John Tagg and his recent book, *The Disciplinary Frame* (2009). There he develops the idea of photo-graphing 'subjecting light to the punctual rule of the room's inbuilt geometrical law' where the camera is useful as 'a device for producing and preserving text' (Tagg 2009: 1). Tagg's reading of photography is crucial, for Foucault claims that he applies his method only to 'verbal performances'(Foucault 1973: locations 3782-88). Of particular relevance to the subject of architectural photography, Tagg refers to both the camera and the panopticon as 'the truth machine' though with some degree of implied doubt about the veracity of such a claim. Another elision is made between the camera and the filing cabinet which together form a completed unit for the capture, taxonomy and storage of information. Building on the his work in *The Burden of Representation*, Tagg looks at how photography is used by institutions and the state, as well as analysing how art history has constructed the disciplinary frame through which photography is viewed. He questions and problematizes the notion that documentary photography is transparent and universal, a window on the world, instead of a series of moves responding to standardised tropes or the specific requests of a photographic brief (his example is the Farm Security Administration, not architecture). Documentary emerges from and produces discourse in the service of political, social and economic powers. This final topic leads to the key, albeit startling, claim that 'discourse for Foucault is not a purely linguistic phenomenon, for the elements of a discursive system may not be in words at all'. Furthermore, he argues: 'Confessional rituals [...] involve not just certain kinds of speaking and hearing but also specially designed spaces [...] And we can readily see how this could be extended to the rituals of connoisseurship or art historical judgment (ibid 243). As I will now argue in the next section, discourse can take on many forms but need not be as total and severe a prison as the Panopticon.

Discourse in decline?

In her book, *Constructing a New Agenda*, Krista Sykes writes, 'during the period spanning the mid-1960s through the mid-1990s, there did exist a prevailing discourse that, despite varying methods of approach, sought to reformulate the discipline and carve out a niche for architecture' (Sykes 2010: location 183-88). The once present dominant discourse was a combination of critical theory and post-structuralism for the reading of modernist architecture, and ended with the final issue of the journal Assemblage in 2000, of which K. Michael Hays was editor-in-chief. The argument made by Hays and Sykes about the waning importance of theory in contemporary architectural practice and education (Hays 2000, Sykes 2010) presents an interesting opportunity for reflection. The vacuum they have identified is the result of a long trend away from theoretical, language-based arguments to one that is often called the new pragmatism in architecture (Sykes 2010, Saunders 2009). A simple definition for that new pragmatism might be a focus on business practices, not least of which is a reliance upon spectacle in order to sell building designs. That move has been repeatedly attacked by theorists in recent years, often for a superficial use of images (Pallasmaa 2005, Leach 1999). Hays has argued that theory is necessary in order to architect, a neologism of his own devising, without the exigencies of the commercial practice of architecture which the pragmatists have made their raison d'être (Sykes 2010). It is a space where a 'refunctioning and reforming of disciplinary concepts' can take place (ibid locations 5337-43). In light of this position, is it not possible to reconceptualise Hays and Sykes' assertion that discourse is disappearing or become less relevant to architectural practice? What if, instead, it is being translated in the literal sense of the term, to images?

Sykes acknowledges that pragmatism is itself a discourse, as is the position that theory is not needed. Perhaps a new discourse, albeit one less influenced by cultural theory, structuralism, deconstruction, phenomenology than by PR and business strategies has been on the rise at least since the outset of the 21st century? This is a move in line with the general zeitgeist in which economics and celebrity are always front-page news. How could architecture remain unaffected by social conditions? So perhaps this is not so much a disappearance of discourse but a shift. A great deal of what is said about architecture is said through pictures. Such a shift is not neutral, however. If the textual argument was about challenge and investigation, the photographic discourse is perhaps more centred on success in the marketplace[14]. If that is so, how might it be demonstrated? Would a reluctance to take risks be a marker of such operational logic? If so, are atmospheres a means of locating that marker? Furthermore, if the heritage of the history of architectural photography is one focussed on the great works of the famed photographers instead of an analysis of general practices, is it possible that any critique of architectural photography will have focused on what is unique to each photographer, not general and repeated practices?

Broadly speaking, our understanding of architectural photography comes through examples of photographers as icon makers: Ezra Stoller, Julius Shulman, Lucien Hervé, and so on. Historians have identified and paid tribute to the unique qualities of the select few (Redstone 2014, Elwall 2004, Robinson and Herschman 1990, Sobieszek 1986). This perspective leaves out the general practices of the many and the discourses behind the conventions that emerge. This is a familiar problem, for we know much about kings and queens but very little about the people who worked their land. As was the case with those untold stories, commercial architectural photographers don't often discuss their work. Three notable exceptions are of course three of the most celebrated photographers: Iwan Baan, Hélène Binet and Julius Shulman. Each has written and given talks and interviews which have helped expand knowledge not only of their own work but of architecture and architectural photography. They have done much to increase the appreciation of each. But they are the exceptions.

I hope to have identified a standard through my practice and an analysis of published images. That standard operates according to certain conventions, and any analysis of the vast majority of these is clearly beyond the scope of this paper[15]. But as a starting point I have looked at the weather. If there is continuity across the practices of photographers separated by geography, age, gender then it seems reasonable to question why. It is likely that the discursive practices outlined here have much to do with that. Furthermore, if a trend towards telling the story of architecture through images (photography, renders and video) is truly in effect, then scrutiny of the discourse behind the appearance of such images is of ever-increasing importance. It must be approached from several perspectives.

I have attempted so far to present one such perspective by arguing that there is no such thing as transparency, only modes of representation conditioned by commissioning practices made into images by photographers which are then repeated as commercial practices. However, many highly skilled photographers have distinguished themselves by showing their unique vision of the world [16]. It is most of their work that fills the pages of the Phaidon Atlas. Each of them is a remarkable talent, a skilled practitioner and a seasoned connoisseur. So why do so many of their images resemble each other in that publication, when viewed at the level of atmosphere? On the surface this appears to point to a paradox. Whilst on one hand, architectural photography is as wonderful, inspiring and diverse as its subject matter, when regarded as a means of presenting atmospheres it takes on uniform appearance. In the cases I have looked at here, both from my experiences as a practitioner and through my analysis of the photographic content of a global publication, the diversity of the world is simplified, ordered and structured through the inclusion of common characteristics and the exclusion of others — a table of elements that amount to atmospheres. Identifying and defining atmosphere is a way of placing discursive practices under scrutiny — for practitioners, consumers and critics alike. No such scrutiny of architecture's discursive space exists, to my knowledge. How that discourse is reified by the activity of photographers, editors and architects is a critique equally lacking at present. The repetition of stylistic conventions homogenises the diversity of places we call the world. That reduction of variables amounts to style, not transparency. Taken individually, photograph by photograph, the repetition of conventions I've attempted to address is easy to overlook. By putting them alongside one another, I hope to have made the conventions in practice more visible. It is not a building you see when you look at an architectural photograph. You see the way the photographer represented it according to architecture's discursive space.

Showing Seeing : Atmospheres

Another way of seeing architecture is to consider the production side of what Gerhot Bohme calls "tuned spaces." This he uses this term interchangeably with "atmospheres." Whilst atmosphere might seem like a vague and woolly concept, tuned spaces bring in the notion of intentionality through design. Bohme argues that "production aesthetics[...] make it possible to gain rational access to this "intangible" entity" (Bohme 2013) because scenography would be impossible were atmospherics not something "quasi-objective." He writes:

> It is the art of the stage set which rids atmospheres of the odour of the irrational: here, it is a question of producing atmospheres. This whole undertaking would be meaningless if atmospheres were something purely subjective. For the stage-set

> artist must relate them to a wider audience, which can experience the atmosphere generated on the stage in, by and large, the same way (ibid 3).

Hence atmospheres, seen in this light, are a kind of message emitted by skilled artist-technicians; however, while atmospheres can be reliably produced, there are preconditions for intersubjective reception. An audience must be primed, as it were, or attuned to experience atmospheres collectively: "an audience which is to experience a stage set in roughly the same way must have a certain homogeneity, that is to say, a certain mode of perception must have been instilled in it through cultural socialization" (ibid 3).

The convergence here with Foucault and especially Tagg is striking. Factors of constraint and exclusion in these discursive formations follow principles of classification and ordering, rituals and fellowship which preserve modes of expression, leading to the rarefaction of knowledge, the establishment of truth effects, and the formation of the expert practitioner. Following this, the perceiving and consuming subject are brought to accept and apply certain discourses, and hence become subjected to configurations of the discursive practice that is architectural photography.

The atmosphere of the stage set is not limited to the theatre, however. It is relevant to life in general because staging has become a basic feature of our society: the staging of politics, of sporting events, of cities, of commodities, of personalities, of ourselves. The choice of the paradigm of the stage set for the art of generating atmospheres therefore mirrors the real theatricalisation of our life. This is why the paradigm stage set can teach us so much, in theoretical terms, about the general question of the generation of atmospheres, and therefore about the art of staging (ibid 6).

Of course, this staging refers to the production of space, whereas the focus of this paper is the atmosphere of a photograph in order to see discursive regularity and error. But what Bohme says about socialization explains the need for control over atmospheric variety in the architectural photograph as well. Errors, which I am suggesting might be called alternate atmospheres in a gamma of potential but unused atmospheres, are judiciously weeded-out in order to assure the audience will experience architecture in roughly the same way: discursive regularity is enforced in order to assure a certain way of seeing. My conclusion is not the discovery of a conspiracy to discipline and punish, but rather that a sort of micromanagement of connoisseurship. Through architectural photography, the audience is primed through repetition to see architecture in a certain way. That way of seeing is a reflection of certain preferences and values conventionalized through repetition. This perspective on architectural photography removes the air of sinister conspiracy, yet a problem remains. For the place-making potential of architecture is not fully realized through the reduction of atmospherics to a universalized standard which excludes the vast majority of experiential encounters with the earth we inhabit and the designs architects create. Photography can be used to do far more, for it lends itself to the emission of multiple views, hence it represents far more than a means of making sure everyone in the room gets the same picture. Iconic photographs show this to be true; conventional practices might also.

Architectural photographers, unlike architects, are not directly involved with the design or building or architecture. They interpret architecture according to certain decisions. One of these is when you choose to shoot. A large portion of my time working as a photographer in Northern Europe has been spent studying weather forecasts in order to arrange shoots on sunny days. My analysis of the Phaidon Atlas suggests I am not alone in this, nor are my clients. A panoply of options is discarded each time a photographer engages is this sort of filtering. The idea that there is good weather and bad weather must be challenged. The notion that there is an atmosphere in a photograph is a starting point.

Atmospheric photography is quite often taken to mean something like the 19th century romantic, occasionally bordering on the sublime. Images of foggy, eerie, lonely European streets at dawn or dusk appear when you search your mind or Google. But I mean something both less and more than that with the term 'atmosphere'. Less, in the sense that my definition is less specific. I am not arguing that one type of photography 'atmospheric' should replace another: 'documentary'. This paper offers no normative values based on personal taste. Rather, I believe a more ample definition of atmosphere, starting with the specific atmosphere produced by the weather in different parts of the world must be considered if architectural photography is to aspire at all to documenting the sense of place that varies so greatly around the world. Rather than limit the notion of atmosphere to yet another historical trope — one consisting principally of fog, moonlight and mist — atmosphere might be taken as a kind of rubric into which a Pantone of atmospheres would be placed. Rather than sitting there, they would be constantly on the go, shuffled according to the place and taste of an architectural practice. Personal or conventional taste might be pushed, expanded, challenged by simply casting out the old notion that good architecture needs good weather (to paraphrase Mark Wigley). Photographers can choose to take beautiful images according to the established means of doing so, or they can be a part of extending and expanding both notions of beauty and a sense of place through the photography of architecture. Attention to atmosphere and an extended definition, beyond established tropes, is a way of achieving this.

Architects from Mark Wigley to Juhani Palasmaa to Peter Zumthor have argued the importance of atmosphere in the production of architecture. It could be argued that each of their arguments has roots in an earlier text: Genius Loci: Towards a Phenomenology of Architecture (Norberg-Schultz 1980). Through attention to the Genius loci, Norberg-Shultz aimed to refocus readers' attention to the environment instead of the discrete objects designed by architects. 'Place' is the word Norberg-Shulz centres on via five constituent parts: thing, order, character, light and time. Place is the sum total of these and synonym for genius loci — which is in turn a synonym for atmosphere. But images are important, too. Manmade places are given meaning by visualising and symbolising them (ibid 17). He explains that we have a tendency to create maps: images of the world that we can navigate and grasp that which is beyond our immediate experience (ibid 17). Photographic images of architectural environments are one such map. But character, light and time appear to be missing, for the most part, in the places they point to.

Showing More

This study is by no means all-inclusive, it goes without saying. If it is to have any significance at all it will need to scale up. There is much need for further research into publications, blogs and photographer's archives as well as similar research into CGI and its integration into photographic backgrounds via photographic retouching methods (mainly through Photoshop) [17].

This has been a Luddite solution, the slow and fallible plodding of a sole researcher. But it could be extended to all major publications for the sake of falsification. Technology could do much of this work. Current developments in object recognition [18] suggest that deep learning will allow for computers to not only identify image types according to a predetermined rubric but learn to identify new images via past experience [19]. Such experiments are expensive and not currently available to modest research projects. Yet the furore around big data suggests access might be democratised before long[20]. Hence, in addition to visualizing data through artistic methods, treating image as data via scientific methods appears to be a near reality. Responses

to that sea change will undoubtedly be diverse if not utterly polemic.

However, the technological production of grids on the internet is a present reality and one less likely to be divisive. The issue is addressed in October 146 in the article 'On Aggregators' (Joselit 2013). The point the author makes is that a new sort of online aggregate has emerged, where 'curated search engines' such as Contemporary Art Daily, Arch Daily, Architizer, etc. act as a kind of selective, personal selection that takes a step beyond the impersonal algorithms of Google. Filters, such as tags and keywords, are working to create countless grids of images that change the way images are used, understood, shared, consumed. Be it the aggregators of Joselit's article or the aggregates of images found in Google searches, Pinterest, Instagram, endlessly shuffled and reshuffled though keyword searches, this new sort of fluid grid figures largely in the future of photography. For this reason, it seems, Daniel Rubenstein argues in his 2009 article in Photographies:

> The classroom study of photographic masterpieces by selected "masters of photography" feels more and more outdated. Contemporary digital photography is characterized not by the outstanding work of the few but by the middling work of the many. Rather than a system of the production of work of art, photography today is a system of dissemination and reproduction (Rubenstein 2009: 139).

Urging increased dialogue between photographers, editors and architects is a desirable outcome of such research. Publications such as Archizines (Redstone 2011) and exhibitions such as the 'Constructing Worlds' in the London Barbican Centre (2015) suggest that such a need has been identified and change is already underway [21]. But this topic presents ample opportunities for the kinds of photographic studies called for in Photographies by Rubenstein. Along those lines photography might serve researchers and educators as a means of critical engagement with the general cultural and scientific milieu and not continue to look inwards upon itself as a either a specific technology or particular sphere of visuality, but rather 'place the study of the digital photograph at the centre of a culture which is based on reproduction, multiplication and copying' (ibid 135). Tellingly, Rubenstein concludes that rather than continuing to look primarily on at the work of the masters of photography, we should teach photography focus on discourse created by all producers and users of images (ibid 141). This is in line with what I have said about the history of architectural photography. Moreover, Joselit and Rubenstein's arguments are strikingly similar to the paratactic aggregates which Feyerabend speaks about at great length in Beyond Method (1993). An argument based on the historical shift from polytheism to monotheism, it is against the authority of one belief and the resultant singular method which results as the acceptable standard. The crux of the argument is the source of meaning: is it singular or plural? A pluralistic worldview was found in late, pre-rationalistic Greek figurative art as well as in the Homeric epics. Feyerabend's pluralistic philosophy has far reaching consequences ranging from scientific methodology to a stand against totalitarianism.

Conclusion

Grids reveal an aggregate of beliefs and practices that show how the discursive space of architecture as one that is increasingly photographic. Discursive regularity creates a biopolitical control of the way of seeing architecture through photographic norms. That those norms are in part the heritage of architectural representation, in part the result of beliefs about best documentary practices goes without saying. Yet the conventional atmosphere of architecture goes beyond that. It visualises preferences for

certain, ideal conditions which when repeatedly published globally become the industry standard. That standard promotes certain atmospheres to the exclusion of others. Grids have proven one way of looking at repetition in order to examine discursive regularity and errors. This is just one example of how photographic practices can be used for critical thinking as well as promotion. As technology democratises both the practices of photography and publishing, this presents new opportunities for critiques of commercial uses of photography as well as a the means of constructing new and more diverse spaces through the discourse photography can create. Instead of being the enabling dispositif of the systems of control exposed by Feyerabend, Foucault and Tagg, photography might be used to turn them on their heads like the image in the ground glass of a large format camera, which so elegantly reveals how our eyes work.

NOTES

1 Thanks to them we still know of Bedford Lamere, Dell and Wainwright, Robert Elwall, Eric de Maré in the UK; Max Dupain and David Moore in Australia; Cervin Robinson, Ezra Stoller and Baltazar Korab in the US; the Bisson brothers, Edouard Baldus and Dominique Roman in France. To say nothing of the great fame of photographers like Le Grey, Negre, Le Secq, Atget, Abbott and Evans whose subject matter was largely the built environment, or Julius Shulman and Lucien Hervé who worked commercially as architectural photographers.

2 Of course, critical debate on the subject of architecture can still be found in Architectural Review, Architectural Design, peer-reviewed journals and many of the publications found in Archizines, such as Mas Content. Architects such as Michael Sorkin argue for the continued importance of theory: http://www.architectural-review.com/essays/critical-mass-why-architectural-criticism-matters/8663075.article But perhaps none of these could be said to replace journals like Oppositions or Assemblage.

3 http://de.phaidon.com/store/architecture/the-phaidon-atlas-of-contemporary-world-architecture-9780714843124/

4 This is the tagline for the journal on www.phaidonatlas.com

5 Categories are not mutually exclusive as several images appear on each page: therefore, certain project numbers may appear in the tally for several different image categories. Equally, in certain images no atmospheric conditions were discernible and thus not counted.

The breakdown is as follows:

Australia
Project numbers 001 — 059
Blue images appear in 86.5% of projects
Greyscale images appear in 34% of projects
57 projects with blue daytime, 17 projects with sunny interiors, 23 projects with blue nocturnal images
6 projects with grey images, 3 projects with black images, 12 projects with white images

China
Project numbers 097 — 130
Blue images appear in 73% of projects
Greyscale images appear in 54.5% of projects
39 projects with blue daytime, 6 projects with sunny interiors, 3 projects with blue nocturnal images
6 projects with grey images, 4 projects with black images, 19 projects with white images

South Korea
Project numbers 131 — 151
Blue images appear in 80% of projects
Greyscale images appear in 65% of projects
18 projects with blue daytime, 0 projects with sunny interiors, 4 projects with blue nocturnal images
4 projects with grey images, 1 project with black images, 16 projects with white images

Finland
Project numbers 282 — 297
Blue images appear in 100%
Greyscale images appear in 37.5% of projects
27 projects with blue daytime, 5 projects with sunny interiors, 1 project with blue nocturnal images
2 projects with grey images, 1 project with black images, 6 projects with white images

Denmark
Project numbers 298 — 322
Blue images appear in 88% of projects
Greyscale images appear in 48% of projects
29 projects with blue daytime, 6 projects with sunny interiors, 5 projects with blue nocturnal images
3 projects with grey images, 1 projects with black images, 7 projects with white images

UK
Project numbers 322 — 389
Blue images appear in 78 % of projects
Greyscale images appear in 29% of projects
05 projects with blue daytime, 23 projects with sunny interiors, 13 projects with blue nocturnal images
11 projects with grey images, 4 projects with black images, 17 projects with white images

Africa
Project numbers 837 — 860
Blue images appear in 92% of projects
Greyscale images appear in 29% of projects
37 projects with blue daytime, 4 projects with sunny interiors, 6 projects with blue nocturnal images
4 projects with grey images, 2 projects with black images, 2 projects with white images

USA
Project numbers 872 — 917
Blue images appear in 98% of projects
Greyscale images appear in 28% of projects
60 projects with blue daytime, 10 projects with sunny interiors, 15 projects with blue nocturnal images
6 projects with grey images, 0 projects with black images, 9 projects with white images

South America
Project numbers 1026 — 1052
Blue images appear in 92.5% of projects
Greyscale images appear in 18.5% of projects
42 projects with blue daytime, 11 projects with sunny interiors, 9 projects with blue nocturnal images

1 project with grey images, 0 projects with black images, 5 projects with white images

6 http://arkitekturforskning.net/na/article/view/481
7 From top down: Helin and Co, JKMM, KHR, 3XN, AOA, Alvar Aalto for Aalto University, PLH, JS Siren for the Finnish Parliament and Studiopuisto. Six of the nine clients started out as partners in my research who ended up purchasing the images indicated. These purchases acted as a catalyst for this research.
8 Same as in previous note.
9 The clients are the same, though in some instances the projects represented on each grid vary.
10 It may be useful to compare the photographic atmospheres of the Phaidon Atlas with actual Meteorological data. The point I hope to make is that there is greater atmospheric variety in the world than in the world of the architectural photograph. Annual rainfall and sunshine are two means of documenting that variety, though mass observation data is also a useful source of information, such as can be found here: http://www.massobs.org.uk/index.htm

Average precipitation in depth (mm per year) 2005- 2014

Australia	524
China	645
Finland	536
Denmark	703
United Kingdom	1220
United States	15
South Korea	1274
South Africa	495
Ethiopia	848
Guinea	1651
Libya	56
Central African Republic	1348

Annual Hours of Sunshine

Australia	1,750 - 3,500
Finland (Helsinki)	1780
Denmark	1495
United Kingdom	1154
United States (D.C)	1783
South Korea (Seoul)	2066
South Africa	2500

11 Hotels: Sahara, Riviera, Stardust, Caesar's Palace, Dunes, Aladdin, Tropicana; stations: Gulf, Texaco, Shell, Texas, Union 76; motels: Gaslite, Mirage, Wedding chapel.
12 http://www.photonotebooks.com/PDF/Diary-ENG.pdf
13 In short, we are hot-wired to see things through patterns, hence repetition of photographic practices will homogenise architectural spaces, as I am arguing. To overlook this built-in tendency is to ignore the physics and psychology of optics — in short, to ignore Arnheim's argument.
14 Clearly success has always mattered to practicing architects and debates continue to rage in academic journals. It is only the increased importance of a certain type of image and the decreasing influence of a certain type of writing that are at at stake here.
15 Tonino Griffero suggests avenues for further investigation: 'there are various types of atmospheres: they can be protypic (objective, external and unintentional), derivative (objective, external and intentionally pro.duced) and even quite spurious in their relatedness (subjective and projective) (Tidwell 2014: 19).
16 A cursory glance at global photographic practice shows that: the world is vibrant and bustling in the images of Iwan Baan, poignant and beautiful in the work of Hélène Binet, silent and sculptural in the images of Agata Madejska, visionary and far-fetched in the creations of Victor Enrich and Filip Dujardin, dense and urban according to Michael Wolf, exists on the anonymous fringe when shot by Bas Princen, is a strange, sad fantasy in the work of Geert Goiris, is a seemingly limitless source of inspiration for Frank van der Salm, can be viewed from several points all at once in the work of Barbara Probst, or reduced to exceptional graphic beauty in the work of Janie Airey and Josef Schulz. This is to say nothing of respected, successful, contemporary practitioners such as Hufton and Crow, Roland Halbe, Richard Bryant, Simona Panzironi, Fernando Guerra, Duccio Malagamba, John Gollings, Adam Mørk, Miko Huisman, Adrià Goula, Brigida Gonzalez, Grant Mudford, Nick Guttridge, Dennis Gilbert, Erieta Attali, Morley Von Sternberg, as well as the many other photographers represented by the agencies: View, Arcaid and Esto.
17 I was fortunate to interview key artists and managers at Cityscapes about this very subject, yet space prohibits more than just a cursory comment about their work here. Whilst my primary purpose was to observe and document their workflow, during the course of interviews I was surprised how each expressed frustration with the conventionalized limitations their job presented them with. The general consensus was that blue-sky 'fair' weather is opted for to avoid risks and save time with the client. These interviews took place in London on 8 April 2015.
18 http://www.cs.jhu.edu/~hager/Public/teaching/cs461/ObjectRecognition.pdf
19 http://deeplearning.net/reading-list/
20 http://www.sas.com/content/dam/SAS/en_us/doc/whitepaper1/big-data-meets-big-data-analytics-105777.pdf
21 For a compelling explication of a atmospheric architectural photography see, concerned mostly with fine art practices but with cross-over's into commission based work, see: Nanni Balzter «Atmosfera nella fotografia d'architettura», in: archi, Nr. 6, 2005, p. 14-19.

WORKS CITED

Alexander, Christopher. A Pattern Language: Towns, Buildings, Construction (Center for Environmental Structure Oxford University Press (1977)
Arnheim, Rudolph. 1974. Art and Visual Perception: A Psychology of the Creative Eye. Berkeley: University of California Press.
- The Power of the Center. 1988. Berkeley: University of California Press.
Čeferin, Petra. 2003. Constructing a legend: the international exhibitions of Finnish architecture, 1957-1967. Helsinki: SKS.
Choisy, Auguste. Histoire De L'architecture .. Paris: Gauthier-Villars, 1899. Print.
Baltzer, Nanni. «Atmosfera nella fotografia d'architettura», in: archi, Nr. 6, 2005, p. 14-19.
Bate, David. 'The Memory of Photography' essay published in Photographies journal, Volume 3 Issue 2, September 2010.
Böhme, Gernot. « The art of the stage set as a paradigm for an aesthetics of atmospheres »,

Ambiances, Redécouvertes, mis en ligne le 10 février 2013, consulté le 04 janvier 2015. URL : http://ambiances.revues.org/315

–'On Beauty', Nordic Journal of Aesthetics, 21 Aug. 2010. <http://ojs.statsbiblioteket.dk/index.php/nja/article/view/3001/4595> (accessed 27 Nov. 2012)

– 'The Space of Bodily Presence and Space as a Medium of Representation'<http://www.ifs.tu-darmstadt.de/fileadmin/gradkoll/Publikationen/space-folder/pdf/Boehme.pdf> (accessed: 27 Nov. 2012)

– "Atmosphere as the Fundamental Concept of a New Aesthetics," (1993), Thesis Eleven 36, p. 113-26

Elwall, Robert. 2004. Building With Light. London: RIBA Press.

Feyerabend, Paul. 1993. Against Method. London: Verso.

Frampton, Kenneth. "Towards a Critical Regionalism: Six points for an architecture of resistance", in "Anti-Aesthetic. Essays on Postmodern Culture." Seattle: Bay Press, 1983

Foucault, Michel. The Order of Things: An Archaeology of the Human Sciences. New York: Vintage Books, 1973. Print.

Gursky, Andreas, Ralf Beil, and Sonja Fessel. Andreas Gursky: Architecture. Ostfildern: Hatje Cantz, 2008. Print.

Hays, K M. Architecture Theory Since 1968. Cambridge, Mass: MIT, 2000. Print.

Higgott, Andrew & TimothyWray. 2012. Camera Constructs: Photography, Architecture and the ModernCity, Farnham: Ashgate.

Hayes, K. Michael (ed.). 2000. Architecture Theory Since 1968. New York: Columbia Books of Architecture.

Joselit, David. OCTOBER 146, Fall 2013, pp. 3—18.

Krauss, Rosalind E. 1985. The originality of the avant-garde and other modernist myths. Cambridge, Mass: MIT Press.

Leach, Neil. 1999. The anaesthetics of architecture. Cambridge, Mass: MIT Press

Norberg-Schulz, Christian. 1980. Genius loci: towards a phenomenology of architecture. London: Academy Editions.

Pallasmaa, Juhani. 2011. The embodied image: imagination and imagery in architecture. Chichester: John Wiley & Sons.

– 2010. The thinking hand: existential and embodied wisdom in architecture. Chichester, U.K.: Wiley.

– 2005. The eyes of the skin: architecture and the senses. Chichester: Wiley-Academy.

Pardo, Alona, and Elias Redstone. 2014. Constructing worlds: photography and architecture in the modern age. Munich : Prestel Art.

Redstone, Elias. Shooting Space: Architecture in Contemporary Photography. , 2014. Print.

-- Archizines. N.p.: London, 2011. Print.

Robinson, Cervin, and Joel Herschman. 1987. Architecture transformed: a history of the photography of buildings from 1839 to the present. New York, N.Y.: Architectural League of New York.

Rosa, Joseph. A Constructed View The Architectural Photography of Julius Shulman. New York: Rizzoli, 2008. Print.

Rubinstein, Daniel. 'Towards Photographic Education' Photographies Vol. 2, Iss. 2, 2009

Saint-Martin, F. (1990). Semiotics of visual language. Bloomington: Indiana University Press.

Saunders, William S. The New Architectural Pragmatism: A Harvard Design Magazine Reader. Minneapolis: University of Minnesota Press, 2007. Print.

Sobieszek, Robert A. 1986. This edifice is colossal: 19th century architectural photography. Rochester, N.Y.: International Museum of Photography at George Eastman House.

Stimson, Blake. 1 April 2004 Tate Papers Issue 1

http://www.tate.org.uk/research/publications/tate-papers/photographic-comportment-bernd-and-hilla-becher

Sykes, Krista. Constructing a New Agenda for Architecture: Architectural Theory 1993-2009. New York: Princeton Architectural Press, 2010. Kindle book.

Tagg, John. The Disciplinary Frame: Photographic Truths and the Capture of Meaning. Minneapolis: Univ. of Minnesota Press, 2009. Print.

The Phaidon Atlas of Contemporary World Architecture. London: Phaidon, 2004. Print.

Tidwell, Philip. (ed.), Architecture and Atmosphere, with contributions from Gernot Boehme, Tonino Griffero, Jean-Paul Thibaud and Juhani Pallasmaa, Tapio Wirkkala-Rut Bryk Foundation, Espoo, 2014. Print.

Van Leeuwen, Leo and Jewitt, Carey. 2001. Handbook of Visual Analysis. London: Sage Publications. Print.

White, Hayden. Tropics of Discourse: Essays in Cultural Criticism. Baltimore, Md. [u.a.: Johns Hopkins Univ. Press, 1997. Print.

Whitehead, Alfred North. Process and Reality (New York: The Free Press, 1978)

Venturi, Robert, Denise Scott Brown, and Steven Izenour. Learning from Las Vegas: The Forgotten Symbolism of Architectural Form. Cambridge, MA: MIT, 1977. Print.

Wigley, Mark. "The Architecture of Atmosphere," (1998), In Daidalos 68, p. 18-27.

-1995. White walls, designer dresses: the fashioning of modern architecture. Cambridge, Mass: MIT Press.

Zumthor, Peter. 2006. Atmospheres: architectural environments, surrounding objects. Basel: Birkhäuser.

7.4

TOWARDS GREY MATTER — BY BRIDGE OR TUNNEL?

The emergent status of practice-based research within the arts is surprising, given the long tradition of research and reflective practice as the working methodology of artists. Stranger still is the skepticism towards its application in arts education. This article will address those problems via the impasse indicated by current literature on the topic of entrepreneurial learning. As one way out of that dead-end, a case study is presented which applies the practice-based learning of a doctoral thesis to the learning environment of an interdisciplinary course in architectural photography.

Keywords

practice-based research
entrepreneurial education
art education
photography studies
architecture studies
bridge

Introduction

In Volume 9 Issue 3 of this journal (October 2013) a debate emerged over the term 'creative industries' and the notion of entrepreneurship that informs two apparently opposed articles written by professors in the United Kingdom. I will argue their position is more similar than it appears on the surface, once you investigate their primary literature. They contain several theoretical overlaps and share practical concerns. A short list would contain notions such as collaborative work, improvisation and metrics other than standardized tests.

I make this claim on two grounds: a close reading of their sources and a personal experience in teaching. The latter is where practice-based research comes in. I am an architectural photographer in the final stages of my dissertation. From autumn 2013 to May 2014 I taught a course in architectural photography, together with the head of the architecture department of my university. The group was comprised of six architecture students and six photography students working together to test the scalability of my research as well as some new hypotheses that have resulted from it. In presenting this course as a case study, I will argue not only the value of applied, ongoing research in the teaching environment, but also present one way of tunneling under the impasse that arises when one attempts to bridge creative education and industry.

Four interconnected questions will be addressed in this article. What is the relevance of practice-based doctoral research to B.A./M.A. students of a given field? What is the role of a teacher in a classroom of skilled individuals? Must a connection to industry imply the choice between capitalist and socialist ideologies as evidenced by the articles I will scrutinize? Finally, what theory best informs these questions?

The impasse

In the article 'Supporting the creative industries: The rationale for an exchange of thinking between the art and business schools', the authors take the position that the current economic climate makes it imperative for art students to adopt economic strategies (Kearney and Harris 2013). Cutbacks mean that grants are increasingly limited for students. Similarly, the economic downturn means that upon leaving university,

there will be limited opportunities for work. For both these reasons, the authors argue, students will have to be entrepreneurial if they are to make it in the creative industries. Competition is on the rise whereas available funds are in decline. Thus students in the arts would benefit, clearly, from learning a thing or two about business. But authors also argue that business schools are outmoded in terms of thinking about entrepreneurship and its implementation in the classroom. The project-based, improvised, non-test-based methods of arts education offer an established methodology that would solve that problem. Both art and business schools should pay attention to the notion of Effectuation (Sarasvathy 2001), which argues for 'effectual' instead of 'causal' reasoning. Each of these schools is operating on an outdated paradigm of entrepreneurship. Hence a teachable moment is revealed, which creates an opportunity for building bridges between disciplines.

The second article, 'What creative industries?' claims in effect that both the classroom and the playground have been taken hostage by the boardroom (Baldacchino 2013). The logic and terminology of managerial thinking (such as the sort found in the first article cited) have replaced learning and teaching. Baldacchino takes issue with the term 'creative industries' as evidence of this shift in thinking about art education. He cites Horkheimer's discourse on subjective reasoning where self-preservation prevents a collective construct for the greater good and means supplant ends as the raison d'être for practice. Activity is pointless when wholly concerned with the production of objects and the skills required to produce them. Art is best when pointless — that is the point. Activity should be the reason behind practice — collective, exploratory activity instead of the scripted, instrumental, competitive activity of the marketplace.

I agree with each argument because I believe they are far closer at the roots than they appear on the surface. The authors of each paper are deeply invested in promoting collaboration, improvisation and the belief that ends are more important than means. This position is clearly voiced in The Eclipse of Reason in the chapter entitled 'Ends and means' (Horkheimer 1947), the theory upon which much of Baldacchino's argument rests. But it is equally spelled out in 'What makes entrepreneurs entrepreneurial?', the crucial theory for Kearney and Harris. Through a series of charts, Sarasvathy demonstrates how 'causal' and 'managerial' thinking focus on the means of attaining a specific goal, thus loosing the notion of why that goal is worth pursuing (the ends) whereas effectuation takes the means as a given starting point through which an agent can invent the future they'd like to predict (2001: 3). This is the first overlap between the two articles. Furthermore, the gesamtkunstwerk model presented by Baldacchino through the example of Bauhaus as a case study in successful art teaching (albeit one in need of an update to fit contemporary life, he claims) is very much like the need for collaboration argued in the other paper.

Where they are at odds, it seems, is over money. Is this model of collaborative improvisation part of the neo-con ideology of the marketplace? Or is it better suited to the social welfare model of post-war Europe — currently, it would seem, under threat? I offer a synthesis of those two opposed models via a case study that benefitted in several ways from the Nordic model of education and finance.

Bridge and tunnel

With small populations, large foundations for arts and humanities, and a tax-model that provides ample state funding for education, the Nordics are in a particularly good position to benefit from both socialist and capitalist ideologies and practices.

> Nordic universities are tuition-fee-free, and in many cases students are given proper research grants for their work. The artists in the various programmes have a luxurious opportunity (in terms of both finances and time) to focus on a long-term, four-to-five-year project that is content-driven, and not market-orientated. (Hannula 2009: 3)

I sought to take advantage of each by using the institutional value of my university to contact professionals outside it, as well as the status as member of a club to qualify for funding. In short, I saw the classroom as an opportunity to bridge the gap between academia (meaning both research and education) and industry.

It is the specifics of this set up that are radical and might spark debate. I first contacted three architects involved at the time in a controversial development of three mixed-use buildings in the heart of Helsinki. I asked them to work with us by supplying project briefs and feedback — in short, to act as though they were commissioning the students. I next contacted the Finnish Museum of Architecture and convinced them to give us an exhibition and public lecture. I then contacted the Finnish Architectural Review to make them aware of this experiment and hopefully publicize it. Finally, once all of those partners agreed to participate, I secured funding from the architecture and photography departments as well as a grant of 4000 euros for printing and framing.

The role of the teacher has shifted — nefariously, Baldacchino might respond at this stage — from educator to a sort of networking consultant and project manager. But I concur with arguments voiced elsewhere that a great opportunity was missed at the digital turn for altering the way education in photography is accomplished (Rubenstein 2009). I saw my role as curator for developing the concept and guiding the process as one such opportunity for new teaching methods, ends and means. But what about the course itself? It won't seem experimental at this point — just skills training course with a student show at the end which benefitted from available funding. For that reason, I will now explain both my research and the task students were presented with for the course. It is here that the working model shifts from bridge to tunnel.

Grey matter

My research is an architectural photographer's look at conventions and atmospheres. Conventional images are tightly constrained by a set of rules for correct depiction, which have altered little since the invention of photography (see Goodwin 2014). Another sort of depiction might take place through a focus on atmosphere instead of the material object of the building (see Goodwin 2013). I have been doing practice-based research for nearly four years (three at the outset of the course). The research looks at the discourse revealed by conventions and seeks to test the viability of critical practices through the medium of photography for the practice of architecture. At present commissions come from architects, and photographers work to meet those requirements. A small set of views and lighting must be learned, but after that critical practice ends. But what if photography were used analytically to explore and develop the understanding of architecture and the environment in which it sits? I ask that question in my research and extended the question to my students. In doing so, the idea was to test the scalability of my research. Here I wanted to act as the leader of a team who would explore and develop the research question. Within architecture there are some precedents for that kind of research group. An obvious example is Rem Koolhaas's work at Harvard, which produced books exploring vast, complex research projects conducted by students under his critical eye. Similar are Mark Wigley's projects with C-lab and Volume magazine, which equally bridge the gap between commercial architecture and

academic research. However, in photography the nearest example that comes to mind is the student exhibition at the end of a B.A. or MFA. But what if the logic of the two were put together — offering the exhibition (with all the practical obstacles removed) in exchange for research and as motivation for work? That was the motivation for this experiment, which will be addressed in the next section.

More specifically, the students were asked to consider the differences between the rendered images supplied by architects and the actual conditions of autumnal Helsinki life. Architecture is nearly always depicted in fair weather with clear blue skies. Students were asked to think instead about the greyscale of typical weather. They were told that they were free to be critical of the building or celebrate it. But they were asked not to adopt the supposed neutrality of objective photography — the hallmark of correct representation and documentation, according to my research. The reason I gave was that I had found transparent objective photography to be synonymous with the conventions I had addressed — and those conventions invariably meant blue skies and empty settings. That was the only specific scripting they received — no blue. Additionally, they were required to read texts about atmosphere by (Böhme 2010, 2012; Zumthor 2006; Wigley 1998); required to read texts on architecture and media (Colomina 2000; Čeferin 2003; Ahlava 2002), and they were shown examples of photography which depicted grey spaces. Many of those examples came from the 'Helsinki School' of photography. Those lectures were conducted by Professor Antti Ahlava, head of the architecture department and vice-chancellor of Aalto University, and myself.

In addition to testing the scalability of my research questions in the classroom — would it make sense to students and seem relevant to them — I was hoping to test it within the architectural community. Both the museum and participating architects had a stake in this experiment and were asked at the outset to respond honestly and concretely to the results. Verbal and written praise aside, the architects purchased images and the museum requested a book (part catalogue, part essay) about the exhibition and concept.

In theory

Teaching has taught me that the irrational needs to be factored into the equation. Students take courses in order to place bets and hedge them. By that I mean that they do the necessary in order to be able to eventually do the impossible. At least that is often the case in art schools. For many of these students, being an artist is a dream, and taking courses is a bet they wager. They accrue skills and develop networks to hedge those bets. But studying when seen in this light is still something akin to lunacy. Especially when you consider the current argument that times are tough and competition on the rise. So why do it?

As a first step towards answering that question it is helpful to consider the etymological roots of the words 'amateur', 'professional' and 'vocation'. The first, as everyone knows, has 'amour' as its root word. Isn't it strange that this word is used depreciatively in opposition to the professional? What do professionals profess? As it turns out, the answer is:

profession (n.)

c.1200, 'vows taken upon entering a religious order', from Old French profession (12c.), from Latin professionem (nominative professio) 'public declaration', from past participle stem of profiteri 'declare openly'. Meaning 'any solemn declaration' is from mid-14c. Meaning 'occupation one professes to be skilled in' is from early 15c.; meaning 'body of persons engaged in some occupation' is from 1610; as a euphemism for 'prostitution' (compare oldest profession) it is recorded from 1888.

So to be a professional (or a professor) is to take solemn vows to become a skilled prostitute. That seems right for countless cases. But is that really the best we can do? Many inspiring professionals appear to be completely consumed by what they do. That kind of professional is said to have a calling. Strangely, that word is also often connected with religion, whereas it's synonym (below) is almost a depreciative term.

vocation (n.)

early 15c., 'spiritual calling', from Old French vocacion 'call, consecration; calling, profession' (13c.) or directly from Latin vocationem (nominative vocatio), literally 'a calling, a being called' from vocatus 'called', past participle of vocare 'to call' (see voice (n.)). Sense of 'one's occupation or profession' is first attested 1550s.

Arguments for entrepreneurial education and for practice-based research in light of these ideas of love, passion and a calling lead directly to Kierkegaard. I argue that his strange, dense, theatrical writings are a practical tool for making sense of the senseless. He claims in Fear and Trembling that Christianity needs to be saved from its guardians (Kierkegaard 1985). Perhaps the same can be said about business and the institutions that train for vocations and educate students. I will extrapolate from arguments made in Fear and Trembling (1985) to critique both the entrepreneurial turn in education and the notion of professionalism in the workplace.

The love story behind Kierkegaard's book obfuscates its applicability here. He wrote it as a coded message to the young woman with whom he was engaged. Troubled after breaking that engagement, the book was written to explain why he had done so. He refers to the chivalry by using the term 'Knight' in order to posit two possible modes of living that he argues are the only way out of hypocrisy and the sub-human condition of lower immediacy, similar to Nietzsche's final man. The Knights are closer to the Übermensch than Roland, Sir Gawain or Don Quixote.

Equally, the religious significance of the work complicates things. Kierkegaard staked his life on changing the definition of faith and breaking the state religion of Denmark. So the argument uses the Biblical story of Issac and Abraham. The monstrous, lunatic act of Abraham cannot make sense to anyone else in his world. He is driven on a course by something other than sense. The reader is left to decide whether he must be held to account by ethical standards heretofore understood as universal if they are to have any meaning. Was Abraham a criminal, a madman, a murderer? Or can he be taken as an example of a different way of knowing the world? This is the point of the story for Kierkegaard, not the religious question. The ethical or legal status of his acts and the psychological analysis of the voices in his head are all interesting questions, but beside the point, here. However, the notions of passion vs resignation set up qua the Knight of Faith and Knight of Resignation are wholly applicable.

This notion ties to an exposition of the singular developed by Finnish Philosopher, Juha Varto. The subject—object divide leads to the two-culture divide where art is said to be about feelings and science about facts — and never the twain shall meet. A singular experience has no place in science because it is 'contaminated' with the life the person that experiences — it is impossible to construct an object (to be later picked apart) in a contaminated area such as this. Yet our encounter with the world is just that: singular, personal, contaminated. Hence, what science can talk about is limited to the testable and considered factual. What art can talk about is of no informational value, because it is relegated to the personal sphere of feelings.

In Song of the Earth (J. Varto, 2011) he explicates the protracted erosion of the singular human being from the time of Descartes to the perfection of the project

in the twentieth century — with all its resulting disasters and human cruelty on a scale never before achievable. The Song discusses a sort of scarecrow subject set up through countless books and political projects over the past 500 years. The book sets out to show how devotion (understood as: letting go, openness, an interface with the world) seen in the madness of youthful love shows us a path to that sort of devotion and open stance before a world not entirely of the subject's planned, imagined, structured making. It is a way to move forward without a ready path, without prefabricated, distanced images to signpost the way.

A Dance with the World (J. Varto, 2012), in turn, looks at the value of scale, more universal equals more powerful, a system through which the individual's worth is infinitesimally small and subjective skill impossible to measure and therefore value. This points to a need for a new breed of education that would map the nature of skill and in turn justify human singularity. The idea of emergence soon appears in the text, and again we are brought to think of experience without predetermined categories. Only the skill with an axe (or chainsaw?) can get us through the forest. We know of singularity and emergence in orgasms, desire and madness. But what to do with that knowledge?

Might these concepts be linked to Kierkegaard's teleological suspension of the ethical as put forward in Fear and Trembling (1985)? The protagonist of the tale is struck dumb, for he hasn't got a human language with which to express the meaning of the singular madness of his act. Words — a universal system (where each tribe is a universe unto it's own) break down. Subjectivity is incommensurate with objective or inter-subjective reality. So how to speak about it and what to do with it? Might we begin from Kierkegaard's troubling perspective to ask what it means to communicate from a singular position without language? Might we get Abraham to speak? He is transformed by defining moment in which the whole of his being is concentrated into a glance towards heaven. He is defined by his faith, his passion, his love. In the concept of art and art education, work, strangely enough becomes the means of doing these things. It is not business as usual.

The narrator of *Fear and Trembling* (1985) is not a Knight of Faith. He is a kind of professional. This is my final reason for considering Kierkegaard appropriate as a model for art education. He was forerunner in fabulation, writing each his books and articles from the particular point of view of a given fictional character. This gets beyond the need for one answer, one set of conventions. Rather, it suggests the need for performative creativity and the need for perspectival thinking (and making) in lieu of an objective, universal system. In this particular case, the perspective is that of a person unable to become a Knight of Faith — though he would like to. The Knight of Resignation dreams of the past to make the present worthwhile. I wish to argue that this is what informs our default beliefs about the difference between academia and industry, causing a lack of clarity, unnecessary anxieties and a massive loss of creative capital.

The love that actually drives anyone to study difficult things (often for little or no pay in the arts) is considered natural in young people. Later one grows up and learns how to navigate the real world via realistic career oriented goals. It is a bit like that old joke about being a communist at 20 or 40. Only the lucky few escape that fate, at least if we are to believe the mythology surrounding self-actualized professionals who have been successful by answering their calling. The rest are Knights of Resignation, resigned to memories of what they once believed. You are expected to be hard working and produce results acceptable by an industry standard, of course, but love and passion are relegated to marketing rhetoric. Seen in this light the fourteenth-century definition of a profession as 'any solemn declaration' is wholly contemporary.

I have used Kierkegaard here in a way that is neither about religion or ethics or logic. Love, vows, callings are the central topics that make a discussion of his theory relevant to arts education. A natural progression from love to resignation informs default beliefs about maturation and professionalism and explains the separation between school and work without recourse to economic perspectives. Furthermore, teaching through research into one's own practice creates a tighter link with students. In a sense, you are in the same boat, albeit sitting in different parts. We are all conducting research, all taking pictures, all focusing on architecture, all attempting to analyse and critique existing practices as well as contribute to them. Hence, in a classroom based on practice-based research, everyone is to some extent placed in the role of the knight of faith.

I am arguing that Kierkegaard's binary provides the opportunity to consider a different sort of transition from love to vocation. Answering to a calling, even in the face of evidence that it is not practical to do so, can be so satisfying that you are willing to devote all of your energy to it. That is what I mean by creative capital. Letting people do what they love and viewing the classroom and the workplace as spaces for developing that vocation means the shift from a world of Knights of Resignation to one populated with Knights of Faith. I have aligned that argument with the one made by philosopher and art educator, Juha Varto, as an update and a gloss to Kierkegaard — one without the chivalric and religious terminology.

But how do you put those ideals into practical terms? But practice — or in this case practice-based research — supplies an impossible task. It is one that lets others get on with their practice with a known but undetermined goal.

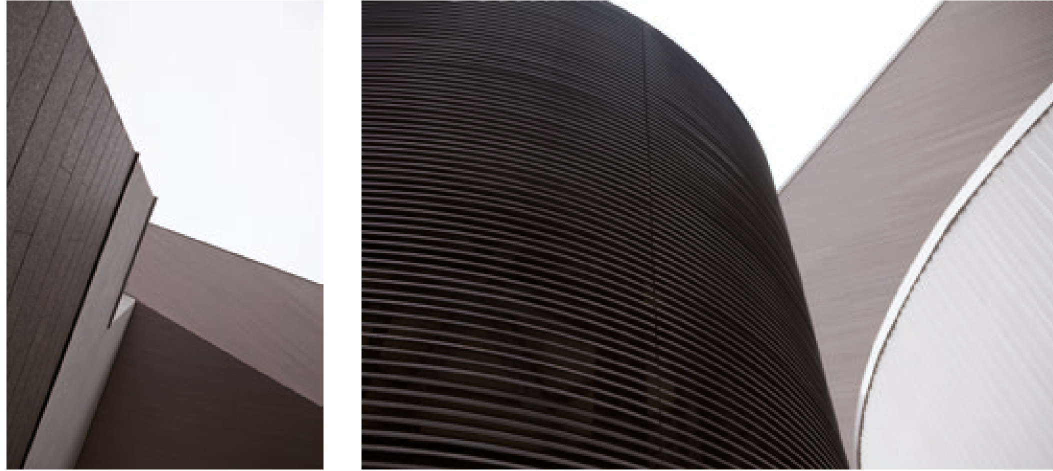
In practice

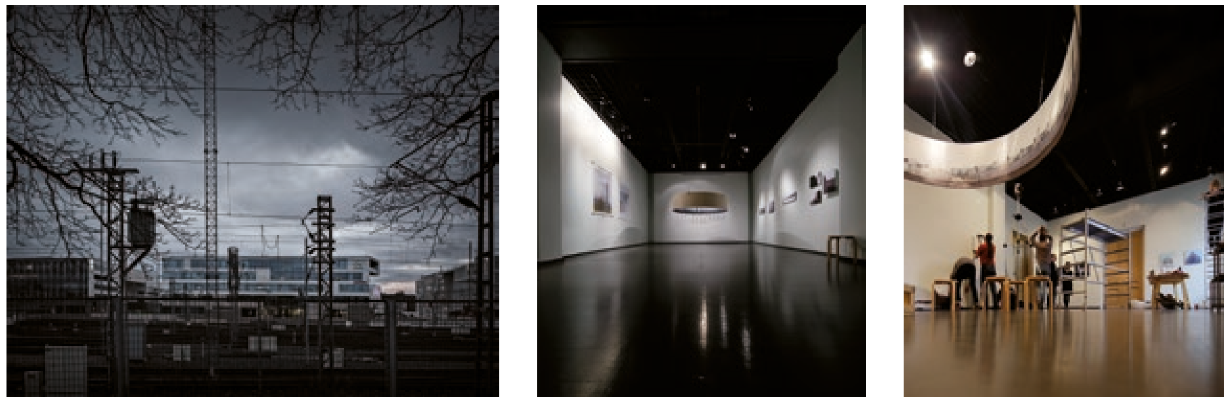
Let's return now to my case study, and consider the standard elements of a practical course like this one. Teaching architectural photography essentially consists of defining a series of utterances. As with many language courses, you are taught things such as grammar, vocabulary, spelling and pronunciation. In this case that would mean familiarity with the type of images commissioned by architects followed by training in the required skill sets. You do not question or analyse those types anymore than a secondary language learner would question the lessons they receive. However it is here that the analogy breaks down.

As stated, this was a group of highly skilled individuals. Their skills did not overlap, however, but rather complimented each other — as if half the room knew how to speak and the other half knew how to write. Hence, another experimental aspect of the course was to see if they could teach each other. The architects could supply the information and connoisseur's eye for the production of images and the relationship with the built environment. The photographers would supply both technical skills with equipment and a fine-art background in photography. Each had experience with project-based work and each was accustomed to narration through images. In this scenario, the teacher has to decide upon assignments, the reading and supervise some of the work sessions. But much of the learning is achieved via both strengths and weaknesses on each side of the room. These supply the need for cooperation and the self-interest that assures participation.

The upshot is that it resulted in a productive but open classroom environment for learning, exploration, play and a successful exhibition that incorporated the same values. The exhibition served as both an experiment to test my research, a means of testing the student work and motivational device suitable for this sort of learning environment (Rand and Zakia 2006; Traub 2006). Students demonstrated findings in support of the hypothesis that site and time specific photography could be commercially viable. One form of evidence is the fact that the architects purchased images and

the museum raved about them. But students were in the service of neither. They had a completely free hand other than the limitations place upon them by Professor Ahlava and myself at the outset of the course.





In other words

It is now time to acknowledge the elephant in the room. I mentioned the scalability of my research being a driving force behind this experiment. The scalability/applicability of this teaching model remains in doubt. For, to some degree, it requires the near certainty of funding that my experience teaching in the United Kingdom, Spain and Italy have taught me is a rare luxury. Next there is the question of time. Teachers have enough on their plate already without being required to take on the role of curator, funding liaison and project manager. Whilst considered part of the task for an MFA, is it really necessary to go through all of this for a regular course? Moreover, it could be argued that doing so distances students from the real world even further by removing the need to deal with realities such as funding and networks. Lastly, how often can the expectation of students teaching each other the basic skills required be put into action? Was this perhaps a one-off or is it possible to design a course with that need in mind? I would like to forward some possible answers for future discussion.

Money has been a central issue, here. Learning to market oneself to industry is the solution to this problem suggested by one article. Another takes the opposite position. I align myself with Baldacchino for his argument against the conversion of the classroom (and the staffroom) into just another business that must follow the logic of the market. Equally, however, I think a rethink about what it means to be entrepreneurial and the honest, open acknowledgement that increasing numbers of students look at art as a business are needed. Moreover, I argue that a both the classroom and the commercial workplace would benefit from embracing a love for what you do over the profession of submission that is the background belief behind 'real' work. Whilst not a dialectical synthesis in the purest sense, the model I have offered here is something of a mid-point that dovetails with the other two positions. However, it cannot be applied everywhere. An obvious avenue of funding that has excited much attention at the moment is crowd-funding. It remains to see whether it will remain a stable, viable alternative to business models or funded research. But it is an interesting start.

As for teachers having the time — that is a personal decision. I am not advocating a change in the logic of teaching and subsequent revolution in the curricula of countless countries. I am in no position to do so. But I do hope I have given a perspective on one possible way of doing things differently that is both tied to industry but not bound to it.

Whilst it is true that students must learn how to find money, I think they are better served by doing so outside the university environment — whether as artists or entrepreneurs or a mixture of the two. However, I do think it is viable and helpful for them to be in contact with selected professionals in their area of education. There need not be anything inherently wrong with bridges to industry, unless the students are eventually forced to live under them.

Finally, as for students teaching each other — I think this can and should be scaled up. At the risk of sounding like a human resources manager, it simply boils down to choosing the right team. Once that selection process is achieved, my experience suggests a new avenue for co-learning. Furthermore, it creates an imperative for interdisciplinary learning that engenders collaboration through necessity.

Conclusions

I will now attempt to connect the dots. The relevance of practice-based doctoral research for B.A./M.A. students in a course such as this takes the form of bridges and tunnels. At times it is important to make connections across divides, at other times it

is useful to dig under the institutions in place like an inmate with a spoon.

The role of a teacher in a classroom of skilled individuals is to put them together and give them interesting, challenging work. In doing so they acquire the skills they need from a practical course and free the instructor up to do other things. Those things involve bridging the practice—theory divide, the commercial—fine art divide, the academia—business divide, the creative—industry divide.

Must a connection to industry imply the choice between capitalist and socialist ideologies? Yes and no. Money must be found both at the learning stages and upon leaving art school. My particular perspective on both architecture and photography students underlines the importance of this fact. For, in Helsinki, most first year university leavers find work in their field; most photography students wait tables. The importance of this issue has been outlined by the articles I've attempted to dialogue with, and I by no means which to diminish the importance of the issues they have raised.

Lastly, is there a theory that we should look at to answer these questions? Whilst Baldacchino, Kearny and Harris verbalize the importance of ends over means, each spends a great deal of their argument discussing the latter. I prefer to consider any means necessary — as Feyerabend said, anything goes — to facilitate the meaning of a course. Open-ended, unscripted, analytic exploratory use of the medium (of photography in this case) is that meaning. But it only becomes meaningful where students and teacher alike are swept away by the passion, the love for what they are doing, which is anything but analytic or full of meaning in the positivistic sense. It is, in fact, madness. Yet it still provides for meaningful activity. That is a paradox, in the sense intended by Kierkegaard — a curious sort of instrument, yet a powerful one.

All of this has been accomplished by making students part of a team to help me with my research. By sharing my practice with them I was able to share the passion for what I do, my findings so far and the problems I currently face. I found it an extremely gratifying form of collaboration, honest in both the desire to educate but also to learn from the students.

REFERENCES

Ahlava, A. (2002), Architecture in Consumer Society, Helsinki : University of Art and Design Helsinki.

Baldacchino, J. (2013), 'What creative industries? Instrumentalism, autonomy and the education of artists', International Journal of Education through Art, 9:3, pp. 343—56.

Böhme, G. (2010), 'On beauty', Nordic Journal of Aesthetics, Vol 21, No 39, http://ojs.statsbiblioteket.dk/index.php/nja/article/view/3001/4595. Accessed 27 November 2012.

____, (2012) 'The art of the stage set as a paradigm for an aesthetics of atmospheres' Cresson Publications, the centre for research on sonic space and urban environme nt, http://www.cresson.archi.fr/PUBLI/pubCOLLOQUE/AMB8-confGBohme-eng.pdf. Accessed 1 November 2012.

____ (2002),'The space of bodily presence and space as a medium of representation', http://www.ifs.tu-darmstadt.de/fileadmin/gradkoll/Publikationen/space-folder/pdf/Boehme.pdf. Accessed 27 November 2012.

Colomina, B. (2000), Privacy and Publicity, Cambridge, MA: MIT Press.

Goodwin, M. (2013), 'A hinge: Field-testing the relationship between photography and architecture', Journal of Artistic Research, 03:2013, http://www.researchcatalogue.net/view/30884/30885. Accessed 1 October 2014.

____ (2014), '9 facts about conventions in architectural photography', Nordic Journal of Architectural Research, 01: 2014, pp. 09—34.

Čeferin, P. (2003), Constructing a Legend, Helsinki: SKS.

Hannula, Mika (2009), 'Catch me if you can: Chances and challenges of artistic research', http://www.artandresearch.org.uk/v2n2/hannula1.html. Accessed 1 October 2014.

Horkheimer, M. (1947), The Eclipse of Reason, New York: Oxford University Press.

Kearney, G. and Harris, P. (2013), 'Supporting the creative industries: The rationale for an exchange of thinking between the art and business schools', International Journal of Education through Art, 9:3, pp. 311—26.

Kierkegaard, S. (1985), Fear and Trembling, New York: Penguin.

Rand, G. M. and Zakia, R. D. (2006), Teaching Photography, Burlington: Focal Press.

Rubenstein, D. (2009), 'Towards photographic education', Photographies, 2:2, pp. 135—42.

Sarasvathy, S. D. (2001), 'What makes entrepreneurs entrepreneurial?', http://www.effectuation.org/sites/default/files/research_papers/what-makes-entrepreneurs-entrepreneurial-sarasvathy_0.pdf. Accessed 1 October 2014.

Traub, C. H., Heller, S. and Bell, A. (2006), The Education of a Photographer, New York: Allworth Press.

Varto, J. (2011), Song of the Earth, Helsinki: Aalto University Publication series.

Varto, J. (2012), A Dance with the World, Helsinki: Aalto University Publication series.

Wigley, Mark. "The Architecture of Atmosphere," (1998), In Daidalos 68:1998, pp. 18-27.

Zumthor, P. (2006), Atmospheres: Architectural Environments — Surrounding Objects, Basel: Birkhäuser.

NOTES

http://www.etymonline.com/index.php?term=profession.

http://www.etymonline.com/index.php?term=vocation.

According to Professor Hubert Dreyfus in his 2009 lecture series on Existentialist literature: https://itunes.apple.com/us/itunes-u/philosophy-7-001-fall-2009/id354819218?mt=10.

See the following review: http://www.finnisharchitecture.fi/2014/05/grey-matter-experimental-architecturaphotography-at-mfa/.

8 APPENDICES

Appendix I Website: Using Grid as a Tool

At http://marc-goodwin.com/atmographs you will find a complete selection of images shot for this research together with a sorting mechanism which shows the importance of atmosphere in the reading of architectural photography.

That extensive catalogue of images can be viewed against the portfolio available at the following site:

http://archmospheres.com/

Appendix II Blog

Please visit https://archmospheres.wordpress.com/ to read the log for this research. It contains 387 posts which run from the first year of research until the present day. These posts span principally across the following three categories:

Diary: personal events that should be earmarked — life as connected to work.
Log: things which maybe useful as reference material
Research log: activities and observations significant to research

Appendix III Definitions

For the sake of clarity, I will attempt to take a stand on certain key terms and issues that are used in several different ways by practitioners and theorists. These may be taken as a crucial subset of terms specific to both my practice and my research.

— Architectural photography: by this term I mean commission-based photography appearing in trade magazines such as El Croquis and the Finnish Architectural Review, the popular press such as Mark or Wallpaper and occasionally in research journals such as the Nordic Journal of Architectural Research and Architecture and Culture. The Phaidon Atlas of Contemporary World Architecture is perhaps the best example of all because it demonstrates how the conventions I have identified are followed all around the world, amounting to a sort of universal style. I am not referring to independent publishers (covered at the end of the 'discursive map' section of the dissertation) or fine art projects.

— Documentation: this a convenient term for expressing the belief that a style of photography, often opposed to Pictorialism (Naef 1978, Rosenblum 1984), can provide objective visual evidence. Documentary style exists as a photographic practice that is well researched and has been reinvented on several occasions (Frizot 1994, Hostetler 2000). However, I take issue with the notion of transparency or objectivity in architectural discourse when referring to documentation. To create such a visual document is to remove the creator, eliminate interpretation,

and simply present things as they are, via an image. That is impossible because the sense data stored as information content in a photograph is transmitted via a visual language (Kress 2006). That language is a convention, loaded with cultural baggage. A document is a picture.

— Image vs. Picture: According to WJT Mitchell, a picture is 'something one can hang' or something appearing printed in a publication, a physical thing; an image is the visual and mental formation of something. (Mitchell 2005: 85 & 140). This distinction is important because a finding of this research was that the architectural community (academic and commercial) is concerned with images of their buildings where I have been concerned with pictures in publications. The image and picture is one and the same in most cases, only the reason for looking at them changes their ontology.1

— Interpretation: Interpretation is the 'how' of the 'what' that is normally called the subject. All content is subject to interpretation in order for the presentation of in image as picture to take place. Much of that interpretation in architectural photography is guided by architectural discourse. See article three.

— Practice: by this term I mean three interconnected things. Practice as medium specificity which has shifted the ontology of art (Flusser 2011, Benjamin 1936), practice as the working life of commercial professionals (Iloniemi 2004, Redstone 2011), practice as research as understood specifically within academia (Barrett 2007, Biggs 2011).

— Presentation: The medium can never be irrelevant because every picture you see is mediated. The medium not only is the photograph but also the techniques used to produce the thing that is a photograph. The medium shares another person's particular view with a viewer. Hence the act of looking at a photograph has an aspect of inter-subjectivity which takes place via constructed objects — photographs, in this case of other constructed objects. A photograph presents a certain way of seeing, a set of choices taken by a photographer, to a viewer.

— Promotion: what normally takes place when a photograph is commissioned. Nearly everyone on Earth can now produce photographic pictures. Technology has made that possible. Paying for a professional means a different, better sort of picture is required for the purpose of promotion. But on that basis of what paradigm is one picture better than another? That question is a central concern to this research and further afield. See discursive map.

— Representation: the default definition of architectural photography. These photographs present architecture anew via the medium of a photograph. Representation via two-dimensional imagery is an integral and relatively straightforward part of architecture often divided up into classes such as: section, plan, elevation (Perouse de Montclos 2011: 22-29). Unfortunately, cultural theory from Althusser and Foucault to Horkheimer and Benjamin suggests there is more to consider when using this loaded word. See documentation.

— Transformation: To capture an image (with a camera, pen and paper, the eye, radar, spectrograph, thermostat reading, etc.) and render it into a final version that re-presents a particular place and time is to transform: to choose an image from a limitless number of possible ways of perceiving a place. Just as seeing is selective and determined by beliefs, showing seeing — photography — is anything

but the whole truth. A whole truth would an infinite thing, whereas photographs are clearly finite. Transformation takes place whether we recognise it or not. See interpretation.

— Taking place: I offer this term as a way to replace the above terms by describing what architectural photography is and does. The idea is a simple one: you 'take' a picture of a place. Equally, by doing so, you take a place and make it yours, taking a visual aspect of the world and transforming it into a smaller flatter object. The practice is not objective or neutral, and photographs are not transparent windows. Studies of architectural photography are rife with neologisms. It has been referred to as: building with light, constructing a legend, camera constructs, shooting space, constructing worlds, and so on. So perhaps adding another new notion to the pile will not be very useful. Certainly this term is not the only way to rightly see the practice. Rather, in keeping with the notion of paratactic aggregates, it could be seen as one of so many parts which adds up to a picture. Taking place, building with light, constructing a legend — may the reader decide.

— Practice Based Research: My perspective in the research I have presented here is at once that of a practitioner and that of an observer. This is because I am working as both a photographer in a field of architects and a researcher into a series of practices. That is what I take Practice Based Research to mean, in line with established definitions from experts in the field (Barrett & Bolt 2007, Biggs & Karlsson 2011).

— The current separation of fine and commercial art is entrenched in language: we still think of amateurs vs. professionals. But do we ever reflect on what we are saying? One means to be in love with something, the other comes from the idea of the solemn declaration one makes when joining a religious order. Professionalism in this case means the production of restrained, un-evocative images in the name of transparency and objectivity. The point can be made even clearer by reading Hannah Arendt's discussion of the meaning of all European words for labour in which amount to paint and effort in footnote 39 of The Human Condition (Arendt 1998: 48). The less you see the work of the photographer, the less painful it is for everyone, perhaps. The knight is resigned to his role and we are resigned to look at its effects.

Appendix IV Sample Interview

The following interview was the first part of the fieldwork conducted for the article published in the Journal of Artistic Research in 2011. It took place in Finland and Denmark with the following architects:

AOA: Vesa Oiva; K2S: Kimmo Lintula, Mikko Summanen Kimmo Lintula & Niko Sirola; JKMM: Samuli Miettinen; 3XN: Kim Nielsen; KHR: Mikkel Bedelhom; PLH: Holger Bak and Torben Hjortsø.

The goal of this interview was to establish the participant's beliefs about architectural photography, about atmosphere, and about the correlation between the two, all of

which would later be cross-checked with a questionnaire containing images of their building shot by me. This interview was my first direct contact with architects for this research. It was followed by photography of their buildings from which images were gleaned to produce a questionnaire.

1. What is the role of photography in publishing architecture and winning competitions? (The business of architecture aside from ideological considerations.)

2. Photography and architecture have a long history together. Can you think of some ways the one might have influenced the other?

3. How do architectural conventions shape architectural photography? Where does the “architectural style” of photography come from?

4. Are trends in architectural photography changing?

5. Can you talk about that relationship with reference specifically to your practice?

6. If you accept that the institution of architecture influences the practice of (architectural) photography (through specific briefs and general conventions), do you also think it could work the other way around? Can you think of ways that photographs, photography and photographers might have an effect on architectural practices?

7. My research question can be stated as follows: Do images make buildings? Could you respond to that?

8. What is an architectural atmosphere?

9. What are the strengths of Finnish architecture with respect to atmosphere?

• Can it exist at once in a building and in it’s depiction: can the photo and the architectural work share common ground through atmosphere?
• Are there some aspects of that notion which local architects are overlooking?

10.Peter Zumthor has written and spoken repeatedly about the notion of atmosphere as central to his work and appreciation of architecture. Do you see any possible links there to photography?

11.Gernot Böhme has also written extensively on the subject of atmospheres. He has identified the stage in theatre as a space for the production of atmospheres. He asserts their production and reception is almost scientifically reliable and predictable. Could you talk about that idea with reference to architecture?

12.What about photography? Can you see any similarities in the way it reproduces space in an image?

13.Architects such as Juhani Pallasmaa and Neil Leach have spent a decade disparaging photography and blaming it for much of what is bad in architecture. Why do you suppose that is?

14. What were atmospheric intentions of (name of specific project)?

15. How well were these realised by the photography you commissioned? In what way do the photographs succeed in transmitting your intentions (atmospheric and otherwise) and in what ways do they fall short?

16. What were some of the pleasant surprises from the photography you commissioned?

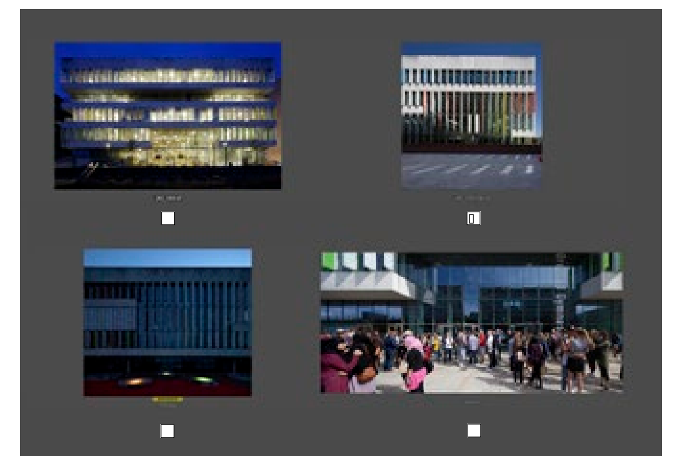
17.What do you think could be added in subsequent shoots of that work and why? How about a wish list?

18.Can the atmosphere of an image coincide with the one perceived upon visiting the actual site? And upon what would it depend (photographic techniques, correspondence of light and weather, presence/absence of people, noise levels and general “vibe”, etc).

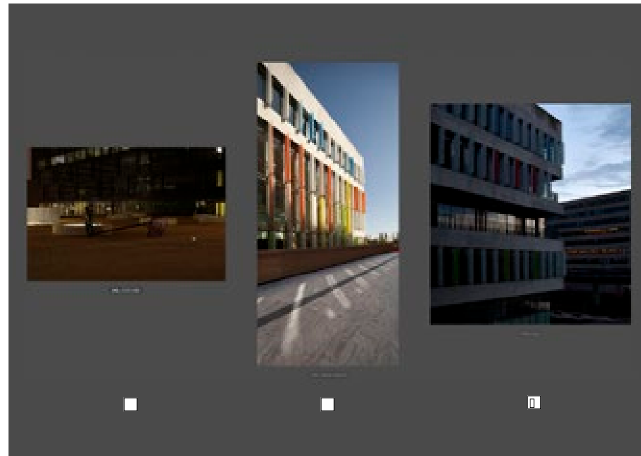
Appendix V Sample Questionnaire

The following questionnaire was sent to the same six architects with whom the first interview was conducted. This was the final phase of fieldwork for the first article and first phase of this dissertation. The key focus at this point was to test the industry reception of the notion of atmosphere, identify differences between its use in words and pictures, and check for disparities and correlations between image preferences and purchases. From this questionnaire, developed entirely from pictures I shot of the participant architects’ buildings, important feedback was derived not only about the photographs the architects would purchase had the services of a photographer been commissioned, but also the images they would choose for personal reasons not related to their commercial practice. Discrepancies there were of particular interest, for they raised a key question: why are these people not guided by their preferences? What makes an architect believe one image is more commercially viable than another and choose that image over their preferences?

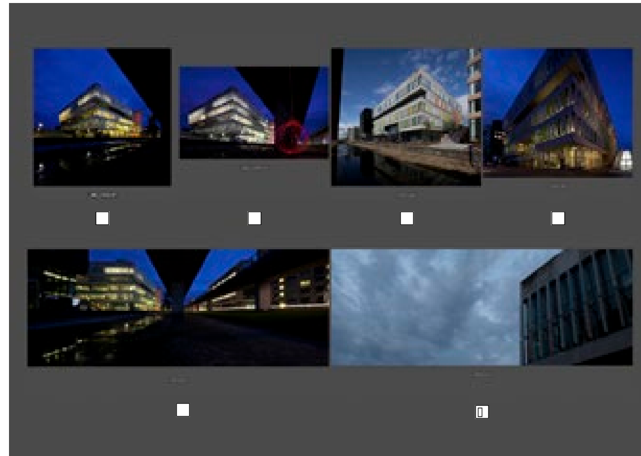
TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



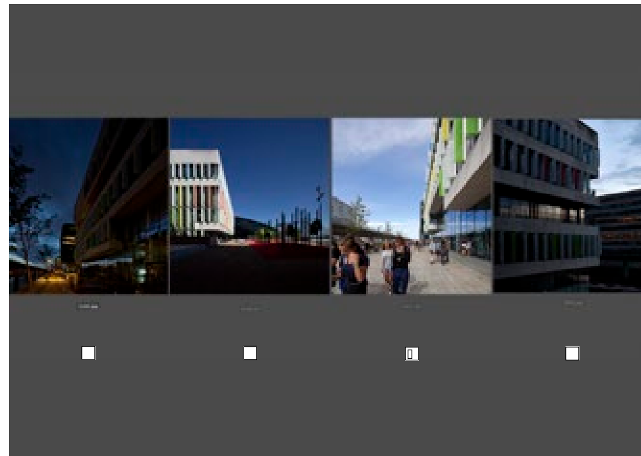
TICK THE BOX OF THE IMAGE YOU LIKE BEST



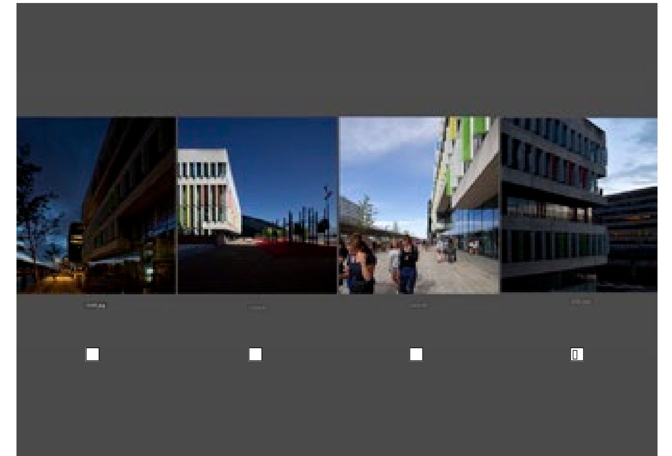
TICK THE BOX OF THE IMAGE YOU LIKE BEST



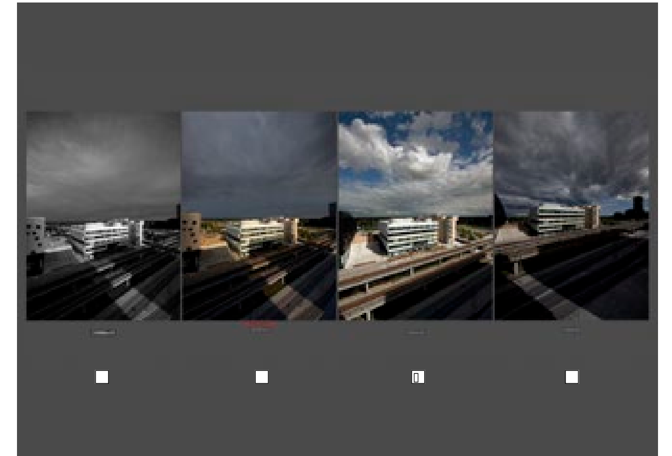
TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



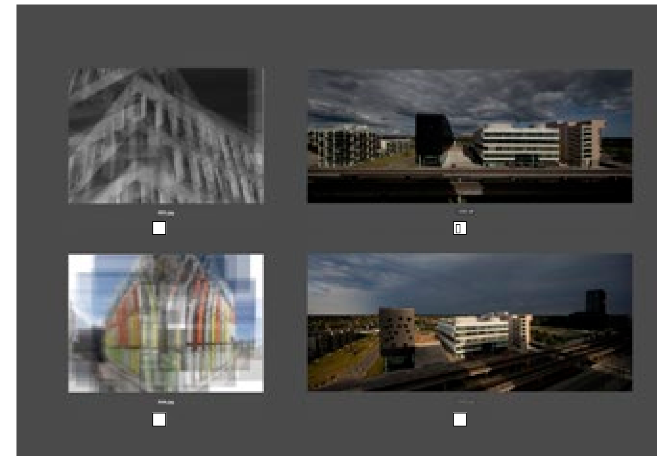
TICK THE BOX OF THE IMAGE YOU LIKE BEST



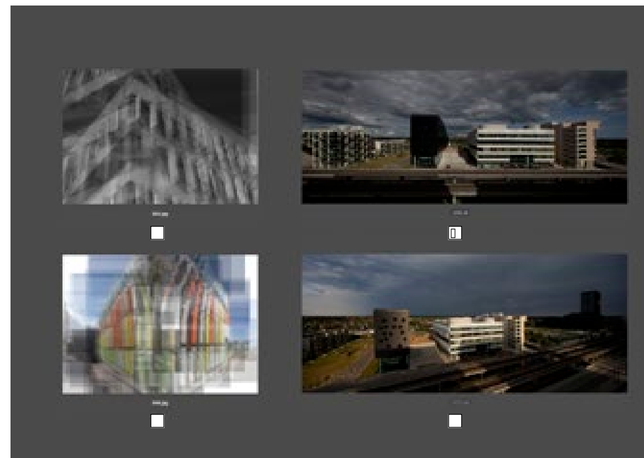
TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



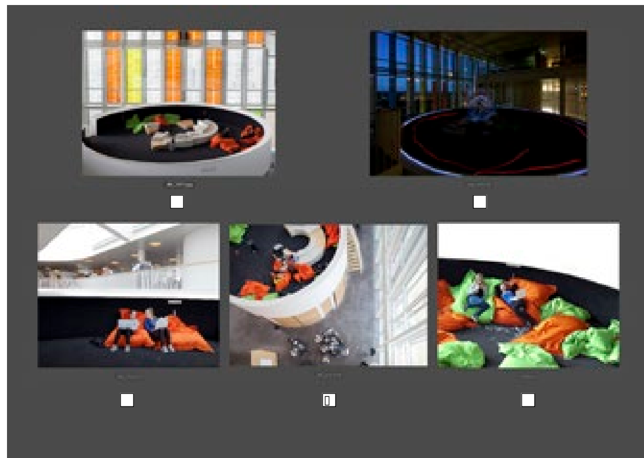
TICK THE BOX OF THE IMAGE YOU LIKE BEST



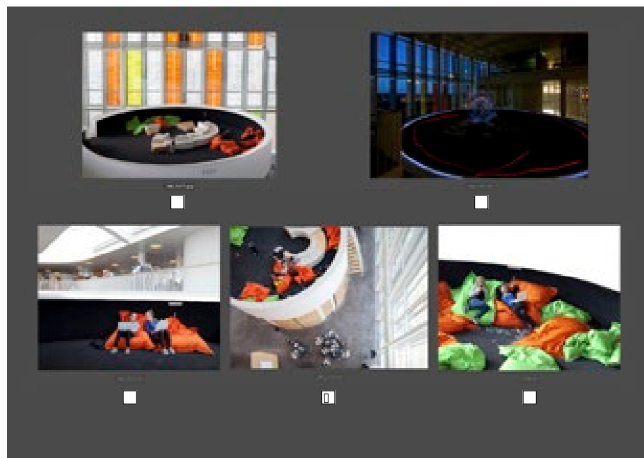
TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



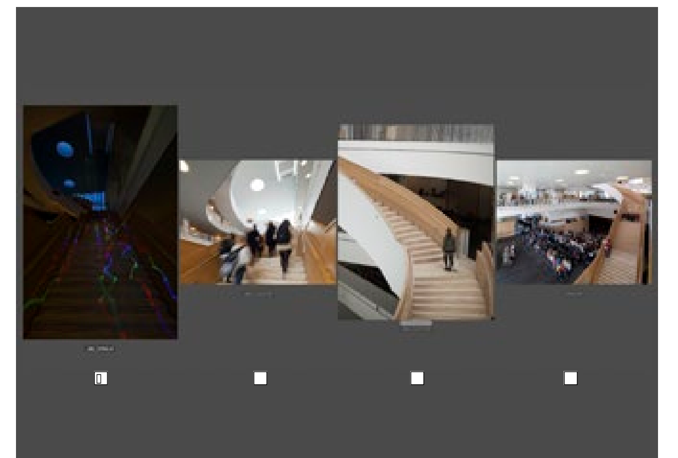
TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



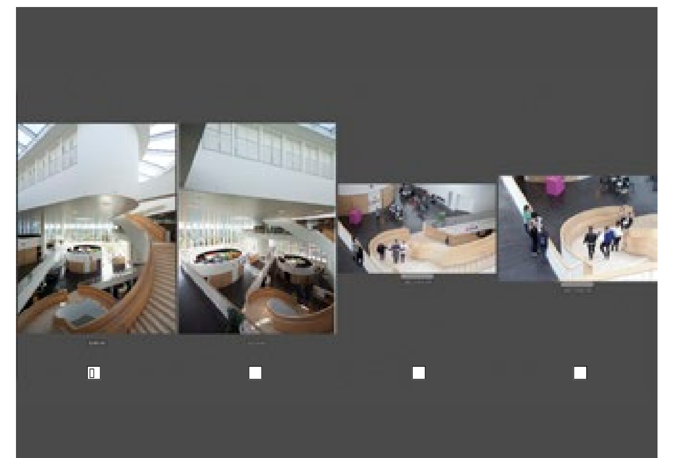
TICK THE BOX OF THE IMAGE YOU LIKE BEST



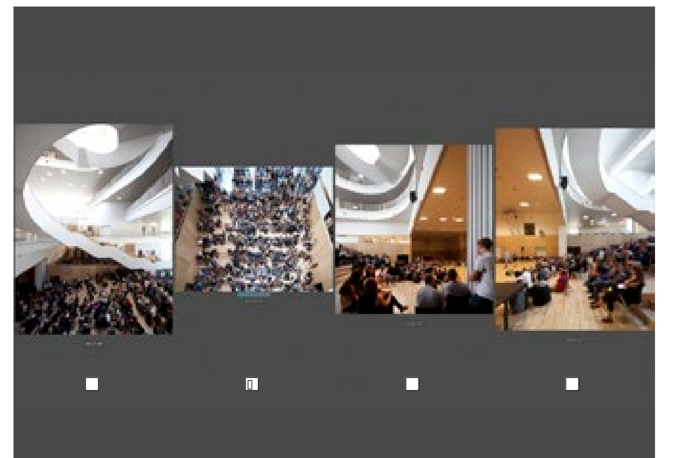
TICK THE BOX OF THE IMAGE YOU LIKE BEST



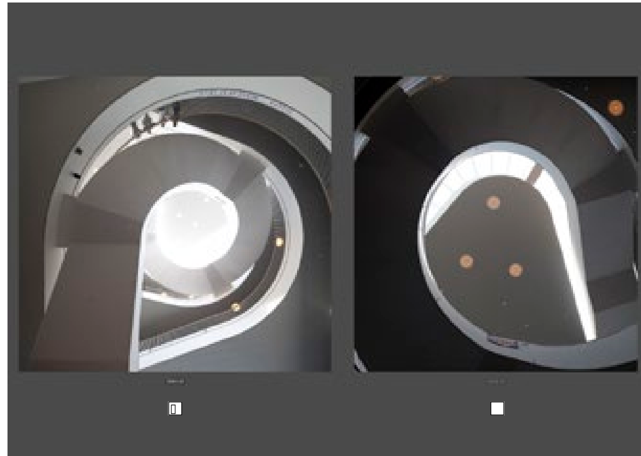
TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



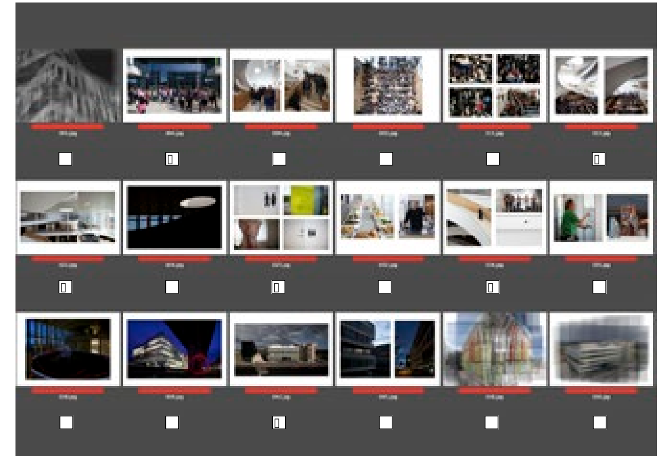
TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE



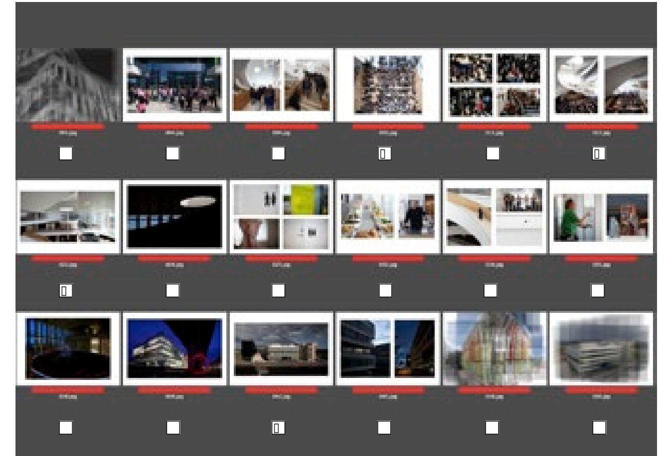
TICK THE BOX OF THE IMAGE YOU LIKE BEST

TICK THE BOX OF THE IMAGE YOU WOULD PURCHASE

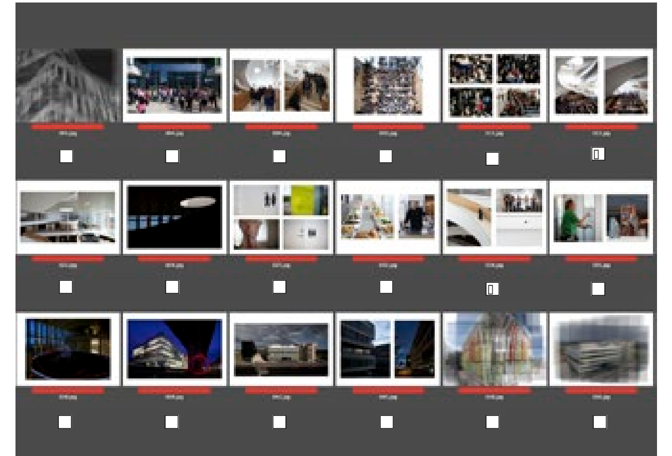
TICK THE BOX OF 6 IMAGES YOU WOULD SELECT TO TELL THE STORY OF THIS BUILDING



TICK THE BOX OF 4 IMAGES YOU WOULD SELECT TO TELL THE STORY OF THIS BUILDING



TICK THE BOX OF 2 IMAGES YOU WOULD SELECT TO TELL THE STORY OF THIS BUILDING



IN THE SPACE BELOW WRITE THE TITLE & AUTHOR OF 2 OF YOUR FAVOURITE PHOTOGRAPHS
(ALTERNATELY, COPY/PASTE A URL)

The Blue Planet, Adam Mørk (see attachment),

Dialectic approach

1. Was this a viable method of collaboration with a photographer?

Yes

2. Was this method really a dialectic? How could it be more so?

It was dialectic to the extent that we had quite long discussion about the role of architectural photography before the photos were taken.

Conventions

1 .Which visual conventions should architecture hold on to?

Focus on how the natural daylight interact with the architecture.

2. Do any of the images produced in this investigation point to a kind of innovation that could be pursued?

Yes, a stronger focus on the life and the social behaviour the architecture generates

Atmospheres:

Please match letters from the list of words with each of the following numbers.
Letters can be repeated.

1. Atmosphere as a concept for a new brand of photography: A
2. Atmosphere as the organizing principle for a photographic project: A
3. Atmosphere as the organizing principle for a research project: A
4. Atmosphere as a bridge to facilitate dialogue between different professions: A
5. Atmosphere as the means of categorising different types of photographs: DON'T KNOW
6. Atmosphere as a means of marketing architecture: A

Word choice: a. useful b. pretentious c. unnecessary d. useless e. other (explain)

Please explain briefly why you purchased the images you did.

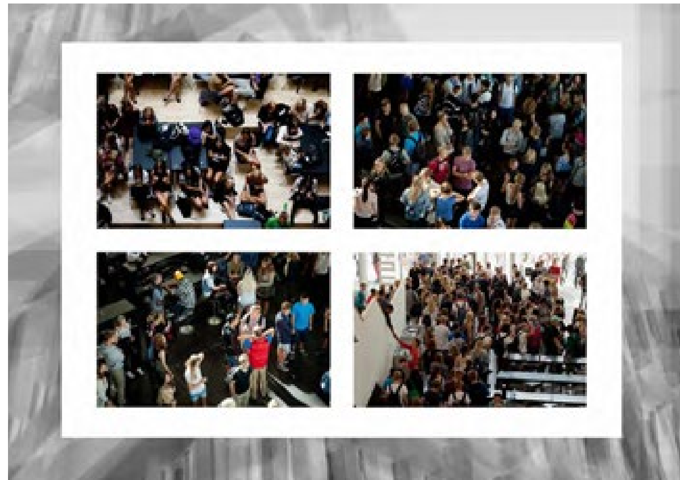
We wanted photos that showed the life in the building

Thank you!

Appendix VI Early Archmospheres

The following is the first set of images produced from fieldwork with the six architects mentioned in the Journal of Artistic Research article. These images first appeared in JAR 3/2011. They are included here as an early stage in the practice based exploration of architectural photography. They represent an attempt to establish conventional photographic practices as well as explore alternatives that were later sent to participant architects for approval/disapproval. This selection was revisited and largely reconsidered later upon the discovery of grids as an important heuristic device. Those grids together with a small selection from each, can be found at the beginning of this dissertation.

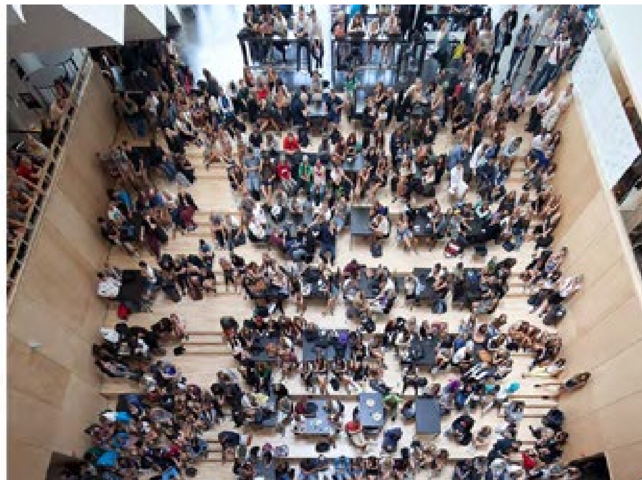
The interview with Kim Nielsen lasted just 30 minutes and was very intense. He had clearly spoken a great deal about this project over the years, and the challenge was to get him think beyond the sound bites he rolled off, one after another, at the beginning. He talked a lot about the space as a stage for young people to show off.

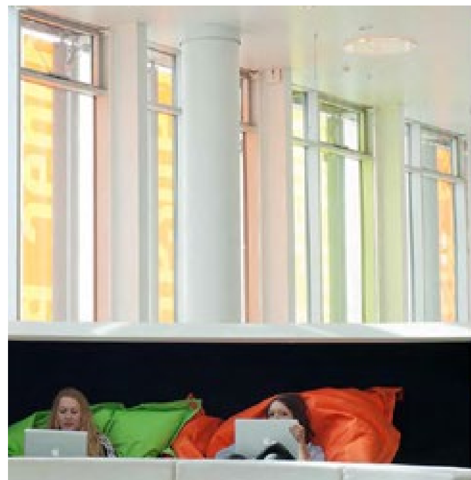


To my mind, this statement clearly aligned itself to Gernhot Bohme's essay about the atmospheric qualities of the theatre. The question then became a simple one of documenting that quality, thereby visualising his statement. Here the photographer found himself in the classic role of the hunter with lens.

The function of the building was also discussed:

"I think one thing you have to know, the building is designed for 800 students and now there's 1200. That again can be used in photos to get the atmosphere of the building. Our intention was to make an indoor village."





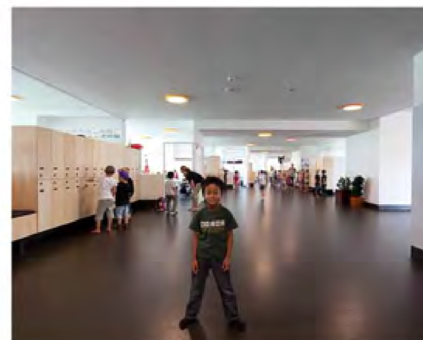
When asked what he thought of Ørestad and the metro, Mikkel Beedholm, partner at KHR didn't mince words: "I've been here for two years and I get more and more angry. In my generation hundreds architects have really missed every opportunity." He said that Ørestad was, in a word, a disaster. However, he was a very warm and positive person to interview and spent 2 hours showing me around his building with obvious pride and affection. He was determined that his school should not suffer the same shortcomings as the neighbourhood. One main point is particularly relevant here: the importance of framing views. He expresed this repeatedly, both as a first-hand, lived experience and as a mediated, photographic one.

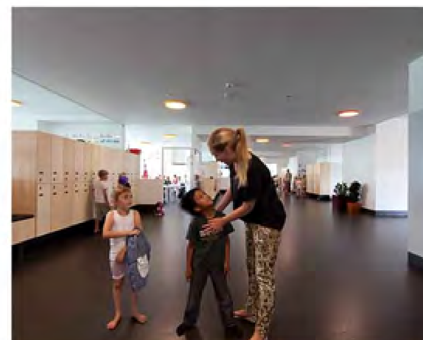
Atmosphere is considered by Beedholm as a sensual experience, at once visual with engaging views and at the same time a corporeal experience - one of warmth and the feeling of being enveloped. Beedholm expressed repeated the importance of fuction and aesthetics and that each of these should be encountered and appreciated by all visitors, not just trained specialists.

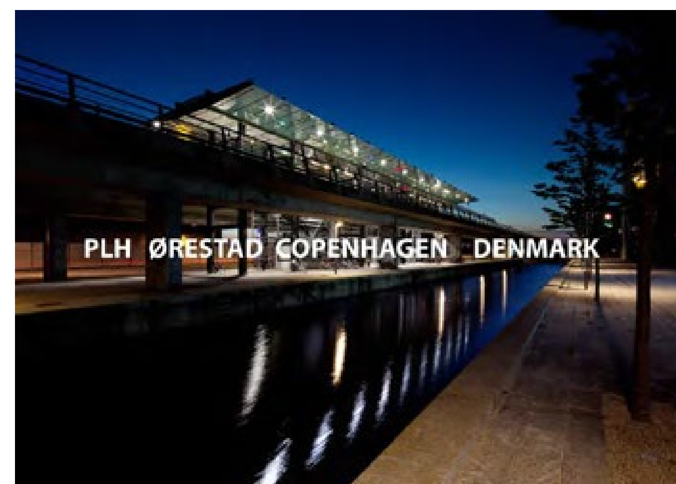
The photograph was, for him, a sort of litmus test of that experience:

"The role of the photographer for me, or the picture? I would hope anybody could take a picture of the experience of it [ie, the building]. Anyone taking a picture [inside or outside the building] can see any image they think is interesting."

This idea that anyone can take a good picture if your building looks good enough posits photography as a net used to catch butterflies. All you need in order to be successful is a net without holes and a good set of reflexes. Technology certainly brings architects nearer to achieving that desire, as cameras get easier to use and high resolution becomes democratically priced. If photography is hunting, that dream will eventually come true in most areas where photography is used instrumentally, as a means to an end. If photography is a means of research, an end in itself, perhaps not so.



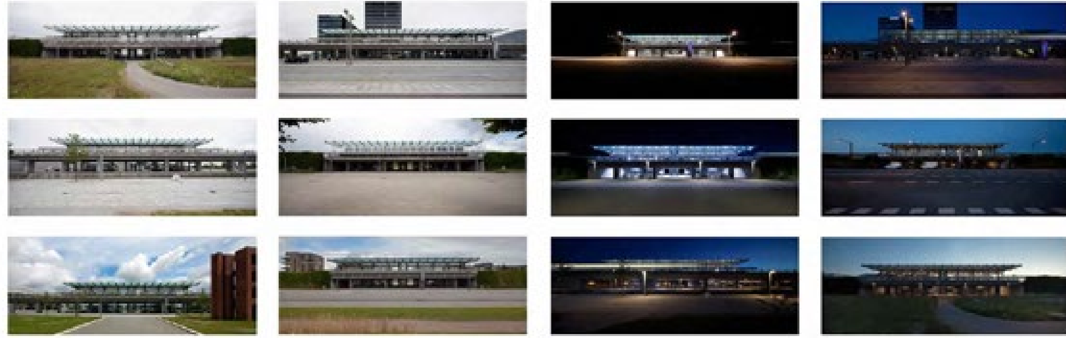




PLH ØRESTAD COPENHAGEN DENMARK

Torben Hjortsø is one of the partners of PLH and has been with the company for several decades. His answers immediately took us down the well-beaten path standard architectural dogma, appearing cautious and not wholly engaged or convinced by the questions he was being asked: "When we designed the metro stations, we had several things in mind. First of all, pure functionality. It's got to function, that's why we redesigned the original design."

The purpose of these interviews is neither to confirm or disprove the value of atmosphere in architectural photography nor seek controversial statements. Atmosphere is a topic that was hoped would provide a new focal point away from architectural and photographic cliches, a means of opening up the conversation: a neutral ground common but foreign. Transparency was a notion that emerged thanks to repeated attempts to speak about atmosphere. For the designer it is a key aspect of the programme and hence part of the function; for the photographer transparency is a keyword to direct the process of capture and edit.



In a talk given at the architecture school of Aalto University and later during our interview, Vesa Oiva, half of AoA architects mentioned the importance of atmosphere repeatedly: "[In Kaisa Talo, the University of Helsinki's new library] there are three different voids, each with different atmosphere which changes on each level due to spatial relationship of floor. The goal was to create the best atmosphere possible for learning: several different atmospheres are employed to suit the varied needs of visitors." The low ceilings common to this sort of building are punctured by three parabolic voids, creating a stark contrast from the square geometry of the walls, floors, shelves and books. The building is large, changes from one level to the next and is very different on each side: one facing the 18th & 19th century neoclassical quarter designed largely by Engels, which feels studenty, peaceful and reminiscent of the days of empire, the other facing one of the busiest and more urban parts of what is ultimately rather a quiet, empty city, is the entrance to a busy metro sation, is crossed by cars and trams and filled with shops. The building was shot several times during the winter of 2011 while still under construction and finally during the first week of its opening in September 2012. All of this will be reflected in the eventual selection of photographs and is perhaps hinted at here to some extent.

My interview with Samuli Miettinen, partner at JKMM, was one of the longest, most indepth and engaging. It was also one of the first. Perhaps the process of asking the same questions over and over again during the course of several months means the interviewer is less engaging, too. But for the two hours we spent discussing the topics of atmosphere and architecture, architecture and representation and architecture in Finland, we were each very focussed on the discussion. Atmosphere was of particular significance to the project Samuli presented me with: a crèche providing day care for babies and children up to the age of schooling. He had very clear ideas about how the school might be looked at with a focus on atmospheres: "I would like to see some key moments producing atmospheres: children eating breakfast, taking off outdoor clothes after getting dropped off and putting them on to go out to play, children doing things under skylights and in playground, the chaos of life and work." This message was a clear one, and I think the key moments and the chaos of life were obvious and easy to translate from word to image. Some of the other suggestions he had were that "photography needs to reach the other senses: touchable surfaces, acoustic surfaces, soft/hard, hot/cold." Again, sensorial indicators like these transfer well, showing that photography is not just a visual medium, but rather one engaged through the eyes but which can activate the other senses, particularly touch and sound. There are noisy images and quiet ones, hard surfaces and soft ones. All of this quite clear without actually visiting the location. Photography, Samuli helped me to understand, is more than a visual medium. Herein lies the idea behind the embodied image.

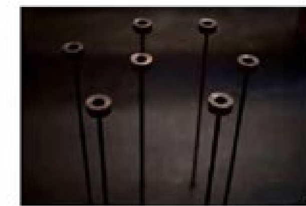
Lunch with the 3 partners of K2s was thoughtful, chatty and very encouraging. From the outset they made statements that piqued my interest in their work and our collaboration, such as their interest in the "trend to get rid of the boundary between art photography and architectural photography."

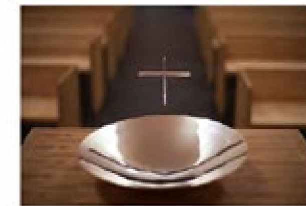
They were openly aware of the importance of connotation when producing architectural photographs. The standard statements about objective, neutral depiction were nowhere to be found in the course of our discussion. Instead, "with the web, the magic you create through official photos is taken down by the kind of… snap-shots you see taken by other people."

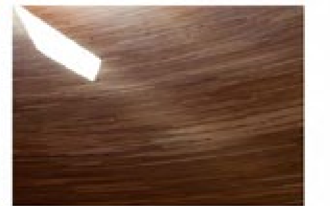
And when it came time to suggest future trends in photography they could see developing or discuss the type of images they would like to see more of in the future, again they were full of ideas, pointing to the lack of spontaneity, and the need for more "eventful lively photography."

However, when asked whether the rise of cheap, high quality video would mark the end of photography's role as the primary means of representing architecture, they were sceptical. "You have to somehow reduce, and photography is still a good way of doing that."

When asked if it is possible to convey the atmosphere of a work of architecture in a photograph, all three partners replied: "Definitely, Hélène Binet's photos of Zumthor's spa are an example of that." So black and white images of selective, evocative parts of the building, unusual points of view and an openess to spontaneous happenstance were all part of the ideas floating around the back of my mind whilst at work. Interestingly, though, when they contacted me and photographer Tuomas Uusheimo for images to publish in Japan Architect and the Mies Van der Rohe Award, they reverted to standard architectural photography. What conclusions can be drawn from that discrepancy? Perhaps the desire is there but not the will? Perhaps a sea change is yet to come.







Appendix VII Industry Work Flow

Much of academic discourse speaks around technical procedures without entering into details. This is problematic, because specific steps need to be enunciated for the sake of clarity. Without such clarity, simple, familiar terminology such as 'photography' and 'retouching' becomes virtually meaningless. Arguments about the validity of such procedures should come from a developed sense of what those procedures involve. For that reason, I include here a series of interviews together with participant observation conducted on 8 April 2015 at Cityscape Digital Limited 69-85 Tabernacle Street, London EC2A 4BD with the following participants:

Art Direction, Luca Guaresci
Photography, David Connelly & David Cabrera
Retouching, Daniele Butari & Mark
CGI Lighting, Joel Azopardi
CGI Assets & Production, Mariusz Podkrolewicz

Two different sorts of images are produced at Cityscape.

Surveys aim to produce an objective image with flat skies (limited shadows and highlights), limited retouching and only a minimum of photographic detail to CGI. These images are used as documentation and evidence to analyse the environment and the impact a new building will have on it. Photography is a form of contract between planning commissions and developers.

Marketing images aim to attract the attention of buyers promoting the building and its location. For this reason, much altering is required in order to make the reality captured on camera and produced by computer models to meet with the conventions of beauty in this market

Workflow steps for planning surveys or marketing. This process can take anywhere from three days for planning surveys to one month for marketing images.

1. Photography

a. Surveys — photography is conducted to request planning commission. In London this means demonstrating the protected view corridors are not obstructed as well as showing the scale and impact of the proposed building in relationship to its context. Weather is not particularly important, nor are anti-aesthetic elements of the scene considered problematic. For surveys the exact spot of the tripod is marked on the ground, allowing the survey team to return there.

b. Marketing — photography is conducted to supply the background to images ordered primarily by architects and commercial property agents. These images must be read as attractive, persuasive, seductive, etc. Sunny days are normally part of the list of requirements.

c. Images are shot on Canon 5D MKIII camera often with Canon 24 TS-E II lenses.

2. Surveying — chartered surveyors measure the exact coordinates of the site and proposed building, supplying Cityscape with a file of this information.

3. Camera Match — software is used to verify match within 5cm accuracy between survey and modelling.

4. CGI — from basic 3D model to photorealistic building

a. Preliminary 3d model supplied by architect to CGI expert.
i. Files require modification. In 70% of cases there are discrepancies between plans and elevations which need correction. Text with measurements is also removed.
ii. Modo and/or 3D Max is the software used for this work.

b. CGI Modelling / Assets
i. Surveys — the modelling is less sophisticated requiring only the minimum amount of work to be read as photo realistic.
ii. Marketing — a large library of assets including people, trees & foliage, furniture and surfaces (stone, glass, metal, wood etc) is used to place or replace elements in the scene.

c. CGI texture and lighting
i. Surveys — very little texture and lighting is added, again satisfying the minimum requirements for photo realistic images.
ii. Marketing — surfaces require added texture and lighting in order to look both more realistic and more attractive.

5. Retouching

a.Surveys — little retouching required

b. Marketing — Interior views: colour changes to create mixed lighting, people added, blur added to background. Exterior views: considerable changes to the context made: urban 'furniture' removed, traffic removed, people wearing winter clothes / bald / overweight replaced by photogenic people, dead vegetation removed, lighting added to highlight building, context darkened and desaturated to highlight building, proportions of building sometimes changed. Wide-angle shots preferred. Generally in search of 'hero shot': iconic image of a beautiful building in a beautiful city with beautiful weather filled with beautiful people.

c. Photoshop is the software used for this work.

6. First version sent to client (returned and altered repeatedly): 126mb file 5760px x 3840 px @ 300 dpi.

.

Appendix VIII AIA Instructions for Photography Commissions

This publication, put out by the American Institute of Architects and the American Society of Media Photographers is included here as a clear concise list of practices which lead to many of the visual conventions which have come to characterize architectural photography. The guidelines are helpful suggestions for architects to use when commissioning photographers. Likewise, they provide a series of considerations for photographers to keep in mind. They are a tool that facilitates a sometimes difficult collaboration between professionals. Well thought out and clearly expressed, the tool serves its purpose admirably well.

However, it also exemplifies the sort of limitations which standardize architectural photography. It is because the notions behind such guidelines exist that similar images are produced and circulated around the world. The potential damage such conventionalized repetition might cause to architectural design and the limitations it imposes on photographic practice are worth considering. To sum up, how might these helpful hints also hurt architectural photography, its viewers and its producers?

Contributed by the Architectural Photography Specialty Group of the American Society of Media Photographers

Commissioning
Architectural Photography

Best practices in working with a professional photographer.

Developed jointly by the American Institute of Architects (AIA) *and the* American Society of Media Photographers (ASMP)

Contents

Selecting a Professional Photographer 2
Understanding the Estimate for a Photographic Assignment 5
Controlling the Cost of a Photographic Assignment 10
Licensing Photographs for Publication 14
Preparing for Professional Photography: A Checklist 17

***Riverbend Music Center, Cincinnati OH.** Designed by Michael Graves. Photographed by Ron Forth (www.ronforthphoto.com)*

Selecting a Professional Photographer

WHEN ONLY EXCELLENCE WILL DO

Image quality relates to *persuasion*. You aren't merely documenting your work but are actively trying to convince other people that yours is the best of its class. Photography, like any other custom service, is never a "one size fits all" proposition, but a matter of finding the right person for the job.

Just as architecture is more than construction materials, photography goes far beyond the mechanics of focus, exposure, and composition. It requires an aesthetic aptitude for creating a unique and compelling presentation of a physical structure. It requires craft: knowing how to choose lenses and aim lights, caring for details of cleanliness and arrangement, understanding what color adjustments create the most impact on a printed page and making sure permissions and releases are secured. It requires professionalism, ensuring that finished images will be delivered reliably,

on time, on budget and looking better than you expected. Photography requires a visual style that presents your work to its best advantage.

Images play a major role in defining how we come to know architecture and interior spaces. Because photography is pivotal in understanding the built environment, choosing a professional to photograph your project is a most important consideration. Here are suggestions to make the experience of photographing your project a good one.

IDENTIFY YOUR NEEDS

Which aspects of your project might best represent your design? Would you like to highlight any specific concepts, architectural elements, or other features? Are some areas best avoided? Which areas would illustrate creative problem solving?

Next, ask yourself how will you use the photography as an integrated part of your marketing plan?

- Show the photos to clients via website, portfolio or presentation
- Use the photos for in-house reference/documentation
- Use the photos for internally produced publications
- Submit the photos for competitions
- Send to editors of trade magazines or books
- Use the photos in trade or consumer advertising

The answers to these questions will help you and the photographer define the assignment parameters and develop cost estimates.

Share costs. Inquire whether other parties in your project (such as the owner, contractors, consultants, product suppliers, financing sources, or even public agencies) might be interested in participating in the assignment and sharing the expenses. If so, all of the participants should likewise identify their needs and priorities.

It is important that the participants understand which costs are shared and which are not. The total price has three components: creative/production fees, expenses and rights licenses. Expenses (e.g., travel; consumables; equipment or prop rentals; and fees paid to assistants, models and stylists) and production fees (the photographer's time, expertise and judgment) can be shared on any basis the participants choose. Rights licenses, in contrast, are based on the use each participant makes of the images and are not shared or transferable among the parties.

RESEARCH THE CANDIDATES

There are a number of possible strategies for finding the right photographer for the job. One is to scan architecture magazines for images that impress you and find out who made them. If the photo credits do not appear next to the pictures, they are usually near the magazine's table of contents or masthead. If an advertisement does not show photo credits, a call to the advertiser or ad agency might produce a name. Ask your professional colleagues for a recommendation.

To narrow the field of candidates, visit photographers' websites, request samples of their work or schedule meetings for portfolio presentations. Be aware that websites and portfolios often represent only a limited selection of the photographer's work. When asking to see portfolios, request images from assignments of similar scope and building type to the project you have in mind.

Architectural photography is a specialty within the profession, requiring different tools and skills than, say, weddings or wildlife. Within the specialty are further specializations—interiors, exteriors, landscapes, aerials—that may be important to your project. One criterion for evaluating a website or portfolio is whether the images indicate that the photographer has the skill and experience you want.

The photographer's "vision" or stylistic approach is just as critical. You want a visual style that complements both your architectural design and your marketing goals. Evaluating this factor is often the primary goal of a portfolio review.

> **FIND A PHOTOGRAPHER**
> The American Society of Media Photographers (ASMP) operates a free "Find a Photographer" service at www.FindaPhotographer.org. Only qualified professionals are in this database, and you can search by geographic location and photographic specialty. The search results include full contact information, sample photographs and website links.

ASK FOR ESTIMATES

Once you have identified the few photographers who seem to have the experience, skills and vision that match your goals, ask for estimates. You are not looking for a "lowest bidder" but rather a confirmation that each candidate understands the nature of the assignment. This understanding should encompass your budgetary and marketing goals.

Although photography is a competitive industry, it is not a commodity business; expect variations in the initial proposals you receive. The differences may reflect the photographers' experience, professional stature, different creative approaches and interpretations of your needs.

An estimate is not set in stone. If it reveals a misunderstanding of your requirements, call the photographer to discuss the matter. The photographer might make suggestions that could yield better results or lower costs. For some concrete suggestions, see *"Controlling the Cost of a Photography Assignment"* on page 10.

Don't underestimate the value of a photographer's enthusiasm and experience, as he or she can become an important part of your creative team.

Try to match your needs with a photographer's strengths, professionalism and compatibility with your style. The right photographer for you is one who understands your design ideas and can communicate them visually to the wider world.

***Soldier Field Renovation.** Architects: Lohan, Caprile & Goettsch and Wood + Zapata. Photographed by David Seide (www.DefinedSpace.com).*

Understanding the Estimate *for a Photographic Assignment*

SPECIFICATIONS FOR THE ESTIMATE

As a creative professional, you undoubtedly understand the importance of accurately defining the scope of work in order to determine your firm's design fees. Similarly, to prepare an estimate, a photographer must have a detailed description of the assignment.

Before you request an estimate, list the aspects of your project that you think might best represent your designs. The list should identify:

- Assignment description with any specific concepts, architectural elements, or design features you'd like to highlight.
- How the images might be used: documentation, portfolio, editorial features, advertising, design competition submissions, websites and so on.
- Other parties, such as contractors or consultants on the project, who may want to use the photos.
- Deliverables needed, such as digital files, prints or transparencies.

These are the major factors that a photographer needs to know in order to frame an accurate, detailed estimate. Based on all these factors, the photographer submits a formal estimate for the assignment. A photography estimate includes the assignment description plus three other components:

- Licensing and rights granted
- Creative/production fees
- Expenses

Let us look at each of these in turn.

THE ASSIGNMENT DESCRIPTION

A description of the project will include its name and location, the number of views, a list of deliverables and a timeframe for completing the assignment, plus any extraordinary circumstances, such as dawn shots, all-night sessions, views from cherry pickers, or aerial photos.

In some cases, the photographer may propose alternatives to your initial specifications. As a creative professional, he or she may be able to visualize some ideas you hadn't considered or to find ways to get the desired results at lower cost.

COPYRIGHT LAW

Under the Copyright Act of 1976 and the Berne Convention for the Protection of Literary and Artistic Works, photographs (like designs and drawings) automatically receive copyright protection immediately upon their creation. Copyright gives the creator of an image the exclusive legal right to control how the image is used.

This control is exercised by granting licenses to specific persons for specific uses. The right to use an image cannot be transferred by anyone without the written consent of the copyright holder.

Absence of a copyright notice does not mean that an image is free of copyright, and it does not relieve a prospective user from the responsibility of obtaining permission from the copyright holder. Altering or removing a copyright notice can result in liability under the Copyright Act and several other state and federal statutes. Simply having physical possession of photographs, slides, prints, transparencies, or digital files does not grant the right to use them.

Practical implications

It's important that you and your photographer agree on the scope of the license before the contract is signed and photography has begun. Outline your tentative plans for using the images, even if they are vague at the moment, and negotiate for optional future rights at the outset. Should your marketing plans change mid-course, be sure to discuss them with your photographer.

If you are interested in sharing photographs with third parties who have not been involved in the commissioned assignment (e.g., members of the design team, contractors, consultants, product manufacturers, clients, tenants, or magazine editors), they must understand that any use of the photos requires a written license agreement from the photographer and payment for usage. If you've received photographs without written permission for their use, do not use them until you have secured licensing rights directly from the photographer.

LICENSING AND RIGHTS GRANTED

A photograph, like an architectural design, is considered intellectual property. The photographer owns the copyright to the images he or she creates and has the exclusive right to license their use. Licensing agreements are specific with regard to use and should answer three basic questions:

- Who will use the images?
- How and where will the images appear?
- How long will the images be used?

This information may be detailed in the licensing section of the estimate, or it may be supplied in a separate licensing agreement that grants specific rights to commissioning clients. If several parties agree to share in the cost of an assignment, the photographer will develop a separate licensing agreement for each individual client to cover the permissions and rights.

PRICING

A photographer's fee typically has three components:

- Creative or production fee
- License fee
- Expenses

Unless there is reason to separate them, some photographers will quote an umbrella "creative fee" that includes both the production fee and the license fee. However, when several parties have agreed to share costs, they usually need to license different rights, and the production and license fees will generally be stated separately.

Creative or production fee. This component reflects the time and skill it takes to complete the assignment. Variables include the total number of views, scheduling and deadlines, site logistics and artistic considerations such as unique vantage points or special times of day. Intangible variables include the experience, creativity and vision that the photographer brings to the assignment.

In addition to the time spent behind the camera, a photographer's preproduction and postproduction time is included in the production fee. Preproduction tasks may include client meetings, advance site visits, meetings with the facility's management to organize access, conversations with building engineers to arrange technical coordination with lighting, landscape maintenance and other site-specific preparation.

Postproduction tasks commonly include image editing and selection (which may involve more client meetings), digital processing (color correction, minor retouching, compositing), and preparing master files for final delivery. It is not unusual for the postproduction work to consume as much time as the photography.

License fee. This component (sometimes referred to as the usage fee) reflects the value of the authorized uses for the images. The value is determined by a number of considerations, including how widely and for how long the images will be viewed, reproduced and distributed. Typically, the more extensive the use, the higher the fee will be.

Licenses use specific language to describe the rights being conferred. A glossary of licensing terms used in the photography and publishing industries has been compiled by PLUS (Picture Licensing Universal System); visit www.useplus.com to browse the definitions.

To obtain the best value, negotiate a license for the entire group of images based on your current and planned needs. There's no point in paying for a right that you will never use. However, it is smart business to negotiate a commitment regarding the cost of additional rights that you might need in the future.

Expenses. If the job will require travel, specialized equipment, prop rentals, specific insurances, or fees for location access, these will all be indicated on the estimate.

Likewise, the anticipated cost of hiring photo assistants, stylists and models will be part of the total. There may be some contingent costs, such as for weather delays.

Expenses for digital photography may include charges for image capture, digital processing, master file prep and postproduction tasks such as color manipulation and digital retouching, archiving and file delivery. For film photography, expenses typically include material charges for film, processing and supplies.

DIGITAL PROCESSING COSTS

People outside the graphic arts are often surprised to learn that equipment and processing costs for digital photography are actually greater than for traditional film photography.

Digital technology saves time and money "downstream" when the images are used in various printing and publishing applications, but it requires the photographer to spend considerable postproduction time to get the best results. In effect, the photographer has taken over the work of the film lab, print lab and prepress house. The specialized tools for capturing and processing high-end image files are expensive and (as with most computer systems) are quickly obsolete.

Both digital and film techniques can yield fine images. In specific circumstances, the photographer may prefer one or the other for technical reasons.

Delivery considerations

If the image is to be delivered digitally, it may have to be processed in several different ways. Each destination has its own particular requirements. UPDIG, a coalition of imaging organizations, describes current best practices for a wide range of applications on its website, www.updig.org.

It may seem as though there are endless variations for delivering high-quality images, but your photographer will be able to simplify the options as you decide on your needs.

A WORKING DOCUMENT

Just as a breakout of fees and responsibilities between architect and client allows the client to make adjustments to the project, so breaking out the components of the fee structure allows architects to work with the photographer in changing the proposed scope of work with a minimum of disruptions.

For example, suppose you initially asked for an estimate based on creating images to be used for brochures, office displays, exhibitions and a website. After you see the images, you decide to also submit them to a magazine in conjunction with an article on your project. This constitutes an extra use, for which there will be an additional license fee (and perhaps additional expenses to deliver optimized images), but the production fee would not be materially changed.

Likewise, you may find that the estimate for the work as originally proposed is higher than you had budgeted. Find out where there is room to reduce costs without sacrificing the objective of visually "telling the story" of the project through the essential views. In addition, the photographer may have suggestions for capturing more successful views without significantly increasing the costs. We offer some practical recommendations on page 10.

THE FINE PRINT

The estimate will have a space for your signature. By signing and returning a copy to the photographer, you indicate your acceptance of the assignment description, license and total price. At that point, the estimate becomes a contract.

Attached or on the back of the estimate will be a set of Terms and Conditions. As with any contract, one purpose is to agree on each party's responsibilities if problems arise and how any disputes will be resolved. Another purpose is to state the industry norms. For photography, these include copyright, photo-credit requirements and what alterations (such as compositing) you can make to the images.

SUMMARY

The photographer's estimate is more than a financial document; it can serve your creative and promotional planning needs as well. It is a tool that can help you meet your business objectives, your documentation needs and your marketing goals.

Los Angeles City Hall. *Designed by John Parkinson. Photographed by John MacLean (www.johnmaclean.com). A properly exposed and slightly but believably enlarged moon replaces the actual moon.*

Controlling the Cost of *a Photographic Assignment*

PHOTOGRAPHY TO FIT YOUR BUDGET

Professional photography is of great value in advertising, marketing, magazine articles, competition submissions and office décor. Good imagery is a powerful tool for conveying the quality of your work.

Like architectural design and development, professional photography is a custom service that can be molded to meet your business goals and stay within your financial constraints. If your needs seem to outweigh your means, don't be discouraged. Following are a few ideas to relieve the pressure on your budget.

SHARE THE COST WITH OTHERS

You aren't the only one who might benefit from photographs of a project. The owner, interior designers, landscape architects, contractors, consultants, product manufacturers, tenants and others probably have similar pride in the building and a similar need to market themselves. With some forethought, all may be served by a single photography assignment where the costs can be distributed equitably, to everyone's advantage. Photographers who specialize in architectural work are quite familiar with such arrangements. If this is your plan, it is essential to let the photographer know about it before the initial estimate is prepared.

The production fees (the photographer's professional time) and expenses (e.g., travel, consumables, props, rental equipment, assistants, models and stylists) are generally not affected by the number of parties unless their separate interests require different views or special setups. A sharing arrangement means these cost elements may be lower for each participant.

Each party will be charged a separate rights-license fee, which is based on the use he or she will make of the images. In addition, each participant will pay separately for any special deliverables, such as large-format prints, web galleries, or image files formatted and sized in different ways.

CONTRACTUAL FORMALITIES

After reviewing the assignment parameters, the photographer will provide a written estimate that states the terms of the cost-sharing agreement and names the primary commissioning client and other participating parties.

Alternatively, the photographer may draw up separate estimates for each of the parties. This relieves the commissioning client of any responsibility for collecting payment from the other participants. It also clarifies the cost-sharing details when different parties need different views. For instance, it's unlikely that the interior designer will make much use of the exterior photography, while the architect probably has limited use for photos of the furniture in the lobby. Nevertheless, each of the parties will get the benefit of dividing the costs that are incurred in common.

LICENSING AND RIGHTS GRANTED

While all the participating parties will be sharing the expenses and the production fee, each party will pay separately for the uses that he or she will make of the images. The building owner may need only brochures for prospective tenants, for which an advertising brochure license would be needed. The designer might require website use and glossy prints for a portfolio. The architect might be interested in web rights, large prints for the office lobby and permission to submit images for competitions. Whether the assignment paperwork is framed in terms of separate estimates or a single estimate with primary and additional clients, each party is asked to sign a license agreement.

A vast array of uses and rights can come into play for any particular situation. Some common standards exist. PLUS (Picture Licensing Universal System) has compiled a glossary of licensing terms used in the photography and publishing industries. Visit www.useplus.com to browse the definitions.

A REAL-WORLD SCENARIO

Suppose that an owner, a contractor and an architect discuss a cost-sharing proposal for photography. Two of them agree, but the contractor decides not to participate. A few weeks later, however, he needs to print capability brochures and asks to use images from the shared photography session. Because he forfeited the option to license the images at the pre-negotiated license fee and terms, he is now in the same position as any outside party requesting use.

Photographers are usually willing to license images to third parties but typically charge these parties at least as much as the original group for several reasons, including different delivery requirements, deadlines and license terms. The photographer and the latecomer will have to negotiate new agreements from the ground up. From the photographer's point of view, this is an inefficient way to do business. Multiparty licensing is cost-effective because it allows streamlined planning and preparation for photography.

In addition, the latecomer can choose from existing images—while the original group could anticipate only the outcome of the assignment they had commissioned. There is also the factor of simple fairness: If non-participants could get photography at the same cost as participants, the benefit of cost-sharing arrangements would be negated.

KEY POINTS TO MULTIPLE-PARTY LICENSING

- All participating parties must sign an agreement before photography begins.
- Each participant is charged a licensing fee commensurate with his or her specific usage needs.
- Each participant is responsible for ordering and paying for his or her individual deliverables.

Clear communication among all participants is of prime importance, whether the photographer contracts only with the commissioning party (acting as liaison and collecting the other parties' respective shares of the fees) or contracts with each party separately. The benefit can quickly be lost if the parties don't share an understanding about goals, timelines and licensing rights.

A practical wait-and-see approach has its place in obtaining photography, as in any business decision. Sometimes the wise course is to license after the fact; other times, it is best to commission a separate assignment. If your requirements are congruent with the other parties' needs, there is no benefit in standing aside from a multiparty agreement. Rather, there can be considerable advantage to joining with other parties, not only to minimize cost but also to participate in the job planning and thereby ensure that the resulting images are useful for your business purposes.

PLAN AHEAD, ALLOW LEEWAY

Schedule photography well in advance and plan for some variability in the timing. Creating photography on a rush basis adds to the expense, while a relaxed schedule means that your photographer can work through any last-minute glitches without incurring extra expenses.

The weather, too, can be a factor. A tight schedule means that foul weather and other uncontrollable variables may become problems. In contrast, an extended schedule may provide the opportunity to highlight your design with dusk or night illumination, different people, moving vehicles and even a variety of changing seasonal elements.

Another aspect of planning for photography is ensuring the site is prepared before the assignment begins. Are the windows clean? Is all the construction equipment out of sight? Is electric power on? In a pinch, problems can sometimes be retouched away, but this adds to the postproduction time and can mean compromises in image quality. It's usually easier and less expensive to prevent the problems while on site.

SHOP LOCALLY

In addition to minimizing the travel expenses, engaging a local photographer will often allow the most flexibility in scheduling the work. It can also simplify getting back on schedule after a weather delay.

The American Society of Media Photographers operates a free "Find a Photographer" service at www.FindaPhotographer.org that lists several hundred specialists in architectural photography. Only qualified professionals are in this database, and you can search by geographic location and by specialty. The search results include full contact information, sample photographs and website links.

USE FEWER VIEWS

It goes without saying that the number of views is a major factor in the job's cost. Each view must be composed and lit; the location must be cleaned and the background cleared; all props and personnel must be in position. Each view takes time and costs money. Get the most value from a given budget by listing concepts you'd like to illustrate and assigning a priority to each. Your photographer can then make sure that you get the most important images while staying within your budget.

WORK WITH YOUR PHOTOGRAPHER

A good photographer can bring to bear a wealth of experiences and skills to get you the images you need at the lowest feasible cost. Just as small changes to a building's specs can make a big difference to the cost of construction, so small adjustments to a photographic assignment can drastically alter the cost of images. Your photographer can advise you about the options and trade-offs that are available, giving you the freedom to balance the costs and benefits to your advantage.

The quality of the photography you use to represent your designs is a reflection of your firm's values and affects how the market place perceives your business. There will always be someone willing to photograph your project at a lower price. A "bargain" can easily turn into an expensive problem when the resulting images do not meet expectations and have to be re-photographed.

CONCLUSION

The decisions you make while planning for the photography will affect its cost far more than any later steps you might take. Here are a few options that will help minimize the outlays:

- Share the costs of the photography assignment among several stakeholders in the job.
- Prioritize the views you'd like and phase the work over a period of time to highlight your design with changing seasonal elements.
- Hire locally. Visit ASMP's free www.FindaPhotographer.org to identify qualified photographers near the project location.
- Schedule flexibly to avoid rush work, overtime costs and to allow for weather delays.

Commissioning a professional architectural photographer is an investment that can prevent frustration while saving time and money. Most importantly, the photographs you receive will be a valuable resource for your marketing as well as a source of inspiration and legitimate pride.

IAC/InterActiveCorp headquarters, New York. *Building designed by Frank O. Gehry; interior architecture by Studios Architecture. Photographed by Chun Y. Lai (www.chunlaiphotography.com).*

Licensing Photographs

for Publication

THE VALUE OF PHOTOGRAPHY

When properly handled, placing attractive images in a trade or consumer publication is a win for everyone. The publication gets better images, the architect gets favorable coverage and the photographer gets a licensing fee for the use of the images.

Editorial images have tremendous value for both the publisher and the architect. The magazine benefits because high-caliber professional photography adds to both the design and depth of the stories. Good architecture, represented by good photography, attracts a more affluent and professional readership. This allows the magazine to charge premium rates for advertising and buffs the magazine's prestige. Although difficult to measure, prestige is more than a feel-good; it smoothes the road and opens doors for the magazine's editors and sales reps.

The architect benefits by gaining visibility and renown. Not only is the cost of an editorial-use license far lower than the price of an ad in that same magazine, but the credibility of editorial content is also far higher than advertising. In addition, the architect can purchase reprints from the publisher at a fraction of the cost of commissioning a similar piece from a graphics house or advertising agency.

Besides these benefits to the architect and publisher, the publication can benefit the entire architectural profession and especially its students and emerging practitioners. Architectural designs are not created in a vacuum but within an evolving tradition or cultural milieu, which both influences and is influenced by the newest designs. Written descriptions and drawings are important in this process, but photographic images are the most direct form of communication. Without photos, architects would have to travel to see examples of successful design. It is no exaggeration to say that good photography is a bedrock element of architectural progress.

Cira Center, Philadelphia PA. *Architects: Cesar Pelli Associates Architects and BLT Architects. Photographed by Greg West (www.gregwestphotography.com)*
.

WHAT'S A PAGE WORTH?

Magazine subscribers rarely have any idea what one page in a publication is worth—a lot! To find out just how much, visit the publication's website, follow the links for advertisers and look at the media kit.

One example: A standard full-page ad in the May 2008 issue of *Architectural Record* cost $16,980.

ISSUES THAT MAY ARISE

Conflicts can arise, however, when the publisher, architect and photographer have different expectations about rights and licenses. For example, if the architect has submitted the images as part of a story pitch, the publisher may believe that it's the architect's responsibility to secure the publication rights. The architect may not see why there should be any restrictions on the uses of the photographs. The photographer may be unsympathetic to the publisher's deadline pressure, and so on.

It is a rare magazine publisher who would run a feature story without pictures, especially if the images had been instrumental in getting the story planning started. At the same time, the publisher would prefer not to drop the story out of hand; the magazine staff has probably invested time in story development and would have to find something else to run in its place, with the deadline inexorably getting closer each day. However, if the necessary rights are not in hand, those are the unpleasant choices the publisher faces.

This discussion refers primarily to magazines and other periodicals, including journals, newsletters and their online equivalents. However, we do not mean to exclude books from the discussion. Deadlines are usually less urgent in the book business, but the upfront investment of staff time and writers' advances can create the same financial dynamics.

In the worst case, there may be a standoff, with neither the architect nor the publisher agreeing to pay for the use rights and the photographer unwilling to give the rights for free. If so, the book or the article will be killed and everyone will lose something.

SECURING AN EDITORIAL LICENSE

Since the magazine receives the most direct financial benefit from the use of the images, it is most often the magazine that pays the photographer for the necessary license. The publication typically contacts the photographer directly and pays a fee commensurate with the value the images contribute to the magazine's success. Several factors determine this fee, including the number of images to be used, their printed size and their placement. Thus, a photo used on the cover has a higher value to the magazine than photos used inside. Other factors include the magazine's editorial payment rates for photos that it commissions from freelancers, the magazine's circulation and the rates it charges advertisers.

Licensing of images for books follows the same principles as magazine licensing. The fee is based on the type of book (e.g., college text, popular press, coffee-table, trade paperback), the press run, and the size and placement of the images.

The publisher may refuse to pay this fee, either as a negotiating ploy or an attempt to shift its editorial cost to another party. It is in the publisher's interest to get the license at the lowest cost, of course, and he may sometimes play a little hardball. However, most photographers have established pricing, which is based on the value that the images bring to the publication. Despite the publisher's protestations, it's quite rare that a publication truly cannot pay. When that happens, it's a sign that the publication is soon to fold, because rights licenses are such a small part of the total editorial, printing and distribution cost.

If the publisher can't or won't pay for the rights, the other option is for the architect to obtain the editorial-use license. The cost is the same either way, and many architects find that spending time dickering over who pays is costlier than simply taking the initiative.

It is rare that an architect will license broad publication rights in advance, although it can be done. Without knowing what use a future publisher or art director might make of the images, the photographer would write the license to cover a wide range of possibilities and charge accordingly. This may not be a wise use of the architect's working capital.

THE VALUE OF A PHOTO CREDIT

It is often argued that a photo credit, like a byline, has value to the photographer as a form of advertising. This is true in one sense: Its value depends on its prominence on the page. However, it's not true that the credit can be used to negotiate down the license fee. Most photographers have already factored its value into their fee structure.

In this respect, photographers and architects have much in common. Architects like to see their firm's name on the dedication placard, but they nevertheless expect to be paid for their design work. Professional photographers view a credit line in much the same way. A visible photo credit may improve the photographer's chances of getting future work, but it's not payment for the work that was completed.

EXECUTIVE SUMMARY: EDITORIAL LICENSING

- Editorial publication rights are not typically granted to architects unless specifically stated in a written licensing agreement.
- A publication's content is its most valuable asset, attracting both readership and advertisers. If the publication refuses to acknowledge the value of photography and does not secure an editorial license, the responsibility for licensing the rights may revert to the architect.
- A photo credit is not equal to the value of the content (images) received by the publisher.

BEST PRACTICE

In the optimum scenario, when an architect and a publisher begin discussing a story, they decide who will be responsible for securing the license rights for the images they want. The fee depends not on who pays it but on the value that the specific use brings to the publication. In practice, the value of high-quality images, both to the publication and to the architect, is always much greater than the cost—and that's why everyone wins when the deal is completed.

Boston residence. *Architecture and design by Daniel H. Reynolds. Photographed by Lynne Damianos (www.DamianosPhotography.com).*

Preparing for Professional Photography

A Checklist

A LITTLE ADVANCE WORK PAYS OFF

Photography, like any outside service an architect might need, has both cost and quality parameters—one to be minimized, the other to be maximized. By choosing an experienced professional and, in particular, by following the due-diligence steps recommended in the earlier pages of this pamphlet, you can be reasonably assured of getting the quality of results you need. Likewise, you can minimize the cost by working closely with your photographer in advance of and during the assignment.

The most productive photography assignment is one with few surprises while on location. Delays, downtime and retakes are too often the cause of both unnecessary expense and hasty compromises that may lead to disappointing results. With this in mind, the American Society of Media Photographers has compiled a checklist that covers many of the details involved when photographing architecture and interior design. By collaborating closely with your photographer and paying attention to details, you will maximize efficiency and productivity.

This checklist is not intended to be exhaustively complete. It should serve as a stimulus to your planning and a reminder of the range of issues that may need your attention in advance of the photography session. Every site is different; every season has its special concerns. With a bit of forethought, you can help your photographer get the work accomplished efficiently and without disruption to other activities while also delivering the quality of results that you expect.

GENERAL CONSIDERATIONS

- ☐ Has the architect walked the site with the photographer?
- ☐ Who will be the architect's representative during the assignment?
- ☐ What is the site contact name and number?
- ☐ Is security clearance required?
- ☐ Is there a security department that must be notified about the assignment?
- ☐ Is parking available for the photography crew?
- ☐ Are certificates of insurance required? Who needs to receive them?

Personnel

Consider who should be present and who should not be present during the photography, and make sure that everyone is fully briefed on the roles he or she will be playing.

- ☐ Are the owner and the occupants expecting the photographer and crew? Do they understand the nature of the project and the duration of the photography?
- ☐ If models will be used, are they employees of the tenant or the architect? Do they understand what they may be required to do and to wear and how long they may be needed?
- ☐ Are model releases required? (This is especially important for children.)
- ☐ Who is responsible for meals and for supplying water, coffee and snacks?
- ☐ Will a memo be sent to employees or tenants regarding advance cleanup and the assignment date and time?
- ☐ Is any union permission required for photography?

INTERIOR PHOTOGRAPHY

Site access and security

- ☐ Where is the loading dock? Are there restricted hours?
- ☐ Will the photographer have total access or need keys to specific areas?
- ☐ Will the crew and equipment be able to get in or out after hours?
- ☐ Will a floor plan be provided?
- ☐ Will elevators be working?
- ☐ Does the photographer have access to ladders and dollies?
- ☐ Does the photographer have access to vacuum cleaners and cleaning supplies?
- ☐ Is there a cleaning crew in the space after hours? Can they and the photographer work around each other?
- ☐ Will the air-conditioning or heat be off during the assignment? Do special arrangements need to be made to keep the HVAC on or to turn it off?
- ☐ Will all alarms be off?
- ☐ Is there a secured place to store equipment during multiple-day assignments?
- ☐ What are the emergency phone numbers for assignments taking place during weekends or after hours?

Illumination

- ☐ Does the photographer need approval to adjust interior, exterior and ambient light?
- ☐ Is the lighting computer-controlled?

- ☐ Are the lights controlled by motion sensors?
- ☐ Is all lighting operational and are the bulbs consistent within areas?
- ☐ Will spare bulbs be available?
- ☐ Can lights be manually turned on and off from a circuit breaker?
- ☐ Will the photographer have access to the circuit box?
- ☐ Is a building engineer or an electrician available if required?
- ☐ Are there windows in the space? Is there a way to control ambient light?

Furniture and fixtures

- ☐ Do any decorations or signage need to be removed?
- ☐ Can desks be rearranged without permission?
- ☐ Will props or models be necessary?
- ☐ Does the photographer have permission/password access to turn on computer screens, television monitors and AV equipment? Must specific images be loaded into the devices in advance?

EXTERIOR PHOTOGRAPHY

- ☐ Will a site plan be provided ahead of time?
- ☐ Is there any construction activity?
- ☐ Are there window washers on the building?
- ☐ Is any facility maintenance scheduled?
- ☐ Will the interior of the building be accessible to adjust window blinds and lights?
- ☐ Can customer or tenant parking be controlled?
- ☐ Will the Police Department be needed for parking or traffic control on public streets? Do any government authorities require that permits be obtained?

Landscaping and surroundings

- ☐ Is the landscaping complete and mature?
- ☐ Are there any fountains? Who can control them?
- ☐ Are there any computer-operated sprinkler systems, and can the photographer control them?
- ☐ Will the photographer have access to exterior lighting and signage?
- ☐ Are there any decorations, signs or banners that need to be removed?
- ☐ Are the lights controlled by timers or photo sensors? Can they be manually controlled?
- ☐ Has a client representative checked the site recently for dumpsters, scaffolding, window stickers, fences, debris, graffiti or snow markers?

About AIA

Since 1857, the AIA has represented the professional interests of America's architects. As AIA members, over 83,500 licensed architects, emerging professionals, and allied partners express their commitment to excellence in design and livability in our nation's buildings and communities. Members adhere to a code of ethics and professional conduct that assures the client, the public, and colleagues of an AIA-member architect's dedication to the highest standards in professional practice.

The AIA website, www.aia.org, offers more information.

American Society of Media Photographers

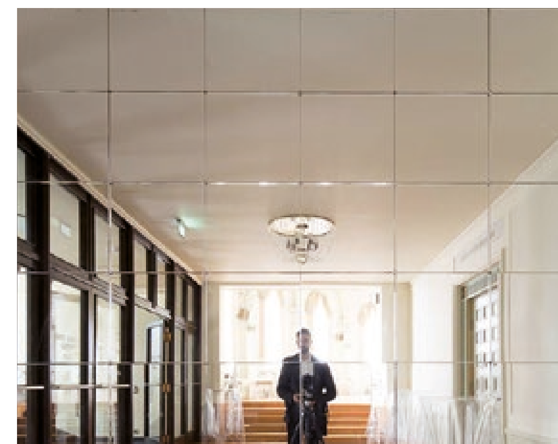
About ASMP

Founded in 1944, the American Society of Media Photographers (ASMP) is the leading trade association for photographers who create images primarily for publication. ASMP promotes photographers' rights, educates photographers in better business practices, produces business publications for photographers, and helps buyers find professional photographers.

The ASMP website, www.asmp.org, offers more information.

The AIA collects and disseminates Best Practices as a service to AIA members without endorsement or recommendation. Appropriate use of the information provided is the responsibility of the reader. You may download this document freely from ASMP at www.asmp.org/architecture or from Chapter 6 of the AIA Best Practices archive at www.aia.org/bestpractices.

© 2008 AIA and ASMP



Marc Goodwin was born in London and has lived extensively in five different countries around the world, studying in three, teaching in three and photographing in over a dozen. He has been commissioned for six different books featuring the work of Rogers, Stirk Habour and Partners, MacCormac Jamieson Prichard, Edward Cullinan Architects, L35 Arquitectes, B01 Arquitectes, a forthcoming book about Event Spaces and a city guide to Barcelona. He has published four academic articles on the subject of architectural photography. In addition, his work has been featured in countless publications in the architectural press such as: Archdaily, Wallpaper, Domus, Dezeen, Detail, A+U, ARK, AD, Mas Context, Building, Green Places, Landscape Review, Pro Interiors, Glorian Koti and many more. Marc, the founder of Archmospheres, has over a decade of commercial experience as an architectural photographer and is now happy to publish a doctoral thesis on the subject.