



Cape Peninsula
University of Technology

**THE PERSPECTIVE OF CAPE TOWN PROFESSIONAL PHOTOGRAPHERS ON
ISSUES OF INTEGRITY IN THE DOCUMENTARY PHOTOGRAPH**

by

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Thesis submitted in fulfillment of the requirements for the degree

Magister of Technology: Design

in the Faculty of Informatics and Design

at the Cape Peninsula University of Technology

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**Bellville
October 2013**

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ABSTRACT

This study investigates the perspective of Capetonian professional photographers on issues of integrity, regarding the impact of digital imaging technology. Key objectives are to establish how the concept of photographic integrity manifests itself throughout the history of the documentary genre, prior and subsequent to the introduction of digital imaging technology; to ascertain the extent to which the Capetonian professional photographer uses digital imaging technology compared to film technology; to discover how Capetonian professional photographers perceive various concepts related to integrity in a documentary photograph; to identify what Capetonian professional photographers regard as acceptable digital editing to the photojournalistic documentary photograph; to ascertain whether Capetonian professional photographers believe that digital imaging technology impacted on the integrity of the documentary photograph; and finally, to discern whether Capetonian professional photographers who have practiced professional photojournalism see the need for a national regulating body, which clearly makes known what acceptable picture taking (in terms of content, e.g. staging of a photograph) and digital editing entails, for the South African photojournalist. The rationale for this study is that we exist in an era where we are faced with a digital revolution which transforms perceptions of integrity and it is essential to ascertain how technology influences the perceptions of the very professionals who produce documentary photography images.

The literature review evolves a context for this study. This empirical study's data collection and analyses has a mixed-method design. The survey's instrument of data collection is a questionnaire, which captured quantitative data and with half of one question captures qualitative data. I analysed quantitative data with the help of SPSS and I analysed qualitative data much akin to a case study. The statistical test used to analyse quantitative data is a chi-square test and there are 66 participants in the study.

I found that a breach of integrity, for instance manipulation, was always possible in the era prior to the introduction of digital imaging technology. Now it is only done faster, more thorough and more people have access to editing technology. Many who lack moral fiber are tempted now, more than ever, to illicitly manipulate. Capetonian professional photographer's experience in digital image creation and editing technology outweighs the equivalent in the film medium. Digital camera usage takes precedence over film cameras. An example of a perception of a concept related to integrity in documentary photography is the sub-group which has practiced professional photojournalism insisted (73.5% of them strongly agreed) that it is possible to be creative and truthful at the same time in documentary photography. With regard to what acceptable editing entails, for cropping respondents favoured *slight cropping*; for dodging and burning in respondents favoured *very light dodging and burning in*; for pasting in respondents favoured *no pasting in is acceptable*; and for removing of objects respondents favoured *no removing of objects*. The Capetonian professional photographer believes that digital imaging technology has impacted on the integrity of the documentary photograph. For instance, the study has measured and proved that a majority of Capetonian professional photographers believe that a documentary essay taken in film and processed in the traditional darkroom feels more consistently trustworthy than its digital equivalent. This study has shown that there is a need for a body that clearly makes known what acceptable picture taking and digital editing entails for the professional photojournalistic photographer in South Africa.

ACKNOWLEDGEMENTS

I wish to thank:

- God for strength and guidance.
- Mr. Irvine Meyer, for his guidance and valuable time.
- My mother, for always being there for me during the completion of my Masters degree.
- All the participating Capetonian professional photographers, for taking time out of their busy lives to take part in this survey.

DEDICATION

For my mother who has stood by me throughout my life.

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CHAPTER 1 INTRODUCTION

This chapter serves as an introduction to the thesis. Firstly, I provided a list of definitions for prominent words and phrases used in the thesis. Following this, I gave background information to the project. Next, I stated the purpose of the study and gave a more in depth rationale. Subsequently, I discussed the research question and sub questions. After this, I expounded the research methods. Thereafter, I stated the delimitations of the study. Next, I elaborated on the research design. Lastly, I presented an outline of the chapters in this thesis.

List of definitions

Photograph. Somekh (1996:14) defines the photograph as, “an image of a real event in real time and place; a fleeting, spontaneous moment in time which no other instrument, except the camera, can capture. This is what the camera was created for, and what distinguishes photography from drawing or painting.”

Integrity. I discussed integrity and its ramifications extensively in chapter two. The word integrity as used in this thesis could essentially be defined as honesty (Collins English Dictionary, 2010). Therefore, if an image lacks integrity, it is dishonest and does not portray a subject as it truly is. The opposite is true for an image that has integrity.

Documentary photograph. I discussed the term documentary photography and its origin thoroughly in chapter two. The documentary photograph is a photograph that portrays a subject authentically. In other words, it is a photograph that gives a truthful and objective account of what transpired (Clarke, 1997:145).

Digital imaging technology. As opposed to the traditional chemical based photographic processes comprising continuous information (also referred to as analogue), digital images are made up of amounts of combinations of binary data in electronic circuitry. This data is divided

into discrete steps. After capturing images with digital machinery, there are opportunities for making precise and calculated changes. Digital imaging technology is thus all mechanisms, such as digital cameras and computers, capable of working with such photographic data. The term digital imaging technology is also used to describe all expertise currently available on how these mechanisms function (Deacon, 2006:6). The term is also used when referring to new inventions in the field.

Film photography. The term refers to the type of photography that uses film as a medium to capture a trace of the object being photographed. The film contains silver salt grains, that when exposed to light rays, forms an indexical or trace-like relation to external appearances or stimuli (Kozloff, 1994:306).

Digital photography. The term refers to photography that uses electronic devices to record and capture the trace of a photographed object as binary data. An electronic device converts a trace of the image into digital data comprising of the numbers 1 and 0. One and 0 show that an electronic signal is there or not there respectively (Wehmeier et al, 2005:134, 407).

RAW. RAW is an image format and contains data virtually directly from the camera's image sensor circumventing much of the on-board camera processing. The advantage is that RAW data remains unchanged and available for reprocessing at any time. RAW data is in a relatively unprocessed state, yet to be changed into an image format such as PSD (Photoshop Document) or TIFF (Tagged Image File Format) (Langford, 2011:35, 209, 211, 212).

Background/Rationale

I was motivated to embark on this study when my supervisor informed a group of students how photographic integrity may be compromised by digital imaging technology. After extensive reading on the subject I became enthralled. For instance, "When the shooting started: a century and a half ago, Britain's Roger Fenton pioneered the art of war photography (Indelible

images)” by Goldberg (2004:23) published in the *Smithsonian* piqued my interest into the possibility of lack of integrity prior to the introduction of digital imaging technology and *Crisis of the real: Writings on photography since 1974*, by Grundberg (1999) made me all the more aware that the introduction of digital imaging technology has added so much more possibilities for illicit manipulation to the cauldron. Moreover, I constantly apply digital imaging technology to do “allowed editing” on documentary photographs in my personal work and thus the question, “how much is too much?” was consolidated in my mind.

The loss of integrity in documentary photography is arguably of tremendous social significance. To quote Clarke (1997:163):

“If even a minimal confidence in photography does not survive, it is questionable whether many pictures will have meaning anymore, not only as symbols but as evidence”.

As soon as one enters the arena of professional documentary photography, there has to be a clear consensus as to what acceptable digital editing entails. It is also essential to explore issues related to the integrity of the documentary photograph by questioning the very people who create those images and learn from the gathered data.

The purpose of the study

The ultimate purpose of this study is to obtain the perspective of Capetonian professional photographers on issues of integrity in the documentary photograph, with regard to the impact of digital imaging technology. The literature review deals with the broader international picture preparing for a survey of Capetonian professional photographers. In the literature review, for instance, I explored the role of the documentary photograph’s integrity prior and subsequent to the introduction of digital imaging technology. By employing a survey I attempted to determine, amongst other facets, whether the Capetonian professional photographer believes the integrity of the documentary photograph has been violated by the introduction of digital imaging technology.

In addition a part of the survey enquires what acceptable digital editing entails. Another purpose of this study is to determine to what extent Capetonian professional photographers use digital imaging technology compared to film technology. A supplemental purpose of this study is to measure whether Capetonian professional photographers, who have practiced professional photojournalism, see the need for the creation of a national regulating body which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist.

Preliminary literature study

Most people acknowledge a documentary photograph as a direct and approximately clear “window” of actuality. This gives a documentary photograph power and introduces vulnerability. The documentary photograph has power because of its authority as genuine access to veracity. There is vulnerability because some will exploit such authority by distorting it in an attempt to mislead (Taylor, 2005).

Roger Fenton’s work is one of the earliest manifestations of documentary photography. He is well known for his pictures of scenes of soldiers behind the firing line in the Crimean War, taken in 1855. Though showing no images of the actual ravages of war, on account of being partly sponsored by the British government, who wished to downplay negative propaganda, he accomplished the extraordinary feat of taking nearly 360 photographs in 3 months. He made use of the wet plate method in which the emulsion had to be applied to the plate just before the exposure. The exposures lasted from three to twenty seconds in direct sunlight (Freund, 1980:105-107).

Roger Fenton is well respected for the authenticity of his photographs, but there is a chance that the first photograph to communicate the ravages of war may lack integrity. As shown on page 5 and page 6 in figure 1-1 and 1-2, the same valley appears in two photographs.

One landscape is strewn with cannon balls and the other is shown with the balls only on the side of the road. Either the balls were moved to ensure easy passage for road users, or Fenton might have re-arranged them in the photograph for dramatic effect. These two photographs and a photograph of a cemetery called Cathcart's Hill are the only photographs that show a hint of the consequences of battle in Fenton's coverage of the war. None of the other photographs shows the effects of war and are of officers, ships in the harbour, men in camp, views of Sevastopol and the plain of Balaklava. There is no reason to doubt the authenticity of any of the other photographs (Goldberg, 2004:23).



Figure 1-1. *The valley of the shadow of death* (salted paper and albumen print) by Roger Fenton, 1855, with cannon balls in the road. Found in Fenton Crimean War Photographs, Prints & Photographs Division, Library of Congress, LC-USZ62-2322 (Library of Congress, 2010).



Figure 1-2. *The valley of the shadow of death* (salted paper and albumen print) by Roger Fenton, 1855, without cannon balls in the road (Rouges, 2007).

Documentary photographs are authoritative, because we use them explicitly as evidence and proof (Taylor, 2005). A photograph is only a representation of what is real; therefore, it only constructs an image-idea of what is real (Kember, 2003:202). Different seemingly real image-ideas can be obtained dependent on various factors such as characteristics of the lens, chemical properties, darkroom decisions and cropping. One can argue that a photograph does not in all cases directly replicate circumstances (Price & Wells, 1997:25). Figure 1-3 on page 7, is an example of a photograph not replicating circumstances. A man holds a cropped photograph in front of the original photo. In 1954, Senator Joseph McCarthy's staff set out to discredit a Secretary of the Army, Robert T. Stevens. They did so by cropping out Colonel Jack Bradley on the left of Private G. David Schine, to make it appear as if Stevens was exchanging a pleasant smile with the Private instead of the Colonel.



Figure 1-3. McCarthy's staff deliberately cropped a Colonel out of the original image. William J. Smith took the photograph in 1954 (Goldberg, 1991:94).

A seemingly unpremeditated capturing of a photograph might not be a true reflection of the circumstances in which it was taken (Geftter, 2006:50). In figure 1-4 on page 8, one can see an example of that. Even though figure 1-4 gives the impression that it is the actual coverage of Rosa Parks sitting in the front of a bus in 1955, two photographers and a reporter from *Look* magazine staged it on 21 December, 1956 (Geftter, 2006:50).



Figure 1-4. Rosa Parks sits in the front of a bus in Montgomery, Alabama, 1956. A photographer from *Look* magazine took the photograph (Gefter, 2006:55).

One can see another example of a restaged photograph, by Hein-kuhn Oh in figure 1-5. In this case Oh restaged (Kwangju Story in 2005) Korea's Democratic Uprising which happened on May 18, 1980. Numerous examples copy images circulated subsequent to the uprising. Flags, family, police and the military were included in the photographs. Oh exhibited the photos in a line behind a window that overlooked the street, thus Oh included puzzled observers in the performance (Caplan, 2008:24).

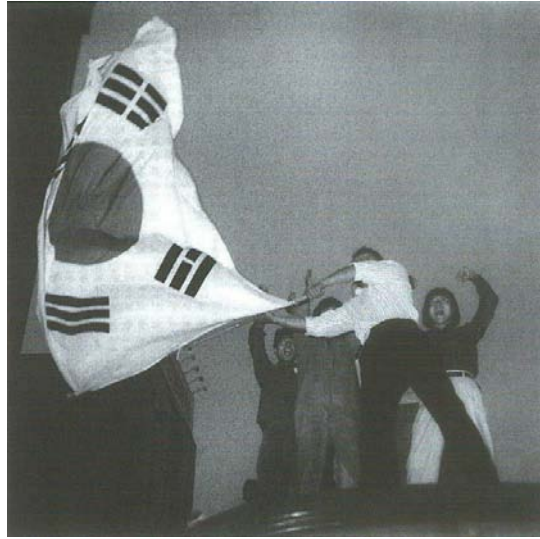


Figure 1-5. An example of Hein-kuhn Oh's restaging (1995) of Korea's Democratic uprising in 1980, named Kwangju Story (Caplan, 2008:24).

There is yet another aspect that affects the integrity of an image, namely how the viewer interprets it. Education, preferences, expectations and even blind spots play an important role in how a photograph is perceived. In addition, information such as sub-titles can change the connotation of a photograph. Beliefs or even wishful thinking can also change the connotation (Goldberg, 1991:21).

From the examples which were shown earlier one can possibly conclude that a photograph is unable to transmit truth, but according to Kozloff (1994:310, 311) we live in a reality of experiencing truth through different mediums of mediation (the manifold activity that affects an impression before it reaches us), since even our eyes and brain serve as a medium for capturing part of the so called "absolute truth". Photographs, though limited in scope, grant us greater perspective to form our perception of reality.

Ansel Adams mentioned that "the negative is similar to a musician's score, and the print to the performance of that score." (Adams, 1984:2). Taking this statement into consideration, one

can safely assume that had Adams applied no darkroom manipulation, his photographs might not have been as striking as the ones developed with a mastery of darkroom skills and effort.

All photographers shooting with film have had the same freedom as Adams, whether working in colour or black-and-white. But how much manipulation is too much? As an introduction, I will briefly have a look at a recent example of punishment for digitally over-editing and discuss two opposing views.

In the beginning of 2010, Stepan Rudik submitted the cropped photograph, as one can see in figure 1-6, for the World Press Photo Contest and won the third prize story for Sports Features.



Figure 1-6. Stepan Rudik submitted this final cropped photograph for the World Press Photo competition (Meyer, n.d.b).

Those in authority asked Rudik to submit a RAW photograph, which revealed that Rudik had digitally removed a foot in the background. Figure 1-7, on page 11, shows the RAW photograph.



Figure 1-7. Rudik digitally removed a foot in the background. Stepan Rudik captured the photograph (Meyer, n.d.b).

After careful consideration and discussion the authorities disqualified Rudik who then lost the third prize. World Press Photo stated that Rudik had violated the rules of the contest. The relevant rule being, "The content of the image must not be altered. Only retouching which conforms to the currently accepted standards in the industry is allowed." (World Press Photo, 2010). The NPPA (*National Press Photographers Association of the United States of America [USA] and Canada*) reflects the standard allowed in the industry. The NPPA code of ethics declares in part that "In documentary photojournalism, it is wrong to alter the content of a photograph in any way (electronically, or in the darkroom) that deceives the public" (National Press Photographers Association, 1999). Was Rudik trying to deceive the public by removing a small unimportant object from the photograph?

In defence of his action Rudik said, "The Photograph submitted to the contest is a crop, and the retouched detail is the foot of a man which appears on the original photograph, but who

is not a subject of the image submitted to the contest. There is no significant alteration nor has there been the removal of important information." (Meyer, n.d.b).

Pedro Meyer and like minded individuals oppose the punishment of Rudik. Meyer (n.d.) stated the following:

“Photography by its very nature is manipulation. Look at the contradictions, of this jury. That someone submits a crop of an image, seems to be quite acceptable. To remove a foot that is not part of the story, is worthy of being burned in a pire (sic) of ignominy. ‘How dare the photographer, have removed a foot’, while cropping a picture was not an issue.”

The issues surrounding digital manipulation and what is and is not acceptable digital editing is discussed in more detail in the rest of the thesis.

When photography came into the world in 1839, most regarded it as an exact witness (Goldberg, 1991:19) and this mentality of “the camera cannot lie” has persisted as an ingrained though misplaced belief (Clarke, 1997:146). With the dawn of the age of digital imaging, people are increasingly questioning the truth of the photographic image. Eamonn McCabe, picture editor of the British Guardian, remarking on digital manipulation, suggested that "you should doubt every single picture you see from now on."(Somekh, 1996:14). In 1991, in an exhibition called *Photo Video: Photography in the Age of the Computer* held at The Photographers' Gallery, London, exhibitors stated the following:

“With the arrival of new and increasingly seamless ways of editing and changing images, our traditional belief that the ‘camera never lies’ is brought into question. ‘Who’, they ask, ‘stands to lose when the ‘truth’ of the photographic image stops being accepted?’” (Lister, 1997:253).

Research question and sub-questions

Research question

- What is the perspective of Capetonian professional photographers on issues of integrity in the documentary photograph, with regard to the impact of digital imaging technology?

Sub-questions

- How does the concept of photographic integrity manifest itself throughout the history of the documentary photography genre, prior and subsequent to the introduction of digital imaging technology?
- To what extent do Capetonian professional photographers use digital imaging technology compared to film technology?
- How do Capetonian professional photographers perceive various concepts related to integrity in documentary photography?
- What do Capetonian professional photographers regard as acceptable digital editing to the photojournalistic documentary photograph?
- Do Capetonian professional photographers believe that digital imaging technology impacted on the integrity of the documentary photograph?
- Do Capetonian professional photographers who have practiced professional photojournalism see the need for a national regulating body which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?

Research methods

The thesis is empirical in nature, being a scientific investigation of a question in the real world (Mouton, 2006:51, 52).

Chapter three provides an in depth exploration of methodology and research design. This section serves only as a simplified introduction.

There are two methodologies employed in this project, namely a quantitative and a qualitative methodology. The qualitative part is minor and supports the quantitative part. The instrument for collecting data is a questionnaire which has 26 quantitative questions. The second part of question 18 is qualitative in nature, requiring the respondent to freely elaborate his/her views on a core aspect of the study. The literature review was executed qualitatively.

The data analysed in the academic undertaking is hybrid in nature. I analysed both primary and secondary data in order to cover all the sub-questions. The research question is

exploratory. In order to cover the research question in its totality, I have divided the thesis to cover all the facets in a manner that is both logical and effective.

- In order to address the first sub-question I investigated the role of integrity/authenticity in the history of documentary photography. The investigation took place in the literature review. I investigated different manifestations of lack of integrity in the documentary genre prior to the use of digital imaging technology, including for example tampering with the subject, taking staged photographs and non-digital touching up. I investigated issues of integrity/authenticity in the documentary photograph, subsequent to the introduction of digital imaging technology. I investigated examples of photographs that were over-edited using digital imaging technology. I analysed secondary data, which included books, databases, journals, reliable news publications, theses and magazines, as hardcopies or on the internet. I researched editorials on internet sites and in magazines in order to obtain different points of view for critical analysis. Where possible, I made use of peer reviewed sources.
- The second sub-question asks to what extent the Capetonian professional photographer uses digital imaging technology compared to film technology. In order to address the sub-question I included five well thought out questions that are quantitative in nature in a questionnaire posed to professional photographers in the Cape Town area who agreed to participate in the study. The questions cover aspects such as degree of experience with picture capturing and editing technology (film and digital media) and camera usage information (film and digital cameras).

- The third sub-question enquires how Capetonian professional photographers perceive various concepts related to integrity in documentary photography. Six well thought out questions, quantitative in nature, explore these issues. Please note, the following numbers are not indicative of where the questions feature in the questionnaire. The first question explores truth vs. creativity in the photographer's chosen genre of practice. The second question explores issues of truth vs. creativity, specifically in press photography. The third question explores how angle of capture affects integrity. The fourth question explores how what is included in the picture frame influences issues of integrity. The fifth question explores how the order of arrangement of photographs affects the integrity of the message. The last question explores what a documentary photographer essentially is.
- The fourth sub-question enquires what Capetonian professional photographers regard as acceptable digital editing to the photojournalistic documentary photograph. I include four well thought out questions, quantitative in nature. The questionnaire covers cropping, dodging and burning in, pasting in and removal of objects.
- The fifth sub-question enquires whether Capetonian professional photographers believe that digital imaging technology has impacted on the integrity of the documentary photograph. Five well thought out questions cover this issue. Please note that the numbers don't specify where the questions occur in the questionnaire. The first question explores ease of manipulation due to digital imaging technology. The second question makes a comparison between the photojournalistic media,

before and after the introduction of digital imaging technology, thus exploring issues of trustworthiness. The third question determines which medium, film or digital, is more consistently trustworthy. The fourth question explores further issues of trust in film-based and digital media. The final question explores issues of credibility in film-based and digital media. All the questions, excluding the second half of the last question, are quantitative in nature. The second half of the last question qualitatively explores why the respondent believes that credibility is either in danger of being lost or not in danger of being lost as a result of the introduction of digital imaging technology.

- The sixth sub question enquires whether Capetonian professional photographers, who have practiced professional photojournalism, see the need for a national regulating body that clearly makes known what acceptable picture taking and digital editing entails for the South African photojournalist. The relevant question (question 23) in the questionnaire instructs only those who have practiced professional photojournalism to answer, since it is ultimately their and their colleagues' fate that rests in the hands of the group. Thus, I was able to obtain a result that was made up of answers exclusively from the "having practiced professional photojournalism" group.
- I posed a number of questions to discover interesting trends and to enable comparisons and contrasts. There are questions requesting genre of practice in photography, degree of involvement in documentary photography, years of experience, whether the photographer has had formal training, age and whether the professional photographer has practiced professional photojournalism. An example

of how I can use the above mentioned information is that I can show whether experience in professional photojournalism has an effect on how the photographer views the relationship between truth telling and creativity in the photojournalistic genre.

Ethics

Certain photographers may regard photographic integrity as a sensitive topic. For example, photojournalists who do not work for themselves may not want their answers dealing with issues of integrity and editing to be exposed to their superiors. Or some professional photographers, especially in the realm of photojournalism, may not want it revealed that they are in favour of drastic manipulation. They would not want their documentary work to be regarded as manipulated photojournalism, simply because they gave certain answers in response to a Masters questionnaire. Therefore I regard all information given by the respondents as confidential. No names are revealed.

Delimitation of the study

- Loss of integrity of a photographic image can also be understood as loss of quality. For example, contrary to popular belief, when data is saved on the hard drive quality is lost (Meyer, 2007). This study does not cover this type of loss of integrity.
- I do not aspire to invent new technological solutions to deal with loss of integrity in this academic endeavour.
- Although I hint at solutions, this thesis is primarily a tool of measurement.

Research design

The research design for the quantitative part of this thesis is that of a descriptive survey. The descriptive survey captures data that is used to describe opinions and views enabling analysis for relationships amongst certain variables. The design for the qualitative part is similar to the design of a case study, where a group of professional photographers' opinions are studied

in depth and compared and contrasted with one another. I will discuss the research design in more detail in chapter three.

Chapter outline

Chapter 1

- An introduction to outline key concepts of the study such as research question and sub-questions.

Chapter 2

- A review of literature dealing with topics discussed in the thesis, including an exploration of the manifestation of the concept of photographic integrity prior to and after the introduction of digital imaging technology.

Chapter 3

- Research design and methodology employed in the field work.

Chapter 4

- Analyses and discussion of the quantitative results.

Chapter 5

- Analyses and discussion of the qualitative results.

Chapter 6

- A conclusion to the study.

CHAPTER 2 LITERATURE REVIEW

This chapter deals with literature to create a contextualisation, to illuminate concepts and to use extracts and ideas gleaned from literature to forward an introductory argument. In the chapters that follow, I measured the perceptions of a very specific target group, namely the community of professional photographers in Cape Town, South Africa. However, the questions posed in the questionnaire are firmly grounded in a reality shared by professional photographers throughout the world. Professional photographers, who due to their commitment in, and greater knowledge about photography, are more aware than most of the power they have to manipulate the outcome of a photograph through approach, technique, image capturing equipment and editing tools. In this chapter the reader will gain a fundamental understanding of concepts and ideas which form a firm foundation for the rest of the study.

I organised the chapter as follows. Firstly, in order to create a context for the study, I constructed a precise definition of documentary photography. Thereafter, I defined the concept of photographic integrity. Subsequently, I discussed the photograph and the perception of it. Following this, I explored the concept of photographic integrity within the documentary genre prior to the introduction of digital imaging technology. Subsequently, I explored the concept of photographic integrity after digital imaging technology was introduced into the practice of photography. Finally, I amalgamated insights gained from the chapter into a logical conclusion.

Documentary photography defined

The definition evolved later serves as the basis for the term documentary photography throughout this thesis. John Grierson coined the word documentary in 1926, to describe a style in cinema very unlike the dream factory of Hollywood at the time. Grierson described it as a “living scene” using “found material” (Finnegan, 2001). Grierson was more interested in

education than frivolous distraction. He wanted to supply society with facts that they could use to make enlightened decisions in the society in which they lived. Photographers soon used the word to describe a similar style in still photography (Price, 1997:63, 77).

One cannot easily define the term documentary photography. As Price (1997:63) asserts, “Historians and critics have frequently drawn attention to the difficulty of defining documentary which cannot be recognised as possessing a unique style, method or body of techniques.” According to the Oxford Advanced Learner’s Dictionary (Wehmeier et al., 2005:431) a document is an “official paper or book that gives information about something, or that can be used as evidence or proof of something”. One can trace the word document back to the Medieval Latin word *documentum*, meaning official paper, evidence not to be questioned and a truthful account by the authority of the law. The documentary photographic genre is built on this same ideal. It is meant to be a truthful and objective account of what transpired (Clarke, 1997:145). The Oxford Advanced Learner’s Dictionary (Wehmeier et al., 2005:84) defines authentic as “true and accurate”; therefore, it is safe to say that the documentary photograph is supposed to be authentic. One could define a documentary photograph as a photograph that gives an authentic record of what transpired.

Stolte (2005:32) mentions that, “Photojournalism is devoted to recording current events or situations to preserve them for the future. News, features, man and man's environment, human interest ... all are included.” Although photographers and even experienced exhibitors are often confused as to what photojournalism entails (Moorhead, 1996:16) this thesis defines photojournalism as: photography with the purpose of supplementing articles in magazines, books and newspapers, which has a long history that places great value on authenticity (Lester, 1988). Consequently the thesis includes photojournalism as documentary photography.

The undeniable witness: Documentary photography

As is later shown in this section, some of the earliest documentary photographers documented events in the hope of effecting social change. The perceived veracity of the photograph had a power of persuasion bar none. The following is an example of how much credibility the public gave the documentary photograph, as opposed to its predecessor the engraving.

Henry Mayhew and Richard Beard created one of the first examples of social documentation in photographs in 1850 (Davenport, 1991:42). Mayhew took charge of the writing and Beard of the visuals. They named the essay *London Labour and London Poor* and it was meant to unveil the plight of the London poor. Due to the fact that the pictures were Daguerreotypes and could not be duplicated for public distribution, engravings were made. An example of such an engraving is shown below in figure 2-1.



Figure 2-1. The print is called *Street Seller of Birds' Nests*. W. Roberts engraved the Daguerreotype on wood. Richard Beard captured the original photograph on a Daguerreotype. The picture appeared in *London Labour and London Poor* c.a. 1850 (Davenport, 1991:42).

The majority of the public were not convinced and were under the impression that the appearance of poverty was exaggerated. A subsequent publication in the 1870's, *Street Life in London*, by John Thompson (visuals) and Adolphe Smith (writing) was much more successful. In the latter case Thompson employed the woodburytype photographic process, enabling duplication for public view. The photographs communicated an undeniable message of wretched poverty (Davenport, 1991:42). This time the public paid attention. To the people of the time, the veracity of documentary photographs was vastly superior to that of woodcuts. The era of photographic documentation for the masses had begun. In conjunction with this however, came integrity issues largely hidden to a yet naïve audience.

What is photographic integrity?

“Truth-telling is the promise of a photograph – as if fact itself resides in the optical precision. A photograph comes as close as we get to witnessing an authentic moment with our own eyes while not actually being there.” (Geftter, 2006:50).

According to the *Oxford Advanced Learner's Dictionary* (Wehmeier et al., 2005:776) integrity “is the quality of being honest and having strong moral principles”. Integrity is applicable to the documentary photograph, which is meant to be a truthful and objective account of what transpired (Clarke, 1997:145). The documentary photographer must adhere to the code of ethics of the industry. As an example, the National Press Photographers Association (NPPA) code of ethics states:

“As journalists we believe the guiding principle of our profession is accuracy; therefore, we believe it is wrong to alter the content of a photograph in any way that deceives the public. As photojournalists, we have the responsibility to document society and to preserve its images as a matter of historical record ... Altering the editorial content ... is a breach of the ethical standards recognized by the NPPA.” (National Press Photographers Association, 1991).

Although the NPPA standards don't apply to all professional photojournalists (only to members in the USA and Canada), most professional photojournalists in the world abide by them (Hancock, 2009).

According to Rohde (1995b:8), although the NPPA has devised a code of ethics barring the use of manipulated photographs, certain editors still publish manipulated images with a caption of "Photo-illustration". In many instances it is only in the form of a minute footnote. He does believe that this is at least a move in the correct direction.

Unfortunately there is no nationally enforced code of ethics for South African photojournalists (Slamdien, 2013). However, all over the world, respective publications do, in many cases, have their own code of ethics. For example *PSA Journal* has introduced certain limitations for nature and photojournalism sections in their "Consolidated Exhibition Standards" (Hindman, 1996:16). Pyke (1998:22) of the *PSA Journal* states the following:

The Photojournalism Division of PSA concurs with this [NPPA code of ethics] statement. Since it is difficult, if not impossible, to detect some of these manipulations, and it would be difficult to police the entries in a salon, we have to trust those entering our competitions to be honest and to enter only images which are true in their content. We have no objection to the use of the computer to print the pictures by photographers who do not have a darkroom available, or to perform the normal darkroom techniques such as controlling contrast, burning in or dodging the print. However, the addition of or removal of objects or people is not acceptable for competition images.

Despite the various codes of ethics, there are also unspoken understandings of what is and what is not ethical in the documentary genre. In this matter, the photographer must do as his/her conscience dictates. An example of a lack of integrity, is if a photo is chosen for career advancement, rather than to communicate the truth to the public (Neri, n.d.).

Rohde (1995a:26) is of the opinion that the wording in most codes of ethics are usually too vague and has even introduced his own scale. He has this to say, "Is it not especially difficult for the novice, even some regulars, entering salon competitions to be certain as they read rules

stating ‘no obvious manipulation’ or ‘manipulation should not be present’ or ‘the truth of the photographic statement should not be altered’? Rather than resort to such wording, which is politically correct, aesthetically stated, but confounding, might there be greater merit to characterize types of manipulation which are permitted or not acceptable?”

One can use the word authenticity in the place of integrity. According to Kozloff (1994:310), authentic can be defined as something that has the source professed or implied.

The photograph and perception of it

We hold the photographic image more accountable than the autographic image, since it arises directly from the external (Price & Wells, 1997:42). According to Howe (2002:22):

“Of all media, perhaps still photography came closest to showing the truth. The best photographs captured a precise moment, holding it there for inspection, offering each image as a fragmentary symbol of someone's reality.”

Newhall (1957:232) believes, “The power to convey immediate and convincing authenticity to the image is a unique characteristic of photography.” Newhall argues that although we are even aware that a photograph can be a fake, we still unconsciously believe that it should be a truthful representation (Newhall, 1957:232). If this is true, how much more do we believe that photographs in the documentary genre should provide the truth?

Petrovic (2005:246) suggests, “the photograph affirms the thing that-has-been by virtue of its reproduction”, but has warned that a photograph can also deceive because of manipulation, especially “since the digital age has opened the door for digitally reproducing that which never existed”. He believes these manipulated photographs can consequentially exercise the same power as the authentic ones on the unsuspecting viewer.

A photograph is only a representation of what is real; therefore, it only constructs an image-idea of what is real (Kember, 2003:202). Different seemingly real image-ideas can be obtained dependent on various factors such as characteristics of the lens, chemical properties,

darkroom decisions and cropping. One can make ordinary changes to camera angle and lighting and, “meaning can be imposed in photographic images” thus with, “each photographer’s use of an expressive code, newspapers can inflect a different news angle towards a story.” (Bissell, 2000:81). It can be argued that a photograph does not in all cases directly replicate circumstances (Price & Wells, 1997:25).

“Photographs possess a power and a point of view based on the agencies or individuals that construct them... photographic images are rarely neutral... it is through the creation of an image that meaning is constructed.” (Bissell, 2000:81). The more one delves into the concept of “photographic objectivity”, the more one becomes conscious of how illusive it really is. It must be stressed that the very reading of the photographic image is a complex process. As Victor Burgin states:

“The intelligibility of the photograph is no simple thing; photographs are texts inscribed in terms of what we may call ‘photographic discourse’, but this discourse, like any other, engages discourses beyond itself, the ‘photographic text’, like any other, is the site of a complex intertextuality (sic), an overlapping series of previous texts ‘taken for granted’ at a particular cultural and historical conjuncture.”(Clarke, 1997:27).

One also has to take into account the concept of visual literacy: As Debbie Abilock (2008) states:

“Like a printed text, an architectural blueprint, a mathematical equation, or a musical score, a visual image is its own language. Visual literacy has three components: learning, thinking, and communicating (Randhawa and Coffman, 1978). A "literate" person is able to decipher the basic code and syntax, interpret the signs and symbols, correctly apply terms from an academic discipline or field of study, understand how things fit together, and do appropriate work. Visual information literacy is the ability to understand, evaluate, and use visual information.”

Since a documentary photograph mirrors the subject and conveys meaning, different viewers will come to different conclusions based on their level of literacy, knowledge and background. Also, most images invariably display some hints of the author’s signature (Clark, 1997:30). In other words, in the process of capturing an image, the photographer alters the

outcome based on his approach and intent. One may even gain a better understanding of an image by studying other photographs by the same photographer (related and unrelated images), or obtaining background information about that photographer and his/her philosophy.

Furthermore, one can argue that the significance of the photograph is principally determined through accompanying verbal description and the context in which the image is utilized. In other words, a changeable meaning emanates from how the image is used and in what environment it is placed. Thus, the subject matter of the image is but one component of the meaning creation process and therefore how it is perceived by the viewer (Price & Wells, 1997:41). In the media, contextual sign systems with which the photograph appears are chiefly words, graphic design and institutional connotations (Lister, 2003:221). If one were, for example, to encounter an image in the newspaper, aspects such as text, title, captions and layout will affect how one perceives meaning in the photograph. For instance, the impact of the photograph on us will even be affected if the newspaper were radical, instead of conservative (Lister, 2003:222).

Another contextual item that has a powerful effect on how we perceive a photograph is that of the spoken word. For example, when individuals discuss a documentary photograph in a lecture hall or debate a news photograph. Even domestic discussions concerning snapshots in a photo album have an effect on how they are perceived by the viewer. Photographs don't occur in isolation. Every surrounding in daily life affects how they are understood (Lister, 2003:222).

There is also the question of aesthetics when it comes to the creation of documentary photographs. Photojournalists are encouraged to be creative in their approach and they are rewarded for skill and artistry in institutionally sponsored competitions. This is at odds with the claim that photojournalism is simply objective news imagery (Schwartz, 1999). Rothstein

stresses that photojournalism is in part creative, “aesthetic, interpretive art” and in part commercial, “the production of functional pictures by skilled professionals for practical purposes” (Peterich, 1957:46). Thus, according to some academics, creativity plays an important role in photojournalism.

Furthermore, a photographic image has a level of ambiguity, which allows the viewer to interpret reality in his/her own way (Howe, 2002:22).

Paradoxically, film documentary photography was predominantly taken in black-and-white to enhance authenticity and realism. Once drained of colour, the photograph is regarded as more real. Colour remains suspect. Many accept this illusion concerning the perception of realism in photography to be true (Clarke, 1997:23).

The concept of photographic integrity prior to the introduction of digital imaging technology

“Photography is a system of visual editing. At bottom, it is a matter of surrounding with a frame a portion of one’s cone of vision, while standing in the right place at the right time. Like chess, or writing, it is a matter of choosing from among given possibilities, but in the case of photography the number of possibilities is not finite but infinite.” – John Szarkowski (Sontag, 1986:192).

“Photographs came along when society wanted pictures and proof and was prepared to believe the two were the same.” (Goldberg, 1991:10).

According to Newhall (1957:232), people use the saying “The camera does not lie” so often it has even become a cliché. According to Biernatzki (2002:36), the belief that photographs are true representations of reality dates back to the time when photography was first created. A statement from a French journal made in 1854; a mere 15 years after the photographic process was announced to the world; “We can hardly accuse the sun of having an imagination” (Jammes & Janis, 1983:247), is a good indication of how much the public failed to take into account the influence of either equipment or photographer when viewing the photograph. Ten years later, on 9 July, 1864, an extract from Harper’s said, “Of course it is

impossible for photography to lie, and we therefore regard these portraiture as faithful to the minutest detail.” (Goldberg, 1991:28). The public attributed the photograph with absolute authenticity.

However in the year 1855, merely 16 years after the Daguerreotype was announced to the world, a German photographer invented a process of retouching a negative. He demonstrated the authentic and retouched version to an amazed audience at the Exposition Universelle held in Paris (Sontag, 1986:86).

Photojournalists usually deliberate on how to communicate an idea most effectively. One can see this frequently in the most famous documentary photographs, such as the photos of working children by Lewis Hine. For instance, as one can see in figure 2-2, Lewis Hine deliberately chose to take pictures of children dwarfed by the machinery they worked with to emphasize their smallness in stature (Davenport, 1991:44).



Figure 2-2. “Girl Working in a Carolina Cotton Mill”, by Lewis Hine taken in 1908 (Davenport, 1991:44).

Hine at no time manipulated photographs taken for the National Child Labor Committee, but did recognize that his own viewpoint influenced what subjects he preferred, his angle of use

and so on. In his own words he called his photographs, “reproductions of impressions made upon the photographer which he desires to repeat to others” (Abilock, 2008). Abilock (2008) is of the opinion that, “A documentary photograph is a mediated communication of truthful evidence. When displayed in exhibits or gathered photo essays, these photographs become an argument with evidence for a claim.”

Although not referring to the integrity of his images, Ansel Adams declared that photographic pictures are not taken, but made (Sontag, 1986:123). Photography is a matter of deliberation and intent. For instance, Henri Cartier-Bresson created his seemingly effortless masterpieces by exquisitely orchestrating them in a split second before he pressed the shutter release on his camera. He chose only those images where all elements lined up to symbolize the subject matter most aptly from among a number of attempts (Golden, 2008:50).

Staged photographs

One element that undermined the integrity of the photograph prior to the introduction of digital imaging technology is the staging of the photograph. Maniscalco (2011:19) provides a concise indication of how to identify a set up photograph when judging photographs in the field of photojournalism:

“For the purposes of judging photojournalism images, a good rule of thumb to determine a set-up would be ‘something that probably would not have occurred had a photographer not been present.’”

For example, a photographer restaged a photograph, of the battle in the harbour beneath San Juan in the Spanish American War, in a bathtub. At the time photographers executed such photographs primarily because of slow film and limited access. This type of staging was common well into the 20th century (Goldberg, 1991:28)

Other more subtle examples of staged photographs are the portrait style documentary photographs by Edward Curtis between 1907 and 1937, of American Indians in their traditional

settings, where Indians were photographed in ceremonial clothing that were only worn in much earlier years (Davenport, 1991:46). Vervoort (2004:463) stated, “While there is much praise for his accomplishments, Curtis has also become the favorite (sic) target of writers on Native culture who claim that he ‘misrepresented history’ by staging his photographs and having a romantic attitude by idealizing his figures and invoking nostalgia for the past.” Figure 2-3 below, is an example of Curtis’ work.



Figure 2-3. Edward S. Curtis photographed a North American Indian Kwakiutl man wearing a Tluwulahu-Mask in 1914. Found in the Curtis (Edward S.) Collection, Prints & Photographs Division, Library of Congress, LC-USZ62-47017 (Library of Congress, n.d.).

One can categorise a very popular documentary photograph, *Migrant Mother* by Dorothea Lange, as a deliberately constructed photograph. If one looks at the sequence of steadily closer to subject exposures, one will realise that Lange was not interested in the identity of the individuals, but rather on the effect the photograph would have on the audience, namely communicating the distress of the migrant workers in the time of the Great Depression, which it certainly did (Clarke, 1997:153). Ultimately the photographer succeeded in making it become symbolic of families struggling to survive during the Great Depression (Abilock, 2008). The

subject matter was authentic, but it is clear from looking at the sequence that the photographer deliberately encouraged the subjects to pose in different compositions. Furthermore, someone retouched the photograph to remove a thumb in the bottom right hand corner of the original photograph (Library of Congress, 2013).



Figure 2-4. The sequence of photographs that led to the photograph now know as *Migrant Mother*, retouched (E) and cropped unretouched (F), by Dorothea Lange. Found in Dorothea Lange’s “Migrant Mother Photographs” in the Farm Security Administration Collection, Prints & Photographs Division, Library of Congress, A: LC-USZ62-58355, B: LC-USF34-9097-C, C: LC-USF34-9095, D: LC-USF34-9093-C, E: LC-USF34-9058-C, F: LC-DIG-PPMSCA-12883 (Library of Congress, 2013).

Taking documentary staging to the extreme in order to try to illustrate the hidden truth, photographer Warren Neidich, in *American History Reinvented* (1989), used 19th century photographic processes to record scenes such as *Contra-Curtis; Early American Cover-Ups* exposing past brutality towards Indians (Neidich, n.d.). These “truthful fakes” challenge past photographs of Indian life, by for example Edward Curtis, which Neidich viewed as fake truths.



Figure 2-5. Warren Neidich photographed *Contra-Curtis: Early American Cover-Ups, Number 7* in 1989 (Neidich, n.d.).

Rearranging material in photographs and the effect of caption and context on how we perceive meaning

An example of an instance where a photographer rearranged material in documentary photography, coupled with the way a caption and context changes the way an image is perceived, is the case of five photographs of a steer skull by Arthur Rothstein while he was a part of the Resettlement Administration (later integrated into the Farm Security Administration), a federal agency initiated by Roosevelt's New Deal to ease the worst of rural poverty (Finnegan, 2001), in the USA during the Dustbowl period. According to the photographer, who found the skull in the Badlands (that has alkali flats all year round), he was in the process of experimenting with “the texture of the skull, the texture of the earth, cracks in the soil, the lighting, how the lighting changed from the east to the west as the sun went down” (Meyer, n.d.) and simply moved the Steer Skull ten feet (Lester, 1988). However, later that year, during a drought, an editor of the Associated Press decided to use picture B (see figure 1-6 on page 33) and labelled it “skull of a drought-stricken steer”. An editor of the *Fargo Forum*, who was not aware that Rothstein had not supplied the caption or that the Associated Press chose the picture from the RA records and it was not forwarded by the government, decided to publish an article with the title “IT’S A

FAKE”. As a result of a severe drought, especially in ardently Republican states, this caused a big uproar and Republicans declared that Roosevelt had provided a fake photograph to undermine them. Alternative pictures of the skull were shown in subsequent articles and this threatened to undermine not only the government, but the integrity of the work of Roy Stryker’s group of documentary photographers (Goldberg, 1991:96, 98) (Finnegan, 2001).

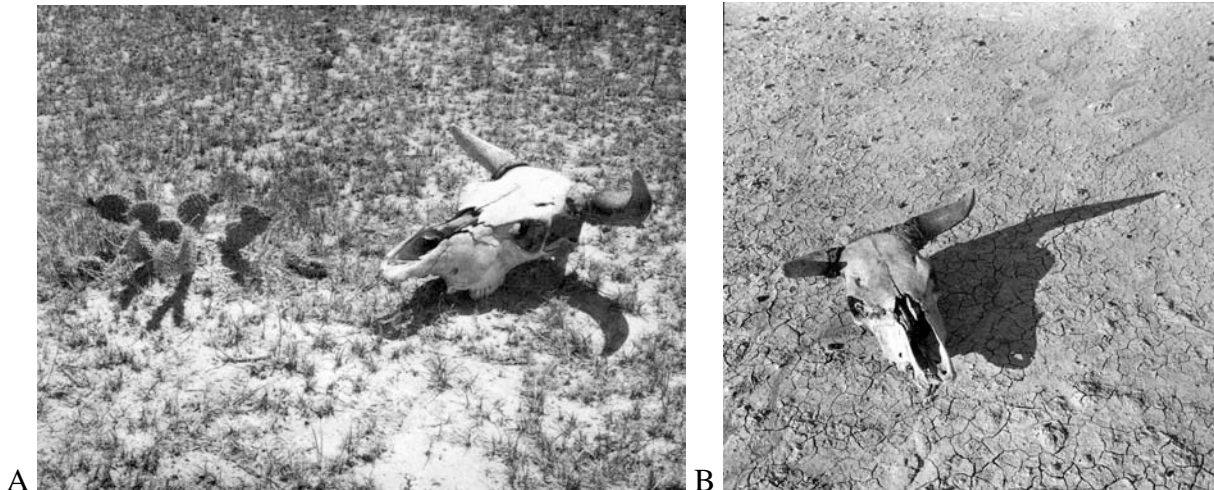


Figure 2-6. Two versions of a steer skull, taken by Arthur Rothstein in 1936 (Goldberg, 1991:97). The Associated Press published Version B as “skull of a drought-stricken steer”.

According to Finnegan (2001) if one examined the arguments of the detractor of the skull photograph in the *Fargo Forum*, one comes up with several challenges of photographic and editorial practice namely, “What is acceptable and unacceptable photographic practice? How does that practice influence the perceived ‘truth’ of images? How should photographs be framed editorially? What roles do text and context play in achieving ‘proper’ framing of a photograph?” Academics, photographers, editors and the like have been struggling with these issues since the birth of documentary photography and are still struggling with them today.

Ordering of photographs

How one orders one's photographs and decides to display them has a powerful effect on how they are perceived. Newhall (1999:246) argues, "A series of photographs, presented in succession on exhibition walls or on the pages of a book, may be greater than the sum of the parts." Newhall goes on to show that in *American Photographs* in 1938, the documentary photographer Walker Evans organized his photographs in two distinct sequences, photographs numbered and factual titles supplied at the end of each sequence. One displaying "the physiognomy of a nation" and the second "the continuous fact of an indigenous American expression." In contrast, Newhall shows that in *Let Us Now Praise Famous Men* published in 1941 together with writer James Agee; Evans simply grouped his photographs before the title page of the book with no explanation. Newhall mentions that the photographs were in Agee's words, "...not illustrative. They, and the text, are coequal, mutually independent, and fully collaborative." (Newhall, 1999:246).

Manipulation of the documentary photograph subsequent to the photographic exposure

Post-exposure manipulation to documentary photographs is by no means limited to the era of digital imaging technology and existed in many forms. Here are two examples of such manipulations. Researchers at the Library of Congress in the United States of America discovered that American Civil War, picture C in figure 2-7, is actually a composite of 3 prints (A, B top, and B bottom). Someone constructed picture C to pass as a picture of General Ulysses S. Grant with his soldiers in the background, at City Point, Virginia. It is actually the body and horse of Major General Alexander M. McCook (B bottom), the head of Grant (A) and the background was derived from a print of captured Confederate prisoners (B top) (Farid, n.d.).

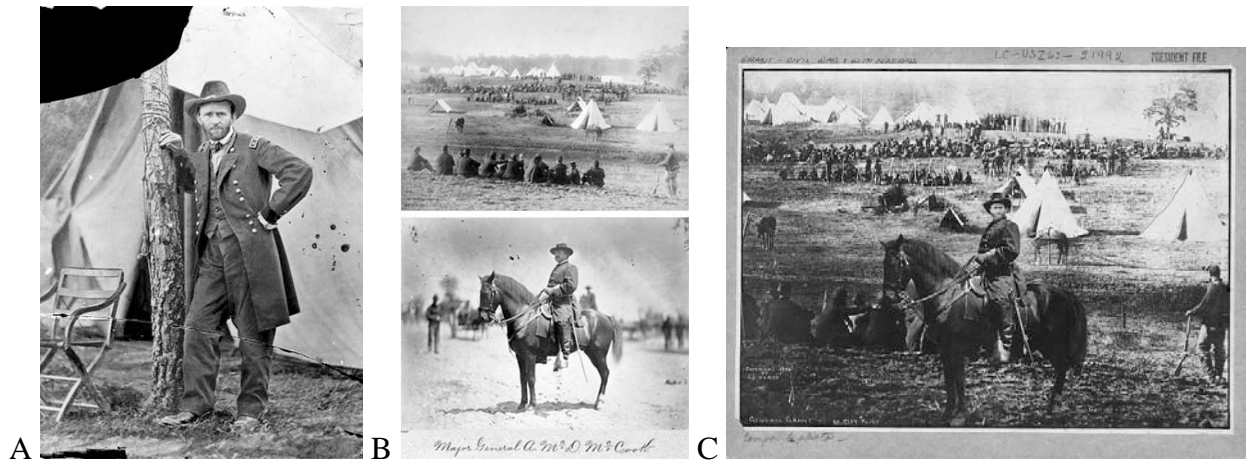


Figure 2-7. Composite print C made from the prints in A and B circa 1864 (Farid, n.d.).

Examples of doctoring are, for instance, photographs in political dictatorships which were often doctored for purposes ranging from making dictators more appealing to the public or simply, as shown in figure 2-8, to eliminate individuals no longer approved of by those in power (Wheeler, 2002:21).



Figure 2-8. An unknown artist painted over Leon Trotsky and other popular Bolsheviks in this 1919 photograph of Vladimir Lenin in Red Square (Wheeler, 2002:20, 21).

Misrepresentation

Another way in which a photograph can lack integrity is if it misrepresents a scene. For example, it is a violation of integrity if one takes a picture of a demonstration of first aid activity and publishes it or displays it as a real event. Similarly, if one takes a photograph of an athletic

feat in a practice session and subsequently publishes or displays it as an example of athleticism during competition, it is a violation of ethics in documentary photography (Maniscalco, 2011:19). A way to avoid misunderstandings is to include a title and/or caption/s which adequately elucidate the context of the image. If no captions or titles are allowed the photographer must take the photo/s in a way that does not misrepresent (Maniscalco, 2010:7). According to Maniscalco (2010:7), “a great PJ shot would include the line-up of photographers on the edge of the cliff in a photo of the Oregon set-up of a horse drive. In this case, the real story is all of the people photographing the horses, not the horse drive itself.”

The concept of photographic integrity after the introduction of digital imaging technology

All the kinds of alterations, prior and subsequent to the photographic exposure, discussed above are still possible in the era after the introduction of digital imaging technology. However, one now executes painting, cutting and pasting and other post-exposure manipulation in the digital realm. Digital imaging technology has made doctoring the photograph decidedly more straightforward, quicker and difficult to detect (Ricchiardi, 2007:36). According to Rohde (1995b:8):

“Historically, photomontages and/or extensive retouching of images were often blatant, time consuming and required much artistic ability to be successful. The advent of digital imaging (DI) now permits digital manipulation (DM) to be done quickly and often undetected, unless it is contradictory to outside frames of reference.”

In addition, this technology is now in the hands of a much greater number of people (Wheeler, 2002:41, 42). Digital imaging technology makes it possible to simulate a ‘photograph’ from patterns of code. One can now synthesize photorealistic images without the use of an image capturing device (Kember, 2003:205). The effects and ramifications of digital imaging technology on the photograph will only truly be evident in years to come (Manovich, 2003:240).

Ingledeu (2005:137) posed the following question:

“But this value (photography as a factual language) is now in danger of being undermined by the ease with which photographs can be manipulated digitally. Digital photography may totally devalue the authority of photography in the public’s eye. Will we trust any image any more? Will we see the death of truth in photography and a time when every image will be altered as a matter of course?”

Grundberg (1999:229) gave a swift and matter of fact answer, “The electronic future is as inevitable as our loss of faith in the integrity of photographic images.”

The arrival of digital imaging technology originally polarised photographers into two opposing groups. Some refused to have any work posted on the internet or scanned. Others however thought digital imaging technology was the solution to all photojournalism’s problems (Howe, 2002:22). Consequently photographers subscribed to many views.

There are individuals, such as Meyer and Rohde, who consider the introduction of digital imaging technology to be a shift fairly consistent with its predecessor, film technology, and embrace it fully, and there are individuals, such as Kozloff, who consider it an extreme departure.

Before discussing Meyer’s photography I must point out that there are academics who would not even define his work as photography. To quote Somekh (1996:14), “We certainly continue to see manipulated images defying reality, which could stand side by side with great surrealist or abstract works of art instead of pretending to be something they are not: photography.”

Meyer was an ardent straight (in favour of no over manipulation or misrepresentation) documentary photographer for twenty years before adding digital manipulation into his work. He has no qualms in identifying himself as a documentary photographer who interprets reality by

means of introducing manipulations, using tools that have evolved, giving more options for creativity (Meyer, 1995:9). Professor Fontcuberta is an internationally renowned critic and photographer, who is an avant-garde practitioner of Catalan photography and a customary contributor to specialist publications (Spain is Culture, n.d.). He introduced one of Meyers' obviously and intentionally manipulated photographic essays as, "a consciousness that cries out its documentary nature, and is nevertheless capable of freeing itself from the modus operandi that has come to define successive documentary models." How can Fontcuberta label excessively digitally manipulated work as documentary? How could he speak of "honest manipulation"? Prior to the above statement, Fontcuberta used analogies to set the stage. He mentioned a set of photographs which would be ideal in describing the holocaust at Guernica in Spain, but was of another incident. Then Fontcuberta discussed Picasso's painting of the holocaust at Guernica. He knew that Picasso was not a witness to the atrocities and was not sure where Picasso obtained his information or whether it was accurate. He then stated that the painting possibly did more for exposing and setting in history the holocaust of Guernica than all photographs with and without integrity. He questioned what is of importance in a document; the effect it brings forth, or the intention that initiated it? He asked what is significant; the aesthetic status as evidence, or the social function that is allotted to it (Meyer, 1995:8)? He did not believe that one should judge all manipulation as wrong, but rather judge, as he put it, the "criteria or the intentions that are applied to manipulation" and its "effectiveness" (Meyer, 1995:12). Furthermore, Fontcuberta stated the following, "The metamorphosis from silver grains to pixels is not in itself that significant". He sees truthfulness in photography as a "deceptive halo" which will suffer as a result of new technology. "Deceptive halo" implies that real truthfulness was lacking even before the introduction of digital technology (Meyer, 1995:10). According to Slade

and Stahl, (1995), Meyer at times attempts to “improve” pictures, “cleaning up distracting elements and insinuating unnoticeable alterations”, but at other times he “employs the technology to create new, more expressive statements that forgo the limited truths of the unmanipulated documentary photograph.”

Rohde also believes that the departure from film to digital imaging technology is not so extreme. Rohde (1995a:26) had this to say:

Human nature peculiarly finds assigning a name to almost anything bestows some immediate sense of control, just as an anxiety (unrecognized provocation) is transformed into a fear (recognized danger source) and permits definitive action to occur. Quantifying the departure of DI/DM (Digital Imaging/Digital manipulation) from predigital photography (S-BI [Silver Based Imaging]) would assist us to better judge the new kid on the block. DM is nothing more than changing the destiny of pixels electronically, not too different than wreaking havoc on silver halide crystals by chemical means.

Kozloff on the other hand said, “If certainly not a clean break with our past visual culture, computer-generated imagery bids to undermine it.” (1994:309). Kozloff’s fears with regard to the integrity of the photograph are largely based on the fact that in film photography the negative is the permanent record, but in digital photography one can alter the initial capture seamlessly with no disfigurement and replace the original. He elaborated, “Since pixels lack temporal specificity, the pictures they create have no necessary terminus in the past, even as their pliancy allows them to be reshaped in the future.” (Kozloff, 1994:307). Kozloff greatly values the permanent indexical quality of the pre-digital photograph. One can identify the photograph as a trace or index of the object from which light was reflected from. The indexical sign is rooted in cause and effect. For example, a footprint in wet sand as evidence of recent presence (Wells, 2002:350). In the “digital darkroom” a photographic print is no longer the direct result of light projected through the indexical negative image. Lister (1997:280), however, pointed out that “the ambiguously complex meanings of photographs have been understood to be the result of

complex technological, cultural, ideological and psychological processes in which indexicality (sic) is but one element.” Wells (2003:199) also states, “To reflect upon the loss of the ‘shadow’ or ‘trace’ immanent to lens-based, chemical photographs is to ignore the relative insignificance of this element within the image economy.”

Some individuals believe that the biggest change digital imaging technology brings is one of belief. As Orvell (2003:206) succinctly puts it:

“There are certainly continuities between analogue and digital photography (and analogue photographers could also manipulate prints), but the difference, if I can put it this simply, is that in the analogue era, we would assume that a manipulated image was the exception to the rule; in the digital era, we must assume that the non-manipulated image is the exception to the rule. The difference lies, then in the kind of belief we bring to the image, the kind of knowledge-assumption we make about what an image represents to us.”

Kember (2003:202, 203) responded powerfully to the many, especially photojournalists, who argue that digital imaging technology is taking away the truth that film photography provided us with. According to Kember, traditional photographs were never ‘true’ to begin with. She proposed that the anxiety over the *real* that’s disappearing is actually a projection of an anxiety over losing something else. She suggested that we’re scared of possibly losing our current primary “investments in the photographic real.” She described “these” investments as “social and psychological in terms of power and knowledge and in terms of desire and subjectivity.” In her synopsis of a part of her argument she stated, “...the current panic over the status of the image, or object of photography, is technologically deterministic and masks a more fundamental fear about the status of the self or the subject of photography, and about the way in which the subject uses photography to understand the world and intervene in it.”

Interestingly, as a result of new technology, according to Grundberg (1999:226), photojournalists are under the impression that reportage is no longer taken at face value and are now beginning to imitate styles of art photography to gain attention. This holds true for

exhibition and publishing systems too. According to Grundberg (1999:226), “This shift is symptomatic of our loss of innocence regarding photographs, and also of their new existence as artefacts.”

According to Richiardi (2007), people are now questioning the adage, “seeing is believing” and many individuals are making doomsday predictions for documentary photography.

What was acceptable manipulation by photojournalists prior to the introduction of digital editing?

Professionals are not in agreement when it comes to what is right and what is wrong when it comes to digital editing of photojournalistic photographs (Wheeler, 2002:xvii). For the purpose of this literature review I will consider some of the findings of respected scholar and educator Dona Schwartz.

According to Schwartz (1999), prior to the usage of digital imaging technology, it was generally accepted by trade magazines that during the editing process (darkroom activities) one should steer clear from any integrity compromising procedures. Basic procedures, such as cropping, burning in and dodging, provided that these procedures don’t drastically change the message elicited by a straight print, are esteemed acceptable. Most photographers are in agreement that the reversal of the negative is unacceptable. It is considered unacceptable to darken or do away with backgrounds, cutting and pasting, or airbrushing. Recent advancement in printing methods reduced the need for “cleaning up” photos for halftone reproduction.

What is considered acceptable editing after the introduction of digital imaging technology?

Schwartz (1999) is of the opinion that the two most significant changes that digital imaging editing technology brings to photojournalism are that one can make manipulations with greater ease and speed; and that one detects digital manipulation with much more difficulty, compared to previous methods.

With the introduction of digital imaging technology, photojournalists and image editors can change photographs with such ease and so effectively, that one must reconsider the issue of editing. Schwartz (1999) has found that most photojournalists agree that one must forbid the manipulation of the content of a news photograph. It is acceptable to manipulate the condition of a photograph. For example, burning in, dodging, cropping, colour correction and elimination of scratches and dust spots. One must not allow airbrushing. Removing items is not acceptable, but cropping is.

According to Schwartz (1999), many photojournalists, in an effort to remain credible, have adopted the philosophy, “don’t do anything that can’t be done in the darkroom”. However, Schwartz then pointed out that this is somewhat ironic, because image editors grossly altered photographs using chemical processes in the darkroom in the past. She also pointed out that those in charge encourage photographers to photograph in such a way that manipulation would not be needed, but that this is still a form of interpretation, not simply mere recording.

Rohde (1995b:8) claimed that there are no hard and fast rules as to the degree of doctoring allowed before an image is no longer true when fine tuning contrast, colour balance and minor burning in and/or dodging. He however firmly stated that “major overhauls of cloning or subject rearrangement” are not acceptable.

Maniscalco (2011:19) believes photojournalists should be limited to simple corrections, which returns the photograph to how the scene originally looked when the photo was taken. For example, cropping, lightening and darkening are deemed acceptable and cloning and colour changes are deemed unacceptable.

Drawing a parallel between ethics in photography and ethics in journalistic writing

Other academics believe that the fundamental solution to what alteration is and is not acceptable, lies in appealing to the professional character of the photographer and they draw a

parallel between the ethics of journalistic writing and the ethics of photography. Kelly expressed it concisely, “We have always known that words can lie. Now everyone knows that photographs can lie, too. Like writers, photographers must now base their claims of reliability on their professional character, on their reputation, on their sacred honor (sic).” (Wheeler, 2002:xv).

In his writing Wheeler, expert in ethics in the non-fictional photograph, compares the photograph to the written quote. In different types of articles (for example, a hard news article and a feature article) the writer must decide whether it is ethical to alter a quote. For instance, he/she must decide to change spoken language into written language to accommodate the speaker, or to print the quote without any alteration whatsoever. In the same way, the photographer must decide how much editing is allowed based on the “Qualified Expectation of Reality”. Wheeler believes that viewers share an expectation of reality that varies, depending on the nature of the environment in which the photograph is presented. For example, expectations of reality from photographs vary in hard news and fashion/beauty news, or simply due to the nature of the article (Wheeler, 2002:127-131).

The same concept can be applied in many areas of photo publication. For instance, Wheeler compared disclosure of photo alteration to disclosure of text alteration. When a journalist uses italics to highlight an aspect of a quote for his own purposes, he should visibly add the phrase “emphasis added” to ethically inform the reader (Wheeler, 2002:177). The same can be done in the case of the photograph. For example, by making it clear in the caption that the photo was altered. The level of prominence of the disclosure is determined by the image’s capacity to deceive (Wheeler, 2002:169, 175, 178).

Wheeler has a very high regard for journalistic principles. He asserts (Wheeler, 2002:146):

“Future challenges will be especially acute because many of tomorrow’s decision makers will have no more familiarity with film or darkroom convention than they have with

manual typewriters. But with a rudimentary grasp of journalistic principles, they can continue to apply new image processing techniques in ethical ways.”

Wheeler stresses that, “it’s the result, not the technique, that determines whether a photo alteration is ethical.” (Wheeler, 2002:134). Wheeler believes that it is indeed possible to have a future where the non-fiction photograph will have credibility (Wheeler, 2002:209, 210), if appropriate measures are introduced, such as, for example, a universal pledge gaining publications a badge that sets their visual journalism apart as ethical and trustworthy to the consumer (Wheeler, 2002:207, 208).

An appeal for responsible photographers

Maniscalco (2011:19), believes that “ethical considerations demand responsible behaviour”, and perhaps over idealistically asserted that it is not the duty of the competition judge to try to determine whether a photographer is using trickery, but that it is the responsibility of the photographer to be honest. She believes that, just as viewers should be able to rely on the credibility of photojournalist work, so judges should be able to rely on the integrity of photojournalists.

Gatekeepers

The photographer is not the only one that can distort the meaning of the photograph. One has to consider the influence of gatekeepers. Gatekeepers are those individuals who decide how a photograph is going to be used in a publication. “...gatekeeping (sic) is the process of winnowing down thousands of potential story ideas to the few that are transmitted by the news media” (Bissell, 2000:81). One can see the exhibition coordinator as a gatekeeper. The neutrality of the photograph is lost, once handled by the gatekeeper (Bissell, 2000:81). The picture editor is also a gatekeeper. The picture editor sometimes even perpetrates illicit alterations.

Examples of digitally “over edited” work

In this section I discuss five landmark transgressions within the documentary genre to further explore what is and is not acceptable when editing digitally. According to Bersak (2006:30), analysing, “fringe situations can help to illuminate the fuzzy boundary between what is and isn’t ethical, and clear examples of journalistic ‘right’ and ‘wrong’ can lead to further understanding of ethics in photojournalism as a whole.”

I have purposefully chosen examples that had an enormous impact on the photojournalistic community. These milestones occurred relatively soon after photojournalists started using digital imaging technology, thus the tremendous impact and novelty of the cases. First class professional photojournalists, who worked for publications respected for their integrity, perpetrated the illicit manipulations.

I discussed work by Brian Walski, Patrick Schneider and Allan Detrich.

The NPPA introduced a *Digital manipulation code of ethics* in 1991 that states:

“As journalists we believe the guiding principle of our profession is accuracy; therefore, we believe it is wrong to alter the content of a photograph in any way that deceives the public. As photojournalists, we have the responsibility to document society and to preserve its images as a matter of historical record. It is clear that the emerging electronic technologies provide new challenges to the integrity of photographic images ... in light of this, we the National Press Photographers Association, reaffirm the basis of our ethics: Accurate representation is the benchmark of our profession. We believe photojournalistic guidelines for fair and accurate reporting should be the criteria for judging what may be done electronically to a photograph. Altering the editorial content ... is a breach of the ethical standards recognized by the NPPA.” (National Press Photographers Association, 1991).

Brian Walski was a staff photographer for the *Los Angeles Times* and a twenty year veteran of the news business (Van Riper, n.d.) when he constructed a clearly illicit manipulation. The *Los Angeles Times* published the composite (image C in figure 2-9 on page 48) on 31 March, 2003.

Earlier in March, Walski was traveling with a group of British soldiers in Iraq. As one can see in the images that are shown later, Walski fused the left side of photograph A and the right side of photograph B to create image C which communicated a different message. In photograph A, a British soldier is motioning a group of Iraqi civilians to get down because of incoming fire. Photograph B shows a passive British soldier and a man carrying a child approaching. In composite C, it appears distinctly as if the soldier is ordering the Iraqi man with child to get down (Bersak, 2006:30, 31). Walski used the *Newscom* wire network, thus it appeared in newspapers around the country. It appeared in the *Los Angeles Times*, the *Hartford Courant* and the *Chicago Tribune* (Johnston, 2003:10). An attentive employee of the *Hartford Courant* detected that a person in the background appeared twice. Walski readily admitted that he had illicitly manipulated the photograph. He was expeditiously fired (Bersak, 2006:31). All three newspapers published notices to inform the public that Walski had perpetrated an illicit manipulation (Johnston, 2003:10).

Earlier in this chapter I discussed drawing a parallel between ethics in photography and ethics in journalistic writing. Here photographers argue within this framework.

Bersak (2006:32, 33) points out the following: Prominent photographer and writer, Pedro Meyer, defended Walski. Meyer (n.d.) stated:

“Instead, they have fired someone for doing a professional job in trying to come up with a better picture, the same way that any of their journalists polish a text so that it reads better and is succinct. (why should a photographer be deprived of doing exactly the same that other professionals are doing on a daily basis as long as the information is not distorted?)”

This argument was countered by Washington Post columnist Van Riper (n.d.):

“Any reporter worthy of the name would no sooner fiddle with direct quotes than a reputable photojournalist would alter his or her picture. Remember: news photographs are the equivalent of direct quotations and therefore are sacrosanct – the situational ethics of Walski's apologists notwithstanding. To be sure, just as a writer can, in the interest of brevity or impact, choose which quotes to use in a story, so can a news photographer or picture editor crop out dead space in a news photo, or use the electronic equivalent of

dodging or burning in to make a picture reproduce better. But the key elements of a news photograph, like the key words in a direct quote, simply are off limits to manipulation. In this, I am reminded of what a Washington Times shooter once told me. On a computer outside the paper's darkroom, she said, there was plastered this flat admonition and warning: "If you can't do it in the darkroom, don't do it here."

Bersak (2006:33) then indicates, "But you can do it in the darkroom." He goes on to show how the *Evening Graphic* made composographs with film photographs, but adds, "They were clearly labeled 'composographs.' Additionally, though skillful, the manipulation was obvious. Walski's changes were more subtle, and intended to hide the fact that the image was altered."

If one looks at the NPPA stipulations above, one becomes aware that Walski violated the code of ethics. He altered content so that it deceives the public and he did not represent the scene accurately.

Walski agreed with his critics and condemned himself. He said, "After a long and difficult day, I put my altered image ahead of the integrity of the newspaper and the integrity of my craft," and "These other photographers are there [in Iraq] risking their lives and I've just tarnished their reputation." (Johnston, 2003:10). The National Press Photographers Association's ethics chairman and staff photographer of the *Hartford Courant*, John Long, said, "The only thing we have to offer the public is our credibility," and, "We can say that it is awful once, but if it happens again and again we'll destroy ourselves.... We have to have accurate information."



Figure 2-9. Brian Walski's photographs and composite image. Image C is a digital composite of the left of image A and the right of image B (Meyer, n.d.a).

Walski's other work was reviewed, but no additional evidence of tampering was found (Ricchiardi, 2007:36).

Patrick Schneider has been a member of the NPPA since 1992 (Winslow, 2006). He worked for the Charlotte Observer at the time that he performed questionable manipulations and

in 2003 those in authority rescinded his three North Carolina Press Photographers Association Pictures of the Year awards (Lang, 2006). Schneider used this as part of his defence:

“What I’ve done is I’ve used techniques that have been standard throughout the ages in our business as we were in the darkroom on enlargers doing burning, where that’s darkening of area, or dodging to bring things up. That standard is the same of what I’ve done on my computer, and that’s just trying to take what’s there in the photograph and bring immediacy to it.”(Block, 2003).

Figure 2-10 shows an example of digital burning in that cost him an award.



Figure 2-10. Patrick Schneider’s photograph of happenings at a post 9/11 funeral. Image A is unaltered and image B has had the background digitally burnt in (Meyer, 2003).

Some in the photographic community didn’t agree with the decision to rescind Patrick Schneider’s awards (Meyer, 2003). As mentioned earlier, Schwartz found that digital burning in and dodging is acceptable, but it should be added that she also found that removing items is unacceptable. The NPPA (National Press Photographers Association) code of ethics declares in part that “it is wrong to alter the content of a photograph in any way that deceives the public.”

And:

“We believe photojournalistic guidelines for fair and accurate reporting should be the criteria for judging what may be done electronically to a photograph. Altering the editorial content ... is a breach of the ethical standards recognized by the NPPA.” (National Press Photographers Association, 1991).

However, as in the case of Patrick Schneider, the photographic community is divided as to what digital over editing entails. It has become more a matter of personal point of view than a clear-cut right or wrong.

In an interview with NPR News, after his awards were rescinded, Schneider pointed out that each press photographer has to decide for himself what over or under editing entails in the digital world, apart from obvious transgressions, such as for instance, if one removes objects from a photograph (Block, 2003).

The Observer disciplined Patrick Schneider for over editing in July 2006. This time those in authority fired him. The Observer failed to show the original photo, but the editor Rick Thames made it clear that Schneider had changed the colour of the sky from brownish-gray to deep red with the sun then taking on a more distinct halo. The grounds were simple. In Thames' words:

“Our photo policy states clearly: ‘No colors (sic) will be altered from the original scene photographed.’ Our news stories and photos are not interpretive forms of art. When our tools and our human memory fail us, we must go out and try again to capture art in real life.” (Winslow 2006).

Thames went on to say:

“Schneider said he did not intend to mislead readers, only to restore the actual color of the sky. He said the color was lost when he underexposed the photo to offset the glare of the sun.” (Winslow, 2006).

As mentioned earlier in this chapter, according to Schwartz's findings, the photojournalistic community regards colour correction as acceptable. Did Schneider really adjust too much? It seems harmless for one to correct that which was lost due to exposure settings, assuming Schneider was being honest in his defence.



Figure 2-11. Patrick Schneider's photograph of a fire fighter with background manipulated (Lubetkin, 2006).

Allan Detrich worked for the Toledo Blade which requires all their photojournalists to be members of the NPPA (Winslow, 2007). Allan Detrich appears to be clearly in the wrong when it comes to violating the NPPA code of ethics (Winslow, 2007). He allegedly submitted 79 doctored images in the 14 weeks before his resignation. Figure 2-12 is an example of an altered photograph submitted, but not published. It's safe to say that figure 2-12 clearly violates the NPPA rules: obvious alteration, obvious misleading of the public and inaccurate representation.



Figure 2-12. Allan Detrich captured the original photograph (A) and doctored it to produce image (B) (Winslow, 2007).

As I previously mentioned, Schwartz found that digital cutting and pasting is frowned upon in the photojournalistic community. The executive editor of the Toledo Blade, Ron Royhab, mentioned the following:

“Reporters and editors are not allowed to change quotes or alter events to make them more dramatic. Photographers and photo editors cannot digitally alter the content in the frame of a photograph to make the image more powerful or artistic.” (Winslow, 2007).

According to Ricciardi (2007:36), fellow photojournalists were baffled that such a successful and gifted photographer, who had worked so hard for success and had received so many awards, would risk it all with such audacious behaviour.

Detrich claimed that he was seduced by software, which makes illicit manipulation so effortless that “anyone can do it.” He also said, “I wasn't the first to tamper with news photos and, unfortunately, I probably won't be the last,” he elaborated, “I screwed up. I got caught.” John Long, chairman of the ethics and standards committee of the NPPA proclaimed, “The problem is far greater than we fear,” (Ricciardi, 2007:36). This makes one aware that there are possibly many manipulators out there who haven't been caught. According to Ricciardi (2007:36):

“During an NPPA ethics session in Portland, a group of some 50 photographers and photo managers were asked for a show of hands if they believed they had ever worked with peers who routinely crossed ethical boundaries. Nearly every arm flew into the air.”

Detrich’s improper deeds caused a new wave of attempts by those in authority to find new ways to curb illicit manipulation.

One can see another example of Detrich’s illicit manipulation below in figure 2-13. This is the photograph which put him under suspicion. It was taken when Bluffton University's baseball team participated in a game for the first time after five teammates had been killed in a bus accident earlier that month. Detrich erased the legs in the bottom right-hand corner while the legs showed up in similar photos taken by other photographers (Ohio's *The Lima News*, Cleveland's *The Plain Dealer* and the *Dayton Daily News*). Once Detrich’s archives were searched the investigators found that he habitually erased information and in some cases added subject matter, as one can see in figure 2-12. Detrich promptly resigned. His superior, Ron Royhab indicated that he would have fired Detrich if he didn’t resign (Ricchiardi, 2007:36). Once again, Detrich clearly violated the NPPA rules: obvious alteration, obvious misleading of the public and inaccurate representation.



Figure 2-13. Detrich removed the pair of legs in the lower right hand corner of the photograph he captured (Ricchiardi, 2007:36).

Professionals and public alike don't frown upon certain digital alterations. For instance, editors deliberately pixilated the private parts of victims in the notorious Abu Ghraib torture images that were taken by the soldiers as they tortured captives in early 2004 in Iraq. One makes such alteration for decency, not deception (Taylor, 2005).

By using digital imaging forensics one can detect digital manipulation. Particular forms of digital tampering create statistical correlations which one can quantify. Scientists have developed schemes to uncover these correlations (Farid, n.d.). According to Anderson (2011), a digital image is made up of, "a finite set of numbers arranged by a series of mathematical algorithms to create a digital image file" which behaves in a preordained calculable way. "If the output of one algorithm is altered, the alteration will most likely affect the output of other algorithms." One can perform different types of analyses. Anderson (2011) is sure that even if results of certain manipulations can get around some of these analyses, it will be hard or impossible to get around them all. Additionally, on a more basic level, one can check the metadata of a photograph to see if illicit changes were made.

"By simple definition, metadata is data about data. Metadata is structured information that explains, describes, or locates the original primary data, or that otherwise makes using the original primary data more efficient. A wide variety of industries use metadata, but for the purposes of digital imaging, there are currently only a few technical structures or schema that are being employed. A schema is a set of properties and their defined meanings, such as type of value (date, size, URL, or any useful designation)." (Adobe Systems Incorporated, 2004).

Conclusion

After one has looked at the role of integrity in documentary photography a statement by Gefter (2006:55) rings all the more true:

"The history of art is a continuum of constructed images that depict reality as it was truly, or else it was imagined in ideal terms. Photography did not change that continuum; it only made the difference between perception and reality more difficult to determine."

The documentary photograph is supposed to be truthful and accurate, but in reality that truthfulness is very subjective. One can approach a subject differently, resulting in different images communicating different messages. As can be seen in this literature review, many individuals are under the impression that manipulation and watering down of integrity in photography came about in the era of digital imaging technology, but in reality it abounds in many ways since shortly after the invention of photography.

The introduction of digital imaging technology has caused the photojournalistic community to become very wary of any form of alteration. Photojournalists and editors are idealising the darkroom era, somewhat blindly in some cases (Schwartz, 1999). Later in this thesis, photographers involved in professional photography in Cape Town, South Africa, will explore issues discussed in this chapter.

CHAPTER 3 METHODOLOGY

In this chapter I elaborate on the methodology employed in the rest of this research project. The thesis is empirical in nature, being a scientific investigation of a question in the real world (Mouton, 2006:51, 52). There were two interacting parts in the process of data collection and analyses, namely a quantitative part and a qualitative part. The undertaking has a mixed-method design (Leedy & Ormrod, 2005:97). The qualitative section of the project is minor and is supportive of the quantitative section.

How does one assess the perspective of Capetonian professional photographers on issues of integrity in the documentary photograph, with regard to the impact of digital imaging technology? Strictly speaking it is not possible to do 100% accurately by a human being. Only a being with extraordinary power can take all circumstances into consideration and venture to give a truly objective answer to the question. On a more practical note, I have ventured to gain answers to specific questions relating to integrity of the documentary photograph with regard to the impact of digital imaging technology, using information obtained by those professional photographers who were kind enough to respond.

The quantitative section

The research in this section is descriptive quantitative research.

“This (descriptive quantitative) type of research involves either identifying the characteristics of an observed phenomenon or exploring possible correlations among two or more phenomena. In every case, descriptive research examines a situation *as it is*. It does not involve changing or modifying the situation under investigation, nor is it intended to determine cause-and-effect relationships.” (Leedy & Ormrod, 2005: 179).

Quantitative research design

I have used a survey as a design for collecting data.

“A survey is a form of planned collection of data for the purpose of description or prediction as a guide to action or for the purpose of analyzing the relationships between certain variables, such as cancer and smoking.” (Oppenheim, 1973:1).

Research tool

The instrument of measurement is a questionnaire, which is semi-structured. It is comprised of multiple choice (predefined) and open questions as described by Gillham (2004:3). With the help of a CPUT statistical consultant, I designed it so that data can be captured and interpreted using quantitative methods.

“...quantitative methods are procedures and techniques used to analyse data numerically: they include a study of the valid methods used for collecting data in the first place, as well as a discussion of the limits of validity of any given procedure (that is, an understanding of the situation when a given procedure yields valid results), and of the ways the results are to be interpreted.” (Antonius, 2004:2).

The predefined questions contain checklists or Likert scales (a rating scale to evaluate an attitude, behaviour, or other phenomenon) (Leedy & Ormrod, 2005:185). A 4-point scale was used, which gives no opportunity for neutral choices. I did this in order to force participants to make up their minds, leaving no room for ambivalence. Two of the principal reasons why Likert scales are vital in this questionnaire, is that they allow for measurement of intensity of sentiment and scaled isolation of the respondent’s perspective. With the exception of one question, all multiple choice questions require the respondent to select only one option. In the case of the exception, space is provided, encouraging the respondent to add additional examples to the list. I encouraged the respondents to share spontaneously. I administered questions in the same sequence and wording to all subjects (Hague, 1993:21). Open questions are crucial for obtaining deeper insight, but I kept them to a minimum for the sake of efficiency of analysis.

My choice of software for interpreting statistics was PASW Statistics 18 from SPSS (Statistical Package for the Social Sciences). I was told by the statistical assistant that one does not display the process by which one has obtained data, because the software does all the work

for you. That is why I provide no more evidence of how my results were obtained. I established how the results obtained are relevant and can be used to forward the argument effectively in later chapters.

Both quantitative and qualitative variables were captured, making use of three levels of measurement. The levels of measurement are nominal, ordinal and numerical scale (Antonius, 2004:11, 12).

Sampling

I researched a significant proportion and a good representative sample of the community of professional photographers in Cape Town, South Africa. The character of this community is fairly indefinite. There is no all encompassing record of names and locations, nor is there a precise record of what each photographer specializes in, therefore probability sampling methods (Davies, 2007:58-62) are not viable options. I initially chose purposive sampling for this study. However, in order to produce results that can better withstand scientific scrutiny, I subsequently decided to make the entire population, that I could locate, the sample. I contacted all the photographers that I know; looked up names in the yellow pages; asked photographers to refer me to other photographers that they know; found contact details from photographers on the internet; obtained lists of past students at my University; contacted very senior students in my university; obtained the names of lecturers at other institutions teaching photography; and contacted the major newspapers in Cape Town to obtain contact details of photojournalists. 66 photographers were kind enough to participate. That does not mean that I could only locate 66. It means I targeted all photographers that I could locate and of that a portion of 66 of chose to participate. They were thus as good a representative sample of professional photographers in Cape Town that I could obtain. I did not target amateur photographers, because even though

they may be enthusiastic, they haven't assumed a professional identity and accepted accountability as professional image makers.

Professional photographers dedicate a large proportion of their existence to photography. Due to their commitment and experience in the field they are aware, more than most, of how a photographic image can assume many different forms, based on the approach and intent of the photographer and use of capturing and editing technology. Professionals are uniquely well placed to report on experiences as a result of change in photographic technology.

Pilot questionnaire

I conducted four verbal informal interviews with professional photographers to make sure I ask relevant questions and to make sure which terms would be easily understood. By doing this I realised that I must make the questionnaire as simple as possible. For example use "credibility" instead of the less understandable "integrity" and use "photograph appearing in a newspaper" instead of the confusion causing "photojournalistic image".

For a pilot questionnaire I selected two candidates, both professional photographers in Somerset West outside of Cape Town. There was no problem with the questionnaire. Both came back via email, well answered, with no problems.

Then I decided to make doubly sure that anyone will understand the questionnaire, so I targeted two amateur photographers. They did not experience any problems. I was now certain that I could use the same questionnaire that I used for pilot tests and that it would not cause confusion on any level. Although despite these precautions, as can be seen in the conclusion chapter, question 12, which deals with the ordering of documentary photographs, caused some confusion, despite giving no problems in the pilot trials.

Questionnaire construction

The questionnaire's main purpose was to obtain data that can be utilized to answer the relevant sub-questions. The relevant sub-questions of the research project apply to professional photographers in Cape Town and are as follows:

Firstly, how do they perceive various concepts related to the integrity of the documentary photograph?

Secondly, what do they regard as acceptable editing to the photojournalistic documentary photograph?

Thirdly, do they believe that digital imaging technology has impacted on the integrity of the documentary photograph?

Fourthly, to what extent do Capetonian professional photographers use digital imaging technology compared to film technology?

Lastly, do Capetonian professional photographers who have practiced professional photojournalism see the need for a national regulating body which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?

In order to make these sub-questions operational, I organised the questionnaire according to four themes. The themes are: respondent profiling, acceptable editing, perception of various concepts related to the integrity of the documentary photograph, and impact of digital imaging technology.

Respondent profiling

I had to capture certain details concerning the respondent to form a foundation for the questionnaire. Although this study promises confidentiality, I designed the questionnaire to form a profile of each respondent. The obvious reason for creating a profile is to be aware of the relevant attributes of each respondent. Ensuing, I discuss some of the less obvious reasons for

capturing individual profile details. As is subsequently evident, a section of the profiling process makes it possible to answer the sub-question, “To what extent do Capetonian professional photographers use digital imaging technology compared to film technology?”

Age and years of experience. The questionnaire requests age, together with duration of practice of professional photography (question 26 stipulates that years of study and assisting are regarded as professional photography). This allows for the determination of the calendar year on which each photographer commenced practicing professional photography. Questions of age and experience in the field are sensitive in nature, thus I left these questions till the end of the questionnaire, to ensure that they will not detract the attention of the respondent from answering the other questions.

Formal education. Additionally, the questionnaire captures details regarding formal instruction in photography. Question 25 requires the respondent to indicate whether he/she had studied photography formally (University of Technology, University or private institution). This enabled me to determine whether formal instruction in photography plays a role in opinion, judgment and belief. Due to its sensitive nature, I only broached the subject toward the end of the questionnaire.

Preferred genre of practice. Genre of practice is an important part of the respondent’s profile. Some photographers practice photography in multiple genres. The questionnaire asks those who do practice in multiple genres to name their preferred area of specialization. During analysis, one can therefore isolate specific groups of photographers. For instance, one can isolate those in the photojournalistic genre, to reveal worthwhile data. One can compare data in specific groups to data in other groups. One can also divide photographers into those who have

and who have not practiced professional photojournalism. This enabled me to determine if having practiced professional photojournalism impacted on opinion.

Degree of involvement. Another crucial profile detail is degree of involvement in documentary photography. To make the photographer who does not work in a documentary genre realise that the questionnaire applies to him/her too, the questionnaire requests in its second question whether the respondent has partaken in documentary photography of any kind. The checklist of diverse options provided, makes it highly probable that the photographer has at some time dabbled in documentary photography. I expected information obtained by this question to give me a better understanding of the range of the documentary photography each respondent has attempted.

To conclude the profile assembly, I determined with which media (digital, film based, or both) the photographer is familiar. By making use of a Likert scale, I determined whether the photographer has no experience, limited experience or considerable experience with capturing and editing technology, in film based photography and digital photography. The questionnaire measured how often the photographer uses a digital camera compared to a film camera. In this way, I had greater knowledge of the respondent's degree of use of film based and digitally based technology, and can answer the sub-question which enquires, "To what extent do Capetonian professional photographers use digital imaging technology compared to film technology?"

Acceptable editing

This section deals with obtaining an answer to the sub-question, "What do Capetonian professional photographers regard as acceptable digital editing to the photojournalistic documentary photograph?" How much can one edit digitally and still obtain a photojournalistic documentary photograph of integrity? There is great debate amongst professional photographers from around the world, as to what acceptable digital editing to the photojournalistic photograph

entails. For instance, in chapter two I discussed the findings of respected scholar and educator Dona Schwartz on this issue. This thesis adds the voice of Capetonian professional photographers to that debate. The topic of what constitutes acceptable editing is on its own a worthy topic for a Masters or Doctoral thesis. Since acceptable editing only forms a part of this exploration I only covered four key, carefully chosen, areas.

The study values a universal analysis of responses, but I isolated the responses of all those who indicated that they have practiced professional photojournalism. This isolation revealed specific input from those who have practiced professional photojournalism in Cape Town regarding photojournalistic editing. I posed questions concerning cropping, dodging and burning in, pasting in content, and removing content, along with Likert scales, allowing the photographer to select the most appropriate graded response. To make sure that all questions obtained answers that can be comparable with each other, I always asked the editing questions from a photojournalistic point of view. For ease of understanding, photojournalistic is expressed as “a photograph accompanying a news article”.

Perception of various concepts related to the integrity of the documentary photograph

This section aims to answer the sub question, “How do Capetonian professional photographers perceive various concepts related to the integrity of the documentary photograph?”

Creativity and disclosure of truth. The questionnaire requests the respondent to identify which is more relevant in his/her chosen area of specialization, creativity or disclosure of truth. I provided the options in the questionnaire in the form of a checklist. The list provides two options, where both creativity and disclosure of truth are deemed important, but one is more so. One purpose of the question is to deliberately involve those who are not inclined to documentary photography. This allows for discovery of interesting correlations. For instance, a press

photographer answered that creativity ranks as important. Another purpose was to make the photographer reflect on the relationship between truth telling and creativity in preparation for the next question. Thereupon a question asks the respondent whether he/she thinks that creativity can exist alongside truth telling in photojournalism. A Likert scale is provided.

Can “reality” be recorded and does the photographer introduce his/her own perspective in the act of taking a documentary photograph? To further ascertain the photographer’s concept of integrity, I pose three questions in the questionnaire, culminating in a fourth concluding question. The three preparatory questions ensure that the respondent “thinks through” what documentary photography entails, before answering what a documentary photographer does. The three preparatory questions, all with Likert scales, are as follows. Firstly, a question asks if angle of capture influences the message of a photograph. Secondly, a question asks if deciding what to include in the frame can change the message of a photograph. Thirdly, a question asks if the order in which documentary photographs are displayed by the photographer can change the message of the essay. Finally, via a Likert scale, a question asks whether the respondent thinks a documentary photographer is simply an objective recorder of reality, or if he/she thinks that there is no such thing as a recorder of reality and that the story conveyed is dependent on the intent and approach of the photographer. In the final question I provide an intermediate option for those who desire a more moderate response.

A national photojournalistic regulating body. I broached a vital issue, which is whether those who have practiced professional photojournalism believe it is a good idea to create an organisation similar to the NPPA, specific to South Africa. This is an independent sub question. Hence, a question specifically geared at those who have participated in professional photojournalism, asks whether having a national regulating body that makes clear what

acceptable picture taking and digital editing entails, is a good idea. One can deduce that it makes sense to ask only those who have practiced professional photojournalism to decide whether there should be a group which decides their fate in their professional field.

The impact of digital imaging technology

This section in the questionnaire seeks to answer the sub-question, “Do Capetonian professional photographers believe that digital imaging technology has impacted on the integrity of the documentary photograph?”

The objective of the questions that follow is to determine whether documentary photography is in danger of losing its level of integrity; and whether digital imaging technology has eroded its integrity and poses a further danger of taking the integrity away altogether. Before broaching this issue head-on, the questionnaire leads the respondent through a series of questions to force him/her to consider various aspects of digital imaging technology and their implications on integrity.

The role of digital editing technology. The first of these aspects is the role of digital editing technology. By way of a Likert scale, a question asked the respondent whether it’s easier to introduce untruth with digital editing technology.

Faith in other documentary photographs. Next, a question made the respondent consider whether he/she has lost any faith, as a result of the introduction of digital imaging technology, in documentary photographs of other photographers.

Film based vs. digitally based. I forwarded two scenarios to establish the level of trust the respondent has in film based documentary photography vs. digitally based documentary photography. A question made the respondent consider whether a film based newspaper photograph of 1975 or a digitally obtained newspaper photograph of 2010 feels more trustworthy. One could either pick both as equally trustworthy, or single out one as more

trustworthy. Subsequently, a question made the respondent choose whether a documentary photographic essay for exhibition, comprised of photographs obtained from film and developed in the darkroom, is or is not as consistently trustworthy as an essay of digitally obtained photographs that were processed in the “digital darkroom”.

Faith in, and credibility of, documentary photography. After the aforementioned orientation, I broached the main topics. Firstly, the questionnaire asked the respondent whether he/she has lost any faith in documentary photographs since the introduction of digital imaging technology and secondly, whether he/she thinks documentary photography is or is not in danger of losing credibility.

Method of administration

I approached photographers telephonically or in person. I asked photographers for their email addresses and sent an interactive questionnaire to them for completion. I monitored email returns and reminded the photographers who had not responded a maximum of two times. I logged all photographer details in a Microsoft Office Access database to facilitate and organise the endeavour.

The qualitative section

The qualitative section of this project is minor and is supportive of the dominant quantitative section. In the qualitative section I aimed not to start an independent research undertaking, but rather to gather more elaborate and subjective input. I attempted to elicit more free flowing opinions regarding a key topic and reveal additional insights, to produce a more balanced research project. I analysed data with qualitative methods and obtained that data from the open question 18b and the additional insights section at the end of the questionnaire. 18b asks for an explanation as to why the respondent chose either that the documentary photography genre is in danger, or is not in danger of losing its credibility as a result of the introduction of

digital imaging technology. The questionnaire has space for additional insights at the end. Some photographers were gracious enough to share additional insights.

I discussed the two approaches separately for the purpose of writing a methodology chapter, but in later chapters it is more evident that the two approaches coalesce and complement each other. One should not perceive qualitative and quantitative approaches as a dichotomy.

Both are useful in their own right (Silverman, 2000:11). Leedy and Ormrod (2005:97) affirmed:

“By making the distinction between quantitative and qualitative research, we do not mean to imply that these approaches are mutually exclusive – that a researcher must choose to use one or the other of them for any particular study. In fact, researchers often combine elements of both approaches in what is sometimes called a mixed-method design. For example, it is not unusual for researchers to *count* (and therefore quantify) certain kinds of data in what is, for all intents and purposes, a qualitative investigation (Eisner, 1998; Silverman, 1993). Nor is it unusual for quantitative researchers to report participants’ perceptions of, or emotional reactions to, various experimental treatments.”

This segment of the research undertaking is grounded in the interpretivist paradigm.

“Data gathered within the interpretivist research paradigm is primarily descriptive, although it may be quantitative, as for example in sizes of living areas, coded questionnaires or documentary analysis. The emphasis is on exploration and insight rather than experiment and mathematical treatment of data. Research set in the interpretivist research paradigm can answer questions about how and why something is happening. If it also addresses questions about what is happening in a wider context and what is likely to happen in the future, it can seldom do so with statistical confidence because the ‘truth’ is not grounded in mathematical logic. The ‘truth’ has to be a conclusion in the mind of a reader (or listener), based on the researcher’s power of argument, and different recipients of the research may come to understand different ‘truths’.” (Cryer, 2005: 79).

An alternate term used for interpretivist paradigm is qualitative paradigm (Cryer, 2005:81).

Qualitative research design

The design followed for the qualitative section much resembles the design for a case study. According to Leedy and Ormrod (2005:135), “In a case study, a particular individual, program, or event is studied in depth for a defined period of time.” Each case study in the research project involves a specific professional photographer and his/her views, judgements, opinions and insights, compared and contrasted to other cases.

Unlike the carefully planned quantitative section the qualitative part was more exploratory.

“Quantitative researchers contemplate and reflect on concepts before they gather any data. They construct measurement techniques that bridge concepts and data. The measurement techniques define what the data will be and are directions for gathering them. Qualitative researchers also reflect on ideas before data collection, but they develop many, if not most, of their concepts during data collection activities. The qualitative researcher reexamines (sic) and reflects on the data and concepts simultaneously and interactively.” (Neuman, 2000:158).

There were five parts in the qualitative analyses of data (Leedy & Ormrod, 2005:136). The parts were organization of details, categorization of data, interpretation of single instances, identification of patterns, and synthesis and generalizations.

The formulation of the question for qualitative analysis

I attempted to elicit free flowing opinion from the Capetonian professional photographers in order to make the thesis more balanced. I wanted to get them to explain their sentiments regarding core aspects of the impact of digital imaging technology on the integrity of the documentary photograph. If the questionnaire asked them to explain their views regarding the influence of digital imaging technology on the integrity of the documentary photograph, most would have been confused as to what integrity really means. Therefore, I decided to use the synonym credibility. Question 18 states the following, “Due to the introduction of digital imaging technology, the practice of documentary photography...” The respondent could then tick either is in no danger of losing credibility, or is in danger of losing credibility. For the qualitative part of the thesis, the questionnaire asks the photographer why he/she picked one of the above mentioned options. I thus encouraged the photographer to discuss a core aspect of the thesis with no length limit or prescribed categories. I furthermore obtained qualitative data from an “additional comments” box at the end of the questionnaire.

Basis for question generation

One has to compose a questionnaire with careful deliberation in order to achieve the desired response from the participant. I explained my methods above.

Equally importantly, one cannot simply include any question on a whim without prior thought, permission and research.

Most of the questions have their origin in the literature review. I only started constructing the questionnaire after the literature review was completed prior to moderation. For example, I formulated question 9 (A press photographer can approach his creativity and still tell the truth...) directly after reading that Lewis Hine deliberately chose to take pictures of children dwarfed by the machinery they worked with to emphasize their smallness in stature (Davenport, 1991:44).

I only implemented the questionnaire once approved by the CPUT statistical consultant and after conduction informal interviews with professional photographers. Please refer to appendix A for the questionnaire, or if you are reading the electronic Word document, please refer to the file that came with the thesis.

Rationale for the choosing of a survey

I decided to use a survey, since it seemed to be the most effective way to obtain the opinions of professional photographers. Photographers are overloaded with projects of their own. Consequently I devised a system that would work efficiently, both for them and for me. I created an interactive questionnaire, where they could simply tick boxes and write in the relevant places and return it to me via email. One attribute, as can be seen later in chapter four, is that the quantitative side forces the respondents to say yes or no. This is positive, because respondents are forced to consider important ideas and pick a side. But it can be limiting, because in some instances the photographer might have wanted to abstain or indicate that he/she simply does not know. I was aware of the limitations, but nevertheless chose to employ this kind of survey for

my Masters level project since it literally forced the photographer to make up his/her mind on the subject and contribute to the debate. I believe that the qualitative side and the place for extra comments gave the photographers a place to vent and to mention information which quantitative methods did not allow and supply additional information.

CHAPTER 4

RESULTS: QUANTITATIVE PART

In this chapter I reveal and analyse the results of the quantitative part of the research undertaking. For the sake of continuity and neatness I decided to always include the valid percent in the relevant tables, since there are instances where the valid percent differs from the percent. I organised this chapter as follows: Firstly, I discuss “respondent profiling”, which involves making known and examining the characteristics of the participants to give the reader a better idea of who the participants are and to form a foundation upon which the rest of the chapter is built. Secondly, I examine to what extent Capetonian professional photographers use digital imaging technology, compared to film technology. Thirdly, I explore the relationship between truth telling and creativity in the chosen genres of the participating Capetonian professional photographers. Fourthly, I explore how Capetonian professional photographers perceive various concepts related to integrity in documentary photography. Fifthly, I examine whether the Capetonian professional photographers believe that digital imaging technology has impacted on the integrity of the documentary photograph. Sixthly, I uncover what the Capetonian professional photographers regard as acceptable digital editing to the photojournalistic documentary photograph. Finally, I discuss whether the Capetonian photographers, who have practiced professional photojournalism, think there is a need for a national regulating body for the South African photojournalist, who clearly makes known what acceptable picture taking and digital editing entails.

In some of the tables only the responses where participants answered were shown. The no responses were however calculated and it won't make any difference to the chi-square result.

Respondent profiling

Preferred genre of practice

This study regards the identities of the participants as confidential, but certain essential information identifies important attributes of the participants. On page 73, in table 4-1, is an all inclusive record of the chosen genre of practice of the professional photographers who took part in the survey. Some participants insisted on including more than one genre. One photographer chose not to answer the question, hence the blank line at the top of the chart. A total of 66 Capetonian professional photographers took part in the survey.

Table 4-1. An all inclusive list of the genres of practice of the participants in the survey.

	Quantity	Percent
Valid	1	1.5
Advertising	2	3.0
Advertising & fashion (documentary photography for personal gratification)	1	1.5
Advertising with products, people for annual reports and landscapes for advertising	1	1.5
Aerial & architectural photography	1	1.5
Aerial photography	2	3.0
Beauty & advertising photography	1	1.5
Bottle, food, fashion, packs & events	1	1.5
Commercial / industrial & advertising photography	1	1.5
Documentary photography	2	3.0
Documentary photography & animal photography	1	1.5
Editorial photography for magazines	1	1.5
Family functions (including weddings) and family portraits	1	1.5
Fashion	2	3.0
Fine art & documentary photography	1	1.5
Fine art photography	3	4.5
Food photography	1	1.5
Humanities/documentary/photojournalism	1	1.5
Industrial & scientific photography	1	1.5
Industrial photography	1	1.5
Interiors / decor / documentary lifestyle	1	1.5
Landscape photography	2	3.0
Nature photography	1	1.5
Photojournalism	8	12.1
Portraiture	7	10.6
Scenic and travel photography	1	1.5
Shooting stock (for Gallo/Getty) and soccer world cup	1	1.5
Social events & functions	1	1.5
Special events photography	1	1.5
Sport, studio, weddings, school portraits and functions	1	1.5
Still life & extreme sport photography	1	1.5
Studio fashion, catalogue, interiors and exteriors of buildings, PR pictures, model portfolios, sport, weddings, celebrations	1	1.5
Studio photography of products in sets	1	1.5
Travel photography and people's expressions	1	1.5
Travel photojournalism	1	1.5
Wedding photography	9	13.6
Wedding photography, portraiture, surf photography	1	1.5
Wedding, industrial & schools photography	1	1.5
Total	66	100.0

I broke the group of participants down further, into two parts, namely those who have practiced professional photojournalism and those who have not practiced professional photojournalism. Thirty-four of the participants have practiced professional photojournalism and 32 have not. Why is this important? The topics the thesis explores are documentary and photojournalistic in nature. Experience in professional photojournalism may affect the opinions

of the participants. In certain instances, breaking down the all inclusive group can yield results worthy of noting. As I will show later, in one instance it is only relevant to obtain only the opinion of the group that has practiced professional photojournalism.

Below, in table 4-2, I include a record of the genre of practice of those photographers who have not practiced professional photojournalism. It is evident that documentary photographers and photojournalists are clearly not found in this group. Only one participant in this group prefers to spend time doing documentary work, yet he admits that it is in a non-professional capacity.

Table 4-2. The genre of practice of photographers who did not practice professional photojournalism.

		Quantity	Percent
Valid	Advertising	1	3.1
	Advertising & fashion (documentary photography for personal gratification)	1	3.1
	Advertising with products, people for annual reports and landscapes for advertising	1	3.1
	Aerial & architectural photography	1	3.1
	Beauty & advertising photography	1	3.1
	Bottle, food, fashion, packs & events	1	3.1
	Documentary photography	1	3.1
	Editorial photography for magazines	1	3.1
	Family functions (including weddings) and family portraits	1	3.1
	Fashion	1	3.1
	Fine art photography	1	3.1
	Food photography	1	3.1
	Industrial & scientific photography	1	3.1
	Industrial photography	1	3.1
	Landscape photography	2	6.3
	Nature photography	1	3.1
	Portraiture	4	12.5
	Special events photography	1	3.1
	Sport, studio, weddings, school portraits and functions	1	3.1
	Travel photography and people's expressions	1	3.1
	Travel photojournalism	1	3.1
	Wedding photography	6	18.8
Wedding photography, portraiture, surf photography	1	3.1	
Total		32	100.0

On page 75, in table 4-3, I include a record of the chosen genres of practice of photographers who have practiced professional photojournalism. Note that many of these photographers prefer practicing in non-documentary genres, yet they have practiced professional

photojournalism. One of the purposes of question 23 in the questionnaire is to break down the all inclusive group into those who have and haven't practiced professional photojournalism.

Table 4-3. The genre of practice of photographers who have practiced professional photojournalism.

		Quantity	Percent
Valid		1	2.9
	Advertising	1	2.9
	Aerial photography	2	5.9
	Commercial / industrial & advertising photography	1	2.9
	Documentary photography	1	2.9
	Documentary photography & animal photography	1	2.9
	Fashion	1	2.9
	Fine art & documentary photography	1	2.9
	Fine art photography	2	5.9
	Humanities/documentary/photojournalism	1	2.9
	Interiors / decor / documentary lifestyle	1	2.9
	Photojournalism	8	23.5
	Portraiture	3	8.8
	Scenic and travel photography	1	2.9
	Shooting stock (for Gallo/Getty) and soccer world cup	1	2.9
	Social events & functions	1	2.9
	Still life & extreme sport photography	1	2.9
	Studio fashion, catalogue, interiors and exteriors of buildings, PR pictures, model portfolios, sport, weddings, celebrations	1	2.9
	Studio photography of products in sets	1	2.9
	Wedding photography	3	8.8
Wedding, industrial & schools photography	1	2.9	
Total	34	100.0	

Duration of practice

The 66 professional photographers, who participated in the survey, have been working in the industry for different durations. On page 76, in table 4-4, I include a record of the different durations of practice of the participants. As one can see, the person with the shortest duration of practice is .3 of a year and the person with the longest duration of practice is 50 years.

Table 4-4. Duration of practice of the 66 participants.

	Years	Frequency	Percent
Valid	.3	1	1.5
	.7	1	1.5
	1.5	1	1.5
	1.7	1	1.5
	2.3	1	1.5
	2.3	1	1.5
	2.4	1	1.5
	3.0	2	3.0
	4.0	1	1.5
	4.5	2	3.0
	5.0	1	1.5
	5.7	1	1.5
	6.0	1	1.5
	7.2	1	1.5
	7.3	1	1.5
	8.0	1	1.5
	8.4	1	1.5
	9.0	2	3.0
	9.5	1	1.5
	10.0	6	9.1
	10.3	1	1.5
	10.5	1	1.5
	10.6	1	1.5
	12.0	2	3.0
	12.5	3	4.5
	13.0	1	1.5
	13.5	1	1.5
	14.0	1	1.5
	15.0	1	1.5
	16.0	1	1.5
	17.0	1	1.5
	18.0	1	1.5
	19.0	1	1.5
	20.0	3	4.5
	20.4	1	1.5
	21.1	1	1.5
	22.0	1	1.5
	23.0	1	1.5
	25.0	2	3.0
	26.0	1	1.5
	27.0	1	1.5
30.0	1	1.5	
32.6	1	1.5	
35.0	1	1.5	
36.0	1	1.5	
38.0	2	3.0	
40.0	1	1.5	
40.2	1	1.5	
42.0	2	3.0	
50.0	1	1.5	
	Total	66	100.0

Formal education in photography

This study also divides the participants into two other categories, namely those who have studied photography formally (at a University, University of Technology or private institution) and those who haven't studied photography formally. In the rest of the chapter I examine whether formal education has an effect on the answers of the participants.

Below, in table 4-5, I divide the group of participants into those who have and haven't studied photography formally. Sixty-six point seven percent (44) of the participants have engaged in formal studies, whilst 31.8 % (21) have not engaged in formal studies.

Table 4-5. All inclusive answers to the question: Have you studied photography formally?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	44	66.7	67.7	67.7
	No	21	31.8	32.3	100.0
	Total	65	98.5	100.0	
Missing	System	1	1.5		
Total		66	100.0		

If the study further breaks down the group, into those that have not and those that have practiced professional photojournalism, the results are evenly distributed. One can see, in tables 4-6 and 4-7 (valid percent) on this page and on page 78 respectively, that they are almost equal.

Table 4-6. The response of the participants who have not practiced professional photojournalism to the question: Have you studied photography formally?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	68.8	68.8	68.8
	No	10	31.3	31.3	100.0
	Total	32	100.0	100.0	

Table 4-7. The response of the participants who have practiced professional photojournalism to the question: Have you studied photography formally?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	64.7	66.7	66.7
	No	11	32.4	33.3	100.0
	Total	33	97.1	100.0	
Missing	System	1	2.9		
Total		34	100.0		

Age of participants

The study breaks down the group of participants into different age categories. As one can see in the all inclusive table 4-8 below, there are participants in each of the age categories. The category which had the most participants is the “26 – 35” age category (30.8%), followed closely by the “36 – 45” age category (26.2%). The category with the least participants is the “18 – 25” age category (6.2%). One participant chose not to take part in this question, so the percentages discussed are derived from only 65 participants, therefore the valid percent is discussed.

Table 4-8. The all inclusive table of ages of participants in the survey.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 25	4	6.1	6.2	6.2
	26 - 35	20	30.3	30.8	36.9
	36 - 45	17	25.8	26.2	63.1
	46 - 55	14	21.2	21.5	84.6
	56 +	10	15.2	15.4	100.0
	Total	65	98.5	100.0	
Missing	System	1	1.5		
Total		66	100.0		

As one can see in tables 4-9 and 4-10 on page 79, the most noticeable difference between the group that has practiced professional photojournalism and the group that has not practiced professional photojournalism, is that there are no participants in an “18 – 25” age category in the group that has practiced professional photojournalism. It is also evident, that in the group that

has practiced professional photojournalism, there is more than double the percentage of participants in the “56+” age category (20.6%), than in the group that has not practiced professional photojournalism (9.7%). Otherwise, age wise, the groups are more or less the same in makeup.

Table 4-9. The ages of the participants who have not practiced professional photojournalism.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 25	4	12.5	12.9	12.9
	26 - 35	10	31.3	32.3	45.2
	36 - 45	9	28.1	29.0	74.2
	46 - 55	5	15.6	16.1	90.3
	56 +	3	9.4	9.7	100.0
	Total	31	96.9	100.0	
Missing	System	1	3.1		
Total		32	100.0		

Table 4-10. The ages of the participants who have practiced professional photojournalism.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26 - 35	10	29.4	29.4	29.4
	36 - 45	8	23.5	23.5	52.9
	46 - 55	9	26.5	26.5	79.4
	56 +	7	20.6	20.6	100.0
	Total	34	100.0	100.0	

Degree of participation in documentary photography

After some critical evaluation the reader may have asked himself/herself, “If this is a thesis discussing documentary photography, must the researcher not set out to survey only photographers who are considered documentary photographers?” I have already given the answer to that question earlier in the thesis. If a photographer recognizes himself/herself as a professional photographer, he/she has unique knowledge and experience and has assumed accountability as a professional image maker. Therefore, I value his/her opinion for this study. The target group is therefore all photographers who have assumed the professional identity.

But, it is also my well founded belief that a photographer who considers himself/herself a professional photographer, has in all likelihood engaged in documentary photography of some kind. By seeking out only photographers who consider themselves solely documentary photographers, one loses many who have at some stage practiced professional photojournalism, but do not consider themselves to be only documentary photographers. Also, one fails to gain the participation of the professional photographers who, at some stage in their career, studies and/or personal life, have engaged in documentary photography of some sort. These are more reasons why it is vital to engage all professional photographers. It turned out that 64 (97%) out of 66 photographers have taken documentary photographs. But how can one calculate the degree to which the group of participants participated in documentary photography?

I gave all participants six options, which I developed after informal interviews. Participants could choose more than one option. One can see the results in table 4-11. “N” represents the number of participants who chose the option, “percent” is the size of the portion chosen in comparison with the whole, and the “percent of cases” refers to how large a percentage of participants out of the total group of 66, chose the option.

One can see in table 4-11, on page 81, that the greatest percentage of participants (87.5%) has taken documentary photographs to document a wedding or other social ceremony. The next greatest percentage (82.8%) has taken documentary photographs for personal purposes. The category participants voted for the least was “Documentary photographs for a non-fictional publication” (43.8%).

Table 4-11. Degree of participation in documentary photography.

		Responses		Percent of Cases
		N	Percent	
Have you taken documentary photographs?	I have taken documentary photographs for a newspaper	31	13.3%	48.4%
	I have taken documentary photographs for a non-fiction publication	28	12.0%	43.8%
	I have taken documentary photographs for a public exhibition	30	12.9%	46.9%
	I have taken documentary photographs for a project when I was a student	35	15.0%	54.7%
	I have taken documentary photographs to document a wedding or other social ceremony	56	24.0%	87.5%
	I have taken documentary photographs for personal purposes	53	22.7%	82.8%
Total (64 out of 66 took some form of documentary photographs)		233	100.0%	364.1%

Ten of the 66 participants had additional input that applied only to them. The additional input was air shows; documentary photographs for corporate clients; photographs for corporate and commercial events; documentary photographs for public relations at an institution; documentary style photography for bespoke corporate image banks (stock images); documentary photographs of Harley Davidson Lifestyle published in two limited edition books; documentary photographs as aids for teaching photography; documentary photographs for NGOs working in disadvantaged areas to assist with their fund raising and for corporate companies to illustrate their corporate social investments; documentary photographs that have been used on the web; and sports photography (mostly motocross).

To what extent do Capetonian professional photographers use digital imaging technology compared to film technology?

One research sub-question asks, “To what extent do Capetonian professional photographers use digital imaging technology compared to film technology?”

How does one demonstrate this extent? There are two parts with regards to usage, namely camera usage and post capture manipulation equipment usage. Furthermore, one must measure

camera usage and post capture manipulation equipment usage in two categories, namely a film based and a digitally based category. One could write a number of theses on the topics outlined in this paragraph. This study investigates degree of experience in capture and manipulating technology, both in film and digitally, and usage of a digital camera vs. a film camera.

Degree of experience in capture technology

Before conducting this survey, I expected that there would be many Capetonian photographers in this age that had not had any experience with film cameras. As one can see, in tables 4-12 and 4-13 on this page and page 83, this was not the case. Seventy-seven point three percent of the participants have had considerable experience with a film camera. By a smaller margin than I had expected, 92.4% have had considerable experience with a digital camera. As one can see, in table 4-12, two participants (3%) had no experience with a film camera as compared to one photographer (1.5%) who had no experience with a digital camera (table 4-13). It is not a significant difference; however, I expected the former more than the latter. More photographers had limited experience with film cameras (19.7%) than with digital cameras (6.1%).

It is evident that the group of participants has less experience with film based capture technology than with digitally based capture technology.

Table 4-12. Experience with a film camera.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No experience	2	3.0	3.0	3.0
	Limited experience	13	19.7	19.7	22.7
	Considerable experience	51	77.3	77.3	100.0
	Total	66	100.0	100.0	

Table 4-13. Experience with a digital camera.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No experience	1	1.5	1.5	1.5
	Limited experience	4	6.1	6.1	7.6
	Considerable experience	61	92.4	92.4	100.0
	Total	66	100.0	100.0	

Degree of experience in post capture technology

In the results, there is a more noticeable difference between experience with film based technology and experience with digitally based technology, with regards to post capture manipulation technology. As one can see, in tables 4-14 and 4-15 on this page and page 84, 57.6% of the participants have had considerable experience in the darkroom, whereas 84.8% have had considerable experience with photo editing software. The outcome, which one can observe in the following two tables, is more consistent with my expectations, but once again film comes out stronger than I expected.

Only 12.1% had no experience in the film darkroom compared to 1.5% in the digital darkroom. I expected the former, but did not foresee the latter. There are considerably more participants who have had limited experience in the film darkroom (30.3%) than participants who have had limited experience digitally (13.6%).

One can observe that the group of participants has less experience with film based editing technology than with digitally based editing technology.

Table 4-14. Experience in the film darkroom.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No experience	8	12.1	12.1	12.1
	Limited experience	20	30.3	30.3	42.4
	Considerable experience	38	57.6	57.6	100.0
	Total	66	100.0	100.0	

Table 4-15. Experience with photo editing software.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No experience	1	1.5	1.5	1.5
	Limited experience	9	13.6	13.6	15.2
	Considerable experience	56	84.8	84.8	100.0
	Total	66	100.0	100.0	

Camera usage: Film versus digital

What follows are the statistics related to camera usage, both in the film and the digital medium. There is a discrepancy between the actual percentage and the valid percentage, because 5 people chose not to participate. I discussed the valid percentage, which takes into account only those who chose to answer. Fifty-four point one percent indicated that they use only their digital camera. One can thus say that the majority of professional photographers in the Cape Town representative sample use only their digital cameras.

I did not foresee that 1.6% (1) of the photographers in this “digital age” still only uses a film camera. In this case, the participant is a fine art landscape photographer who uses a large format film camera. Only 1.6% (1) of the photographers uses a film camera more than a digital camera. Eight point two percent of the photographers use both their film cameras and digital cameras more or less equally often. As one can see, in table 4-16, 34.4% of the participants indicated that they use their digital camera more often than their film camera. These statistics indicate that film camera usage is waning. Digital camera usage takes precedence.

I was expecting an overwhelming majority of digital camera usage, which did not materialize.

Table 4-16. Camera usage: Film and digital.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I use only my film camera	1	1.5	1.6	1.6
	I use my film camera more than my digital camera	1	1.5	1.6	3.3
	I use both my film and digital camera more or less equally often	5	7.6	8.2	11.5
	I use my digital camera more than my film camera	21	31.8	34.4	45.9
	I use only my digital camera	33	50.0	54.1	100.0
	Total	61	92.4	100.0	
Missing	System	5	7.6		
Total		66	100.0		

The relationship between truth telling and creativity in the chosen genres of practice

One detects a compromise between truth telling and creativity when it comes to the integrity of photography in the documentary photography genre. The thesis would be incomplete if I did not explore how the participants view the relationship between truth telling and creativity, not only in the documentary photography genre, but also in the genre in which they practice photography. In table 4-17 on page 87, one can see an exploration of how the participants view the relationship of truth telling and creativity in their chosen genre of practice.

For reasons of space in relation to the rest of the thesis, I will only discuss a few of the most interesting results.

Photojournalism had interesting results. I expected all the seven photojournalists to vote either “truthfulness” or “both are important, but truthfulness is more important”. But instead, one believed creativity to be of sole importance and three believed both creativity and truthfulness to be of equal importance. This result speaks volumes about what actively practicing photojournalists regard as important in their day to day photography and is a

revelation to me. The remaining three believed that both are important, but truthfulness is more important.

There was another unexpected result. Of the three fine art photographers, two predictably voted “creativity” of greatest importance, but curiously one voted “both are important, but truthfulness is more important”. This shows that a portion of fine art photographers value truth telling as well as creativity in their photographs.

Out of the total of the votes, only two photographers believed that only truthfulness is important in their genre of practice. The first of these votes was from “industrial and scientific photography” which is expected, but the second vote was from a portrait photographer. It shows that there are a portion of portrait photographers who view themselves as truth tellers as opposed to creative photographers.

Table 4-17. The relationship between truth telling and creativity in the chosen genres of practice.

	In your one most preferred genre of practice, what is important, creativity or truthfulness?					Total
	Creativity	Truthfulness	Both are equally important	Both are important, but creativity is more important	Both are important, but truthfulness is more important	
In your day to day practice of photography, what is your one most preferred genre of practice?	0	0	0	0	1	1
Advertising	2	0	0	0	0	2
Advertising & fashion (documentary photography for personal gratification)	1	0	0	0	0	1
Advertising with products, people for annual reports and landscapes for advertising	0	0	0	1	0	1
Aerial & architectural photography	0	0	1	0	0	1
Aerial photography	0	0	0	1	1	2
Beauty & advertising photography	1	0	0	0	0	1
Bottle, food, fashion, packs & events	0	0	0	1	0	1
Commercial / industrial & advertising photography	1	0	0	0	0	1
Documentary photography	0	0	0	0	2	2
Documentary photography & animal photography	0	0	0	0	1	1
Editorial photography for magazines	0	0	0	1	0	1
Family functions (including weddings) and family portraits	0	0	0	0	1	1
Fashion	1	0	0	1	0	2
Fine art & documentary photography	0	0	1	0	0	1
Fine art photography	2	0	0	0	1	3
Food photography	0	0	0	1	0	1
Humanities/documentary/photojournalism	0	0	1	0	0	1
Industrial & scientific photography	0	1	0	0	0	1
Industrial photography	0	0	0	0	1	1
Interiors / decor / documentary lifestyle	0	0	1	0	0	1
Landscape photography	0	0	0	2	0	2
Nature photography	0	0	1	0	0	1
Photojournalism	1	0	3	0	3	7
Portraiture	0	1	2	2	2	7
Scenic and travel photography	1	0	0	0	0	1
Shooting stock (for Gallo/Getty) and soccer world cup	0	0	0	0	1	1
Social events & functions	0	0	0	0	1	1
Special events photography	0	0	0	1	0	1
Sport, studio, weddings, school portraits and functions	0	0	0	1	0	1
Still life & extreme sport photography	0	0	1	0	0	1
Studio fashion, catalogue, interiors and exteriors of buildings, PR pictures, model portfolios, sport, weddings, celebrations	0	0	0	1	0	1
Studio photography of products in sets	0	0	0	1	0	1
Travel photography and people's expressions	0	0	1	0	0	1
Travel photojournalism	0	0	1	0	0	1
Wedding photography	3	0	5	1	0	9
Wedding photography, portraiture, surf photography	0	0	1	0	0	1
Wedding, industrial & schools photography	0	0	1	0	0	1
Total	13	2	20	15	15	65

The perception of various concepts related to integrity in documentary photography

I discussed five concepts related to integrity in documentary photography in this thesis. The first four lead up to the fifth, which is an important concept in this project, namely the essence of a documentary photographer's role.

First concept: Creativity and truth

Can a press photographer approach his/her work with creativity and still tell the truth? It is a simple question that generates different responses with different levels of sentiment. In this case, I used a Likert scale to measure intensity of sentiment. Table 4-18 below, shows only the responses and level of sentiment that were chosen by the participants, therefore "strongly disagree" is not included in the table.

As one can see in the all inclusive table 4-18, the majority (34, 51.5%) chose "strongly agree". This indicates fairly strongly that it is possible for a press photographer to approach his work with creativity and still tell the truth. Forty-five point five percent (30) of the all inclusive group simply agreed. The last mentioned reaction is not a "strongly agree" vote, yet it is nevertheless final. Only 3% (2) of the photographers disagreed. The two photographers who disagreed are examples of purists, who believe that documentary photography is just there to record as true a picture as possible. As one can see in table 4-19, these two photographers predictably came from the group that have practiced professional photojournalism (5.9% of the group).

Table 4-18. The all inclusive results when answering in response to: A press photographer can approach his work with creativity and still tell the truth.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	34	51.5	51.5	51.5
	Agree	30	45.5	45.5	97.0
	Disagree	2	3.0	3.0	100.0
	Total	66	100.0	100.0	

In table 4-19 I break down the all inclusive result into two groups of photographers, namely those who have and haven't practiced professional photojournalism. It is evident that there are substantial differences between the results of the two groups, when it comes to "strongly agree" and "agree". It's very interesting for one to note, that the group which has practiced professional photojournalism insisted strongly (strongly agreed) that it is possible to be creative and truthful at the same time. Twenty-five professional photographers (73.5%) value their creativity intensely. In contrast, in the group which hasn't practiced professional photojournalism, only 9 (28.1%) strongly agreed. This could mean that once one has experience, one realises strongly that creativity is a possibility.

The "agree" results are more or less an inverse of the "strongly agree" results. Those who have not practiced professional photojournalism agreed 71.9% (23) and those who have practiced agreed 20.6% (7). As one can see in table 4-20, there is a significant difference (p-value < 0.05) in the responses between those who have and haven't practiced professional photojournalism when it comes to the statement "A press photographer can approach his work with creativity and still tell the truth."

Table 4-19. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: A press photographer can approach his work with creativity and still tell the truth.

		Practiced professional photojournalism		Total
		Yes	No	
A press photographer can approach his work with creativity and still tell the truth.	Strongly agree	25	9	34
	Agree	7	23	30
	Disagree	2	0	2
Total		34	32	66

Table 4-20. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	18.019	2	0.000
N of Valid Cases	66		

Table 4-21 on page 91, shows how education impacted on the participants’ opinion on whether a press photographer can approach his work with creativity and still tell the truth. Because the number of participants who have studied photography is so different from the number who hasn’t, I include percentages in all the tables that deal with impact of education, to make it easier for the reader to grasp how percentage is related to numbers. By a majority, those who have not had a formal education, feel strongly in favour (12, 57.1%) of the fact that a press photographer can approach his/her work with creativity and still tell the truth. To a lesser extent, 47.7% (21) of the respondents who’ve had a formal education in photography strongly agreed. One can thus argue that a formal education in photography greatly predisposes the Capetonian professional photographer to be more aware that creativity cannot coexist with truth in professional photojournalism.

However, there is a greater percentage of photographers who were formally educated who simply (without strong emphasis) agreed (22, 50.0%), than photographers who have not been formally educated (8, 38.1%). If one looks at the percentages of the “disagree” vote, one can see that it is greater in the group that lacks formal education (1, 4.8%) than in the group that has a formal education (1, 2.3%). But the difference in percentage is minor (2.5%), therefore one can conclude that percentage of disagreement was more or less equal, regardless of formal education. As one can see, in table 4-22, the chi-square analysis confirms that there is no significant difference in opinion between those who have and haven’t studied photography formally when it comes to whether a photographer can approach his work with creativity and still tell the truth.

Table 4-21. How education impacts on the photographers' responses to: A press photographer can approach his work with creativity and still tell the truth.

		Have you studied photography formally?		Total
		Yes	No	
A press photographer can approach his work with creativity and still tell the truth.	Strongly agree	21 (47.7)	12 (57.1)	33 (50.8)
	Agree	22 (50.0)	8 (38.1)	30 (46.2)
	Disagree	1 (2.3)	1 (4.8)	2 (3.1)
Total		44 (100)	21 (100)	65 (100)

Table 4-22. Chi-square tests of the results of the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.971	2	.748
N of Valid Cases	65		

Second concept: Effect of angle of approach on message conveyed

Can different messages be conveyed by photographing a subject from different angles? By merely changing an angle, one can send a new message. I expected that everyone would agree. However, strangely, one person (1.5%) chose to disagree. This person was from the group that has not practiced professional photojournalism, as one can see in table 4-24 (3.1% of the group). I discuss the valid percent, because there is a missing vote. If one looks at the all inclusive results, the difference in sentiment was clearly visible; 60% (39) strongly agree and 38.5% (25) simply agreed. So, one can conclude that the all inclusive majority of participants feel very strongly that a different angle creates a different message.

Table 4-23. All inclusive response to the statement: Different messages can be conveyed by photographing a subject from different angles.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	39	59.1	60.0	60.0
	Agree	25	37.9	38.5	98.5
	Disagree	1	1.5	1.5	100.0
	Total	65	98.5	100.0	
Missing	System	1	1.5		
Total		66	100.0		

If one looks at table 4-24 below, it becomes apparent that the group which has practiced professional photojournalism feels more strongly that the message changes when angle of capture is changed (69.7% [23] as opposed to 50% [16] in the group that hasn't practiced professional photojournalism). One can argue that experience in the field of professional photojournalism makes the photographers feel more strongly that the message conveyed can be altered by simply moving the camera to a different viewpoint.

In the group which has practiced professional photojournalism, a lesser percentage of participants simply agreed, compared to those who have not practiced professional photojournalism (30.3% [10] as compared to 46.9% [15]). As one can see in table 4-25, the chi-square analysis shows that there is no significant difference (p-value > 0.05) between the responses of those who have and haven't practiced professional photojournalism when it comes to the statement, "Different messages can be conveyed by photographing a subject from different angles."

Table 4-24. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Different messages can be conveyed by photographing a subject from different angles.

		Practiced professional photojournalism		Total
		Yes	No	
Different messages can be conveyed by photographing a subject from different angles.	Strongly agree	23	16	39
	Agree	10	15	25
	Disagree	0	1	1
Total		33	32	65

Table 4-25. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	3.242	2	.161
N of Valid Cases	65		

As one can see, in table 4-26 below, formal education, or the lack thereof, does not substantially influence the strong intensity agreement percentage (“strongly agree” percentage). The group without a formal education has a higher percentage “strongly agree” vote than the group with a formal education (66.7% [14] compared to 55.8% [24]). Note that both the aforementioned percentages are majorities. I expected that those with a formal education in photography would be more intensely aware that different messages can be conveyed by photographing a subject from different angles, but, as one can see, the research proved otherwise.

The category that was not formally educated made the unexpected response of “disagree” (4.8%). One can argue that such an unanticipated response stems from a lack of formal education.

As one can see, in table 4-26 below, 44.2% (19) of those who were formally educated simply agreed, whilst 28.6% (6) of those who were not formally educated simply agreed. I expected more informally educated participants to agree without emphasis, but this did not materialise. As one can see, in table 4-27, the chi-square analysis shows that there is no significant difference ($p\text{-value} > 0.05$) between the responses of those who have and haven’t studied photography formally when it comes to the statement, “Different messages can be conveyed by photographing a subject from different angles.”

Table 4-26. How education impacts on the photographers’ responses to: Different messages can be conveyed by photographing a subject from different angles.

		Have you studied photography formally?		Total
		Yes	No	
Different messages can be conveyed by photographing a subject from different angles.	Strongly agree	24 (55.8)	14 (66.7)	38 (59.4)
	Agree	19 (44.2)	6 (28.6)	25 (39.1)
	Disagree	0	1 (4.8)	1 (1.6)
Total		43 (100)	21 (100)	64 (100)

Table 4-27. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	3.208	2	.202
N of Valid Cases	64		

Third concept: Does the message change based on what is included in the frame?

Can different messages be conveyed if one chooses different subject matter to be included in the frame? Here the participants would obviously answer yes (some form of agreement). I posed this question primarily to gauge intensity of agreement.

One photographer chose not to participate, thus, where applicable, I will discuss the valid percent. There were no votes for “disagree” or “strongly disagree”, therefore I will not include them in the tables shown later. Hundred percent (65) of the voters agreed in some sort of way. If one looks at table 4-28 on page 95, one can see that there is a considerable majority (48, 73.8%) who strongly agree that different messages can be conveyed by choosing what to include in the frame. Only 26.2% (17) simply agreed. If one looks at table 4-29, one can see that the results in the two sub-groups were remarkably similar. This shows that experience in professional photojournalism doesn’t alter the participants’ perception of the concept that different messages can be conveyed by choosing what to include in the frame. As one can see in the chi-square analysis (table 4-30), there is no significant difference (p-value > 0.05) in the responses of those who have and have not practiced professional photojournalism when it comes to the statement, “Different messages can be conveyed by choosing what to include in the frame.”

Table 4-28. All inclusive answers in response to the statement: Different messages can be conveyed by choosing what to include in the frame.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	48	72.7	73.8	73.8
	Agree	17	25.8	26.2	100.0
	Total	65	98.5	100.0	
Missing	System	1	1.5		
Total		66	100.0		

Table 4-29. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Different messages can be conveyed by choosing what to include in the frame.

		Practiced professional photojournalism		Total
		Yes	No	
Different messages can be conveyed by choosing what to include in the frame.	Strongly agree	26	22	48
	Agree	8	9	17
Total		34	31	65

Table 4-30. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.254	1	.778
N of Valid Cases	65		

Formal education, or lack thereof, did not have much influence on the pattern and intensity of agreement percentage wise. Both those who have had formal education and those who have not had formal education, as one can see in table 4-31 on page 96, responded in a remarkably similar manner to the statement “different messages can be conveyed by choosing what to include in the frame”. A greater percentage (majority) are in intense agreement (strongly agree) and a lesser percentage (minority) are simply in agreement. Thus, in this case, education does not make a notable difference, percentage wise, in how the participants perceive whether different messages can be conveyed by choosing what to include in the frame. As one can see in

the chi-square test (table 4-32), the results do not significantly differ (p-value > 0.05) between the responses of those who have and haven't studied photography formally, when it comes to the statement, "Different messages can be conveyed by choosing what to include in the frame."

Table 4-31. How education impacts on the photographers' responses to: Different messages can be conveyed by choosing what to include in the frame.

		Have you studied photography formally?		Total
		Yes	No	
Different messages can be conveyed by choosing what to include in the frame.	Strongly agree	33 (75.0)	14 (70.0)	47 (73.4)
	Agree	11 (25.0)	6 (30.0)	17 (26.6)
Total		44 (100)	20 (100)	64 (100)

Table 4-32. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.176	1	.763
N of Valid Cases	64		

Fourth concept: Impact of order of presentation on meaning

The questionnaire asked participants in the survey to respond to the statement, "In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay". From table 4-33 on page 97, one can see that the majority (52, 78.8%) of the all inclusive group responded in some level of disagreement. The majority of participants voted simply "disagree" (43, 65.2%). Thirteen point six percent (9) voted "strongly disagree". So, one can clearly see that the majority of participants did not feel strongly on the issue, but nevertheless disagreed.

Of the 21.2% (14) who agreed on some level, only 3% (2) strongly agreed. In the simply "agree" group, the percentage of participants was not that big compared to the entire group of votes, yet it makes up the larger part of the votes of agreement (12, 18.2%).

Table 4-33. All inclusive answers in response to the statement: In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	2	3.0	3.0	3.0
	Agree	12	18.2	18.2	21.2
	Disagree	43	65.2	65.2	86.4
	Strongly disagree	9	13.6	13.6	100.0
	Total	66	100.0	100.0	

If one looks at table 4-34 on page 98, which is a breakdown into the groups that have and have not practiced professional photojournalism; one becomes aware that photographers' responses were varied as to whether the order in which photographs are arranged impacts on the message given. The responses of the group who hasn't practiced professional photojournalism were different from those who have practiced professional photojournalism. However, both groups had a majority of "disagree" votes (78.1% [25] who haven't and 52.9% [18] who have practiced professional photojournalism). If one adds up all the disagreement votes, in both groups, the difference between the two groups is less apparent and one can see that they were more equally in some sort of disagreement (84.4% [27] in the group that hasn't practiced and 73.5% [25] in the group that has practiced professional photojournalism).

Those who have practiced professional photojournalism did not have a single "strongly agree" vote, but participants agreed strongly 6.3% (2) in the group which hasn't practiced professional photojournalism. Thus the group that has practiced professional photojournalism does not feel as strongly as the group that hasn't practiced professional photojournalism, that the order of arrangement does not change the message conveyed; although there are more of them (26.5% [9] as compared to 15.7% [5]) in some level of agreement that the order of arrangement does not have an effect. As one can see in the chi-square test (table 4-35), those who have and

haven't practiced professional photojournalism, responded significantly different (p-value < 0.05) when it comes to the statement, "In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay."

Table 4-34. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay.

		Practiced professional photojournalism		Total
		Yes	No	
In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay.	Strongly agree	0	2	2
	Agree	9	3	12
	Disagree	18	25	43
	Strongly disagree	7	2	9
Total		34	32	66

Table 4-35. Chi-square tests of the results of the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	8.865	3	.019
N of Valid Cases	66		

As one can see in table 4-36 on page 99, except for the "strongly agree" vote (4.5% [2] of those who have studied photography formally only), formal education does not cause a great difference in the percentages of responses in the two groups. One can thus argue that formal education does not influence the participants' views on this issue considerably, except for the strongly agree vote which is minor.

I did not expect that the "strongly agree" votes (2, 4.5%) would come from the group that has studied photography formally. I was under the impression that formal education would make it more obvious that the meaning of an essay can be drastically altered by the order of the photographs. As one can see in the chi-square analysis (table 4-37), those who have and haven't studied photography formally did not respond significantly differently (p-value > 0.5), when it

comes to the statement, “In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay.”

Table 4-36. How education impacts on the photographers’ responses to: In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay.

		Have you studied photography formally?		Total
		Yes	No	
In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay.	Strongly agree	2 (4.5)	0	2 (3.1)
	Agree	7 (15.9)	5 (23.8)	12 (18.5)
	Disagree	28 (63.6)	14 (66.7)	42 (64.6)
	Strongly disagree	7 (15.9)	2 (9.5)	9 (13.8)
Total		44 (100)	21 (100)	65 (100)

Table 4-37. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	1.874	3	.615
N of Valid Cases	65		

Fifth and final concept: A definition of what a documentary photographer does

What, in essence, does a documentary photographer do? The following section gives an insight into how the professional photographers in Cape Town feel about this issue. There are two extremes. Either he/she is merely a recorder of reality with no communication from his/her perspective, or there is no such thing as recording reality, the photographer decides what story he/she wishes to convey. The middle ground is that recording reality is possible, but the photographer still introduces his/her own perspective.

If one has a look at the all inclusive results in table 4-38 on page 100, it is apparent that the majority (55, 83.3%) decided on the middle ground and was of the opinion that a documentary photographer records reality, but also communicates the story from his/her own perspective. The least amount of votes (5, 7.6%) went to the photographer is merely a recorder of reality, who does not communicate the story from his/her own perspective. This shows that most of the

group of participants are very aware that a documentary photographer is not simply an objective recorder of reality. Only 9.1% (6) decided that there is no such thing as recording reality, the documentary photographer decides what story he/she wishes to communicate. This indicates that almost a tenth believe that the documentary photographer is totally in control of what message he/she conveys. It is interesting to see that quite a few participants see the documentary photographer in that light. Where the documentary photographer is arguably on equal footing with the fine art photographer, having total mastery of the message he/she conveys.

Table 4-38. All inclusive answers in response to the question: Which one of the following statements about the definition of documentary photography sounds most accurate to you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A documentary photographer merely records reality, he does not communicate the story from his own perspective	5	7.6	7.6	7.6
	A documentary photographer records reality, but also communicates the story from his own perspective	55	83.3	83.3	90.9
	There is no such thing as recording reality, the documentary photographer decides what story he wishes to communicate	6	9.1	9.1	100.0
	Total	66	100.0	100.0	

As one can see in table 4-39 on page 101, there is not a considerable difference between the responses of those who haven't practiced professional photojournalism and those who have. Therefore, one can safely say that the professional photographers have more or less the same understanding of what a documentary photographer does, regardless of whether they have practiced professional photojournalism or not. The chi-square test (table 4-40) clearly indicates that there is no significant difference ($p\text{-value} > 0.05$) in the responses of those who have and haven't practiced professional photojournalism, when it comes to the question of which definition sounds most accurate.

Table 4-39. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Which one of the following statements about the definition of documentary photography sounds most accurate to you?

		Practiced professional photojournalism		Total
		Yes	No	
Which one of the following statements about the definition of documentary photography sounds most accurate to you?	A documentary photographer merely records reality, he does not communicate the story from his own perspective	2	3	5
	A documentary photographer records reality, but also communicates the story from his own perspective	29	26	55
	There is no such thing as recording reality, the documentary photographer decides what story he wishes to communicate	3	3	6
Total		34	32	66

Table 4-40. Chi-square tests of the results of the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.303	2	.891
N of Valid Cases	66		

If one looks at the percentages in table 4-41, it is apparent that formal education does not have that great an impact on how the Capetonian photographer understands what a documentary photographer does. The percentages for all three options are reasonably close to each other in the group that has and hasn't had a formal education in photography. As one can see in the chi-square analysis (table 4-42), there is no significant difference ($p\text{-value} > 0.05$) between the responses of those who have and haven't studied photography formally, when it comes to the question of which statement regarding definition of documentary photography sounds most accurate.

Table 4-41. How education impacts on the photographers’ responses to: Which one of the following statements about the definition of documentary photography sounds most accurate to you?

		Have you studied photography formally?		Total
		Yes	No	
Which one of the following statements about the definition of documentary photography sounds most accurate to you?	A documentary photographer merely records reality, he does not communicate the story from his own perspective	4 (9.1)	1 (4.8)	5 (7.7)
	A documentary photographer records reality, but also communicates the story from his own perspective	36 (81.8)	18 (85.7)	54 (83.1)
	There is no such thing as recording reality, the documentary photographer decides what story he wishes to communicate	4 (9.1)	2 (9.5)	6 (9.2)
Total		44 (100)	21 (100)	65 (100)

Table 4-42. Chi-Square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.375	2	.884
N of Valid Cases	65		

Impact of digital imaging technology on integrity

Do the Capetonian professional photographers believe that digital imaging technology has impacted on the integrity of the documentary photograph? Five questions lead up to the decisive question 18 which states the following, “Due to the introduction of digital imaging technology, the practice of documentary photography...” The participant then has to choose either “Is in no danger of losing credibility” or “Is in danger of losing credibility”. One can see the all inclusive results (table 4-43) to the credibility question (18) on page 103. I cross-tabulated three of the preceding questions with question 18, to see if the respondents were consistent in their answers.

Credibility

As one can see later, the participants responded to the credibility question, in a manner that gives cause for concern. Fifty-six point one percent (37) believed that the documentary photography genre is in danger of losing credibility. That constitutes a majority. One can rightly be concerned that so many professional photographers have such a pessimistic outlook.

However, 43.9% (29) believe that the documentary photography genre is in no danger of losing credibility. This gives hope for the future credibility of the documentary genre, but not enough to be reassuring.

Table 4-43. The all inclusive results regarding the credibility of the documentary photography genre.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Is in no danger of losing credibility	29	43.9	43.9	43.9
	Is in danger of losing credibility	37	56.1	56.1	100.0
	Total	66	100.0	100.0	

When one breaks down the results further, one can see that the group which hasn't practiced professional photojournalism answered almost exactly the same as the group that has practiced professional photojournalism. One can see this in table 4-44 on page 104. The percentages are surprisingly similar, indicating that both groups felt the same and despite not having participated in professional photojournalism, the participants still had the same understanding as those who have participated in professional photojournalism. Note how close the percentages are. "Is in no danger of losing credibility", 46.9% (15) (have not practiced professional photojournalism) and 41.2% (14) (have practiced professional photojournalism). "In danger of losing credibility", 53.1% (17) (have not practiced professional photojournalism) and 58.8% (20) (have practiced professional photojournalism).

Consequently, in both groups, the majority of the participants believe that the documentary photography genre is in danger of losing credibility as a result of the introduction of digital imaging technology. One may find it interesting to note that those who have practiced professional photojournalism believe more (by a very small margin) that the documentary photography genre is in danger of losing credibility than the other group. I expected that the

group that has not practiced professional photojournalism would believe less in its future credibility, due to lack of experience in the field. I also expected that the group which did practice professional photojournalism would be likely to protect the name of the genre, because they make a living from it. It turns out that those who have practiced professional photojournalism are slightly more negative in their outlook. As one can see from the chi-square test (table 4-45), statistically there is no significant difference ($p\text{-value} > 0.05$) between those who have and haven't practiced professional photojournalism regarding views on credibility of documentary photography, as a result of the introduction of digital imaging technology.

Table 4-44. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Due to the introduction of digital imaging technology, the practice of documentary photography...

		Practiced professional photojournalism		Total
		Yes	No	
Due to the introduction of digital imaging technology, the practice of documentary photography...	Is in no danger of losing credibility	14	15	29
	Is in danger of losing credibility	20	17	37
Total		34	32	66

Table 4-45. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.217	1	.804
N of Valid Cases	66		

As one can see in table 4-46 on page 105, there is not that great a difference, percentage wise, between the responses of those who have had a formal education in photography and the responses of those who have not had a formal education in photography. By referring to the chi-square analysis (table 4-47), one can thus argue that formal education does not have a significant impact ($p\text{-value} > 0.05$) on whether the Capetonian professional photographer believes that the

documentary photography genre is either in danger or not in danger of losing credibility as a result of the introduction of digital imaging technology.

Table 4-46. How education impacts on the photographers' responses to: Due to the introduction of digital imaging technology, the practice of documentary photography...

		Have you studied photography formally?		Total
		Yes	No	
Due to the introduction of digital imaging technology, the practice of documentary photography...	Is in no danger of losing credibility	18 (40.9)	10 (47.6)	28 (43.1)
	Is in danger of losing credibility	26 (59.1)	11 (52.4)	37 (56.9)
Total		44 (100)	21 (100)	65 (100)

Table 4-47. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.261	1	.789
N of Valid Cases	65		

The impact of digital imaging technology on ease of introduction of untruth

There is an obvious response to, "It is easier to introduce untruth with digital photo editing software than in the traditional film darkroom". Of course it is easier to introduce untruth with digital photo editing software. Why then, does the questionnaire ask the participant to respond to such an apparently obvious statement? I asked it primarily to observe the intensity with which the professional photographer responds to the statement. I also asked it to set the stage and make the photographer consider the issue before answering the next set of questions. In table 4-48 on page 106, one can see that the majority of participants agreed with the statement to different degrees (63, 95.4%). Fifty-three percent (35) simply agreed and 42.4% (28) strongly agreed. Forty-two point four percent is a very high percentage to strongly agree, so it is evident that a great number of respondents (not quite a majority) feel strongly that it is easier to introduce untruth with digital photo editing software.

I did not expect that there would be participants who disagree with the statement (1.5% [1] disagree and 3.0% [2] strongly disagree). These non agreement percentages, though perplexing, are very small and thus one needs not give them much attention.

Table 4-48. The all inclusive responses to the statement: It is easier to introduce untruth with digital photo editing software than in the traditional film darkroom.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	28	42.4	42.4	42.4
	Agree	35	53.0	53.0	95.5
	Disagree	1	1.5	1.5	97.0
	Strongly disagree	2	3.0	3.0	100.0
	Total	66	100.0	100.0	

If one scrutinises table 4-49 on page 107, one can see that it was those in the group that has practiced professional photojournalism who, percentage wise, made up most of the “strongly agree” group. Forty-seven point one percent (16) of the “have practiced professional photojournalism” group compared to 37.5% (12) of the “have not practiced professional photojournalism” group. Consequently, it is evident that the group which has practiced professional photojournalism seems to be more emphatically aware that untruthful changes can be made easier in the digital medium than in the film medium. One can argue that experience in professional photojournalism has predisposed Capetonian professional photographers to feel more intensely that one can more easily introduce untruth in the digital medium than in the film medium.

As I mentioned previously, I don’t understand why 3.1% (1) of the “have not practiced professional photojournalism” group voted “disagree” and 5.9% (2) of the “have practiced professional photojournalism” group voted “strongly disagree”. In both these instances, the

percentage is a very small portion of the whole; therefore it is not considered to be a significant trend (p-value > 0.05), as the chi-square analysis confirms (table 4-50).

Table 4-49. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: It is easier to introduce untruth with digital photo editing software than in the traditional film darkroom.

		Practiced professional photojournalism		Total
		Yes	No	
It is easier to introduce untruth with digital photo editing software than in the traditional film darkroom.	Strongly agree	16	12	28
	Agree	16	19	35
	Disagree	0	1	1
	Strongly disagree	2	0	2
Total		34	32	66

Table 4-50. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	3.771	3	.273
N of Valid Cases	66		

As one can see in table 4-51 on page 108, the percentages of participants with a formal education who voted in some form of agreement are remarkably close to the percentages of those without a formal education who voted in some form of agreement. Therefore, it can be said with confidence that formal education does not play a substantial role in influencing the intensity of sentiment with which the Capetonian professional photographers agree that it is easier to introduce untruth with digital photo editing software, than in the traditional film darkroom. Due to their small sizes one need not discuss the “disagree” and “strongly disagree” percentages as important trends. They form only 3% (2) of the total percentage in this table. The chi-square analysis shows that there is no significant difference (p-value > 0.05) between the responses of those who have and haven't studied photography formally when it comes to ease of introduction of untruth.

Table 4-51. How education impacts on the photographers' responses to: It is easier to introduce untruth with digital photo editing software than in the traditional film darkroom.

		Have you studied photography formally?		Total
		Yes	No	
It is easier to introduce untruth with digital photo editing software than in the traditional film darkroom.	Strongly agree	19 (43.2)	9 (42.9)	28 (43.1)
	Agree	24 (54.5)	11 (52.4)	35 (53.8)
	Disagree	0	1 (4.8)	1 (1.5)
	Strongly disagree	1 (2.3)	0	1 (1.5)
Total		44 (100)	21 (100)	65 (100)

Table 4-52. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	2.585	3	.674
N of Valid Cases	65		

Trustworthiness issues with digital and film newspaper documentary photographs

One needs to include a question that relates to the integrity of documentary photographs in the newspaper, because photojournalism makes up such a large part of documentary photography. In fact, experts sometimes use the terms photojournalism and documentary photography interchangeably. I decided that the best way to ask the participant whether he/she thinks that the integrity of the photograph is in doubt, was to ask the participant whether he/she deems it trustworthy.

In table 4-53 on page 109, one can see the all inclusive answers to the question, “Which one of the following feels more trustworthy to you? A film based documentary photograph published alongside a news article in the Sunday Times in 1975, or a digitally obtained photograph published alongside a news article in the Sunday Times in 2010?”

Only 1.5% (1) of the all inclusive group of participants chose “digital photograph”. So the majority (65, 98.5%) of the participants don't see the digitally obtained photograph as more trustworthy than the film based photograph in a newspaper. Forty-seven percent (31) chose “film based photograph”, which makes one aware of a marked distrust in the digitally obtained

photograph in a newspaper. Fifty-one point five percent (34), the majority by a very small margin percentagewise, maintained that both are equally trustworthy. That means almost half of the respondents (31, 47%) believe that a digitally obtained photograph is less trustworthy than a film based photograph in a newspaper. From a group of professional photographers that is a noteworthy response. It shows a massive decline in trust in newspaper photography, as a result of the introduction of digital imaging technology. But I must affirm, that a majority (by an unconvincing margin) of photographers believed that both are equally trustworthy and therefore the participants' most prominent answer was "both are equally trustworthy".

Table 4-53. The all inclusive group's answers to the question: Which one of the following feels more trustworthy to you? A film based documentary photograph published alongside a news article in the Sunday Times in 1975, or a digitally obtained photograph published alongside a news article in the Sunday Times in 2010?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Digital photograph, 2010	1	1.5	1.5	1.5
	Film based photograph, 1975	31	47.0	47.0	48.5
	Both feel equally trustworthy to me	34	51.5	51.5	100.0
	Total	66	100.0	100.0	

In table 4-54 on page 110, I further broke down the responses to this question into the opinions of those who have practiced professional photojournalism and the opinions of those who have not practiced professional photojournalism. Despite one person choosing "digital photograph" in the "have practiced professional photojournalism" category, the results are very similar. One vote does not constitute a significant trend. Those who have practiced professional photojournalism show a greater trust in both mediums (52.9% [18] in the group that has practiced professional photojournalism as compared to 50% [16] in the other group). That is not a sizable difference in percentages, but one can nevertheless say that those photographers who

have practiced professional photojournalism in Cape Town show a greater trust in both mediums, when compared to those who have not practiced professional photojournalism. Consequently, those who have practiced professional photojournalism have less trust in only the film based photograph (44.1% [15] in the group that has practiced professional photojournalism as compared to 50% [16] in the other group). As one can see in table 4-55, the chi-square analysis confirms that there is no significant difference ($p\text{-value} > 0.05$) between the responses of those who have and haven't practiced professional photojournalism when it comes to which option feels more trustworthy.

Table 4-54. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Which of the following feels more trustworthy to you?

		Practiced professional photojournalism		Total
		Yes	No	
Which one of the following feels more trustworthy to you? A film based documentary photograph published alongside a news article in the Sunday Times in 1975, or a digitally obtained photograph published alongside a news article in the Sunday Times in 2010	Digital photograph, 2010	1	0	1
	Film based photograph, 1975	15	16	31
	Both feel equally trustworthy to me	18	16	34
Total		34	32	66

Table 4-55. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	1.090	2	.900
N of Valid Cases	66		

Were participants consistent in their responses in this section of the questionnaire? In table 4-56 on page 111, one can see a crosstabulation between the answers to the above discussed question (15) and the credibility question (18), which was discussed earlier under the heading "Credibility". Here is the first discrepancy. As one can see in table 4-56 on page 111, 7 participants (10.6%) maintained that a film based photograph in the newspaper is more

trustworthy than a digitally obtained photograph, yet they maintained in question 18 that the practice of documentary photography is in no danger of losing credibility as a result of the introduction of digital imaging technology. They don't think a digitally obtained newspaper photograph is credible enough, yet they claim that the integrity of the documentary photography genre is not in danger of losing credibility. Conversely, 13 participants (19.7%) who voted "Is in danger of losing credibility" believed both feel equally trustworthy. So their view of newspaper images does not conform to their answer to question 18. However, it is possible that when they were answering question 18, they were thinking primarily of non-newspaper photographs. The chi-square analysis (table 4-57) shows that there is a significant relationship ($p\text{-value} < 0.05$) between the responses to "Which one of the following feels more trustworthy to you?" and "Due to the introduction of digital imaging technology, the practice of documentary photography..."

Table 4-56. Answers to the newspaper related question (15) in relation to the credibility question (18).

		Which one of the following feels more trustworthy to you? A film based documentary photograph published alongside a news article in the Sunday Times in 1975, or a digitally obtained photograph published alongside a news article in the Sunday Times in 2010?			Total
		Digital photograph, 2010	Film based photograph, 1975	Both feel equally trustworthy to me	
Due to the introduction of digital imaging technology, the practice of documentary photography...	Is in no danger of losing credibility	1	7	21	29
	Is in danger of losing credibility	0	24	13	37
Total		1	31	34	66

Table 4-57. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	11.403	2	.002
N of Valid Cases	66		

As one can see in the chi-square test in table 4-59, statistics prove that there is no significant difference ($p\text{-value} > 0.05$) between the group that has and hasn't studied photography formally when it comes to trustworthiness issues over newspaper photojournalistic photographs. In the "film based photograph, 1975" group, those who have studied photography formally voted by a minority of 43.2% (19), while those who haven't studied photography formally voted by a majority of 57.1% (12). The almost exact inverse occurs in the "both feel equally trustworthy to me" group, when those who have studied photography formally voted by a majority of 54.5% (24) and those who haven't studied photography formally voted by a minority of 42.9% (9).

The "digital photograph, 2010" group had only 1.5% (1) of the total vote, which made up only 2.3% (1) of the group that has studied photography formally. Because of its size it does not constitute a substantial trend. As one can see in the chi-square analysis in table 4-59, there is no significant difference ($p\text{-value} > 0.05$) between the responses of those who have and haven't studied photography formally when it comes to perceived trustworthiness of photojournalistic news photographs.

Table 4-58. How education impacts on the photographers' responses to: Which one of the following feels more trustworthy to you?

		Have you studied photography formally?		Total
		Yes	No	
Which one of the following feels more trustworthy to you? A film based documentary photograph published alongside a news article in the Sunday Times in 1975, or a digitally obtained photograph published alongside a news article in the Sunday Times in 2010?	Digital photograph, 2010	1 (2.3)	0	1 (1.5)
	Film based photograph, 1975	19 (43.2)	12 (57.1)	31 (47.7)
	Both feel equally trustworthy to me	24 (54.5)	9 (42.9)	33 (50.8)
Total		44 (100)	21 (100)	65 (100)

Table 4-59. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	1.441	2	.612
N of Valid Cases	65		

The issue of consistent trust in the digital and film medium

Which documentary photographic essay is more consistently trustworthy? One executed in the film based, or the digitally based medium? As one can see in table 4-60 on page 114, a majority of 54.5% (36) of the all inclusive group of participants believe that a documentary photographic essay taken in film and processed in the film darkroom feels more trustworthy than its digital equivalent. Since no-one chose “a documentary photographic essay taken with a digital camera and processed using photo editing software”, I do not show it in the table. Therefore, one can soundly argue that a majority of respondents distrust a documentary photographic essay taken with a digital camera and processed using digital photo editing software. This is cause for concern and shows how the digital medium is significantly eroding the trust of professional photographers in documentary essays.

Forty-five point five percent (30) of the all inclusive group of participants were of the opinion that both digital and film processes felt equally consistently trustworthy. This is still a considerable number and shows that many photographers trust digital processes, but that the amount of trust is not nearly enough for one to be convinced.

Table 4-60. All inclusive: Which feels more consistently trustworthy?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A documentary photographic essay taken in film and processed in the traditional darkroom	36	54.5	54.5	54.5
	Both feel equally consistently trustworthy to me	30	45.5	45.5	100.0
	Total	66	100.0	100.0	

If one divides the above indicated group into those who have practiced professional photojournalism and those who haven't practiced professional photojournalism, the table (table 4-61) shows that the two groups answered more or less the same. Those who have practiced professional photojournalism were less inclined to trust only the essay obtained through film based processes percentagewise compared to the other group (52.9% [18] in the group that has practiced professional photojournalism as compared to 56.3% [18] in the other group) and they had more faith in both processes compared to the other group (47.1% [16] in the group that has practiced professional photojournalism as compared to 43.8% [14] in the other group).

By referring to table 4-62 on page 115, one can argue that experience in professional photojournalism does not significantly ($p\text{-value} > 0.05$) change the Capetonian professional photographer's judgment as to which medium, digital or film, feels more consistently trustworthy. A majority of professional photographers believe that the film based medium is more trustworthy, regardless of experience in the professional photojournalistic genre.

Table 4-61. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Which one of the following feels more consistently trustworthy to you?

		Practiced professional photojournalism		Total
		Yes	No	
Which one of the following feels more consistently trustworthy to you?	A documentary photographic essay taken in film and processed in the traditional darkroom	18	18	36
	Both feel equally consistently trustworthy to me	16	14	30
Total		34	32	66

Table 4-62. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.073	1	.810
N of Valid Cases	66		

If one looks at table 4-63 on page 116, one can see that 13.6% (9) of the group (including all 66 participants) believed that the documentary photographic essay obtained through film based processes was more consistently trustworthy than its digital alternative, yet they voted that the documentary photographic genre is in no danger of losing credibility. They don't trust the digital medium sufficiently in this instance, yet they believe there is no danger of loss of credibility. This shows that despite answering the way they answered in question 18, some photographers still have lingering doubts, when it comes to the documentary photographic essay.

On the other hand, 16.7% (10) indicated that they have equal faith in both film based and digital based processes, yet they voted "is in danger of losing credibility" in question 18. This might, however, just be their opinion about the documentary photographic essay and not about other forms of documentary photography. Nevertheless, this shows that one cannot simply classify responses to this question in black and white (yes and no). If one looks at the chi-square analysis, one can see (table 4-64) it is statistically evident that there is a significant relationship (p-value < 0.05) between responses to, "Which one feels more consistently trustworthy?" and

“Due to the introduction of digital imaging technology, the practice of documentary photography...”

Table 4-63. Answer to documentary photographic essay related question (16) in relation to the credibility question (18).

		Which one of the following feels more consistently trustworthy to you?		Total
		A documentary photographic essay taken in film and processed in the traditional darkroom	Both feel equally consistently trustworthy to me	
Due to the introduction of digital imaging technology, the practice of documentary photography...	Is in no danger of losing credibility	9	20	29
	Is in danger of losing credibility	27	10	37
Total		36	30	66

Table 4-64. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	11.533	1	.001
N of Valid Cases	66		

As one can see in table 4-65 on page 117, the votes of those who have studied photography formally and the votes of those who haven't don't differ much percentage wise. Having, or not having, formal education does not play a substantial role in which medium, digital or film, feels more consistently trustworthy to participants in this survey. As one can see in the chi-square test, in table 4-66, there is no significant difference (p-value > 0.05) between the responses of those who have and who haven't studied photography formally in the case of what participants believe feels more consistently trustworthy.

Table 4-65. How education impacts on the photographers' responses to: Which one of the following feels more consistently trustworthy to you?

		Have you studied photography formally?		Total
		Yes	No	
Which one of the following feels more consistently trustworthy to you?	A documentary photographic essay taken in film and processed in the traditional darkroom	24 (54.5)	12 (57.1)	36 (55.4)
	Both feel equally consistently trustworthy to me	20 (45.5)	9 (42.9)	29 (44.6)
Total		44 (100)	21 (100)	65 (100)

Table 4-66. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.039	1	1.000
N of Valid Cases	65		

Does ease of digital alteration impact on trust?

In the next sentence, one can see that knowledge of how easy it is to alter a photograph with digital imaging technology can cause one to lose trust in the integrity of documentary photographs. As one can see in table 4-67 on page 118, a total of 43.9% (29) agree and 6.1% (4) strongly agree that they distrust documentary photographs more, now that they know how easy it is to digitally alter them. On the other hand, 42.4% (28) disagree and 7.6% (5) strongly disagree. If one adds up the percentages of “strongly agree” and “agree” one gets 50% (33). If one adds the percentages of “disagree” and “strongly disagree” one gets 50% (33). The two sides are equally divided, which leaves no majority or minority. If one breaks it down, “agree” and “disagree” is 43.9% (29) and 42.4% (28) respectively, not a large difference. Strongly agree and strongly disagree is 6.1% (4) and 7.6% (5) respectively, which is also not a considerable difference. The table is very symmetrically divided. Sentiment is equally divided and for every vote of trust, a participant conversely gives a vote of distrust.

Table 4-67. The all inclusive answers in response to the statement: I distrust documentary photographs more, now that I know how easy it is to digitally alter them.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	4	6.1	6.1	6.1
	Agree	29	43.9	43.9	50.0
	Disagree	28	42.4	42.4	92.4
	Strongly disagree	5	7.6	7.6	100.0
	Total	66	100.0	100.0	

When one breaks down the all inclusive group into those who haven't and those who have practiced professional photojournalism, it is clear, as one can see in table 4-68 below, that the two groups responded very similarly. The most notable difference is that those who have practiced professional photojournalism disagreed strongly in greater percentage (11.8% [4]) than those who have not practiced professional photojournalism (3.1% [1]). This indicates that the group who has practiced professional photojournalism felt more strongly that they haven't lost trust. The chi-square test indicates that there is not a significant difference (p-value > 0.05) in the responses of those who have and haven't practiced professional photojournalism when it comes to distrusting documentary photographs due to ease of digital alteration.

Table 4-68. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: I distrust documentary photographs more, now that I know how easy it is to digitally alter them.

		Practiced professional photojournalism		Total
		Yes	No	
I distrust documentary photographs more, now that I know how easy it is to digitally alter them.	Strongly agree	2	2	4
	Agree	14	15	29
	Disagree	14	14	28
	Strongly disagree	4	1	5
Total		34	32	66

Table 4-69. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	1.776	3	.627
N of Valid Cases	66		

Trust and credibility are interrelated. How participants respond to the statement in question 17 (“I distrust documentary photographs more, now that I know how easy it is to digitally alter them”), should be very similar to how they respond to the statement in question 18 (“Due to the introduction of digital imaging technology the practice of documentary photography is or is not in danger of losing credibility”). In table 4-70 on page 120, one can see a crosstabulation between the answers obtained in these two questions. It is surprising to see that 1.5% (1) of the participants voted “is in no danger of losing credibility” and strongly agreed that they distrust documentary photographs more, now that they know how easy it is to digitally alter them. Ten point six percent (7) of the participants agreed and voted “is in no danger of losing credibility”. Surely if they agree that they distrust documentary photographs because of the possibility of easy digital alteration, they can’t still maintain that the genre won’t be in danger of losing credibility as a result of the introduction of digital imaging technology. Yet they have.

On the other hand, 18.2% (12) of the participants disagreed that they distrust documentary photographs more now that they know how easy it is to digitally alter them, yet they believed that the practice of documentary photography is in danger of losing credibility as a result of the introduction of digital imaging technology. In the latter case, it could however be that they believe only other people, not they themselves, will distrust images because they know how easy it is to alter the images with digital imaging technology. As one can see, in table 4-71, there is a significant relationship ($p\text{-value} < 0.05$) between the responses to, “I distrust documentary

photographs more, now that I know how easy it is to digitally alter them.” and “Due to the introduction of digital imaging technology, the practice of documentary photography...”

Table 4-70. Answers to trust related question (17) in relation to the credibility question (18).

		I distrust documentary photographs more, now that I know how easy it is to digitally alter them.				Total
		Strongly agree	Agree	Disagree	Strongly disagree	
Due to the introduction of digital imaging technology, the practice of documentary photography...	Is in no danger of losing credibility	1	7	16	5	29
	Is in danger of losing credibility	3	22	12	0	37
Total		4	29	28	5	66

Table 4-71. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	13.560	3	.002
N of Valid Cases	66		

If one looks at table 4-72 on page 121, one can see that all the strongly agree votes (6.2% [4] in total) were made by the group that has studied photography formally (9.1% [4] of the group). One can therefore, by referring to table 4-72 on page 121, argue that formal education in photography has predisposed the Capetonian professional photographers to agree strongly that they distrust documentary photographs more, now that they know how easy it is to digitally alter photographs. The second most discernible difference is in the “agree” vote. Those who have studied photography formally agreed 40.9% [18], while those who have not studied photography formally agreed 47.6% [10]. There is not a substantial difference in percentage, but it does indicate that those who haven’t studied photography formally are more inclined to agree with ordinary emphasis that they distrust documentary photographs more, now that they know how easy it is to digitally alter them.

As one can see in the chi-square analysis in table 4-73, the responses don't significantly differ ($p\text{-value} > 0.05$) between those who have and haven't studied photography formally when it comes to "I distrust documentary photographs more, now that I know how easy it is to digitally alter them."

Table 4-72. How education impacts on the photographers' responses to: I distrust documentary photographs more, now that I know how easy it is to digitally alter them.

		Have you studied photography formally?		Total
		Yes	No	
I distrust documentary photographs more, now that I know how easy it is to digitally alter them.	Strongly agree	4 (9.1)	0	4 (6.2)
	Agree	18 (40.9)	10 (47.6)	28 (43.1)
	Disagree	19 (43.2)	9 (42.9)	28 (43.1)
	Strongly disagree	3 (6.8)	2 (9.5)	5 (7.7)
Total		44 (100)	21(100)	65 (100)

Table 4-73. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	2.193	3	.612
N of Valid Cases	65		

Acceptable digital editing to the photojournalistic documentary photograph

Questions 19 to 22 ask the participants what acceptable digital editing to the photojournalistic documentary photograph entails. One can write a thesis on this topic alone. Four carefully formulated questions were posed, so that I could capture an impression of what professional photographers think.

Cropping

Documentary photographers sometimes make a basic adjustment, known as cropping to their photographs (choosing what to include in the picture frame). Although often treated lightly, it is a crucial adjustment that can make a huge difference in what message is conveyed. Prior to conducting the survey, I was under the impression that very few participants would vote "radical cropping is acceptable". I did not foresee that such a high percentage (30.3% [20]), if any at all,

would vote that radical cropping is acceptable to the documentary photojournalistic photograph. Almost a majority of 47% (31) voted slight cropping was acceptable and 22.7% (15) indicated that no cropping is acceptable in the documentary photojournalistic photograph. Most participants thus chose “slight cropping is acceptable”.

Table 4-74. The all inclusive group’s answers in response to the question: Is it acceptable for a photograph appearing alongside a news story to be cropped using photo editing software?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No cropping is acceptable in a news photograph	15	22.7	22.7	22.7
	Slight cropping is acceptable	31	47.0	47.0	69.7
	Radical cropping is acceptable	20	30.3	30.3	100.0
	Total	66	100.0	100.0	

Now I will look at the results when broken down into those that haven’t practiced professional photojournalism and those that have practiced professional photojournalism.

There is not a substantial difference between the results of the two groups, but it is evident, contrary to my expectations, that the group who did practice professional photojournalism has a higher percentage of participants (38.2% [13]) who voted “radical cropping is acceptable” than the group who did not practice professional photojournalism (21.9% [7]). This tells one that the group who are entrusted with the job of conveying a bias-free message is quite satisfied with radical cropping. This group knows what is expected of them (conveying a message as seen) and yet almost 40% of them have no qualms with substantially altering the message given. It is the non-photojournalists, paradoxically, who have a stricter outlook.

Both groups voted almost identically that slight cropping is acceptable. Those who have not practiced professional photojournalism voted 46.9% (15) and those who have practiced

professional photojournalism voted 47.1% (16). Thus, the groups agree almost equally on which category is most important. When compared to the group that has practiced professional photojournalism (14.7% [5]), there was more or less twice the percentage of votes (31.3% [10]) in the group that has not practiced professional photojournalism, for “no cropping is acceptable”. Once again, I did not expect to see that those who have not practiced are stricter in expectation than those who have practiced. This indicates that those who have practiced professional photojournalism feel entitled to creatively express themselves. Consequently, most of the participants, in both groups, voted “slight cropping is acceptable”. As one can see from the chi-square test in table 4-76, comprehensively, those who have and haven’t practiced professional photojournalism did not respond significantly differently ($p\text{-value} > 0.05$) concerning what acceptable cropping entails.

Table 4-75. Crosstabulation of the responses of those who have and haven’t practiced professional photojournalism: Is it acceptable for a photograph appearing in a news story to be cropped using photo editing software?

		Practiced professional photojournalism		Total
		Yes	No	
Is it acceptable for a photograph appearing alongside a news story to be cropped using photo editing software?	No cropping is acceptable in a news photograph	5	10	15
	Slight cropping is acceptable	16	15	31
	Radical cropping is acceptable	13	7	20
Total		34	32	66

Table 4-76. Chi-square tests of the results of the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	3.441	2	.194
N of Valid Cases	66		

In the following section, I explore how formal education, or the lack thereof, impacts on opinion. The statistics show that the result is distributed evenly, regardless of formal education

or lack thereof, concerning those who voted “no cropping is acceptable in a news photograph” (23.1% [15]) in total).

Fifty-two point three percent (23) of those who have studied photography formally, as compared to 38.1% (8) of those who haven’t studied photography formally voted “slight cropping is acceptable”. A total of 47.7% (31) voted “slight cropping is acceptable”.

Predictably, a lesser percentage of those who have studied photography formally voted “radical cropping is acceptable” (25% [11]), as compared to the vote of those who have not studied photography formally (38.1% [8]). The percentage of the total group is 29.2% (19), which is over a quarter of the whole group.

According to my understanding (which proved to be accurate, as discussed above), a formal education in photographers would cause them to be more aware of the fact that radical cropping has the potential to substantially change the message of a documentary photograph. On the other hand, the fact that so many photographers voted “radical cropping is acceptable”, even within the group that had studied photography formally, indicates that my preconceived understanding of what a documentary photograph is, is flawed. One can see a documentary photograph as a subjective and creative documenting statement, instead of merely a realistic rendition of subject matter. As one can see in table 4-78, the chi-square test shows that there is no significant difference ($p\text{-value} > 0.05$) between the responses of those who have and haven’t studied photography formally, when it comes to what acceptable cropping entails.

Table 4-77. How formal education impacts on the photographers' responses to: Is it acceptable for a photograph appearing alongside a news story to be cropped using photo editing software?

		Have you studied photography formally?		Total
		Yes	No	
Is it acceptable for a photograph appearing alongside a news story to be cropped using photo editing software?	No cropping is acceptable in a news photograph	10 (22.7)	5 (23.8)	15 (23.1)
	Slight cropping is acceptable	23 (52.3)	8 (38.1)	31 (47.7)
	Radical cropping is acceptable	11 (25.0)	8 (38.1)	19 (29.2)
Total		44 (100)	21 (100)	65 (100)

Table 4-78. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	1.440	2	.516
N of Valid Cases	65		

Dodging and burning in

Dodging and burning in forms a great part of the traditional film darkroom procedure and carries over into the digital environment. If one looks at table 4-79 on page 126, one can see that a clear majority (60.6% [40]) of participants believes that very light dodging and burning in is acceptable. Over a quarter of participants (28.8% [19]) voted for “dramatic dodging and burning in”. The smallest number of participants (10.6% [7]) voted for “dodging and burning in is not acceptable in a news photograph”. Thus, only a small minority are in favour of a very strict policy. Moderation in dodging and burning in forms a predominant trend, when it comes to the all inclusive group’s reaction.

Table 4-79. The answers of the all inclusive group in response to the question: Is dodging and burning in with photo editing software acceptable in the case of a photograph accompanying a news article?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dodging and burning in is not acceptable in a news photograph	7	10.6	10.6	10.6
	Very light dodging and burning in is acceptable	40	60.6	60.6	71.2
	Dramatic dodging and burning in is acceptable	19	28.8	28.8	100.0
	Total	66	100.0	100.0	

The results don't differ dramatically between the responses of those who haven't and who have practiced professional photojournalism. As one can see in table 4-80 on page 127, those who have not practiced professional photojournalism are the stricter party in deciding that no editing is allowed, voting 15.6% (5), as compared to 5.9% (2) in the group that has practiced professional photojournalism. Slightly more participants voted "very light dodging and burning in is acceptable" in the group that has practiced professional photojournalism (64.7% (22), compared to 56.3% (18) in the group that hasn't practiced professional photojournalism). The "dramatic dodging and burning in" option elicited virtually the same result percentage wise.

Consequently, both those who have and have not practiced professional photojournalism voted "very light dodging and burning in", by a majority. If one looks at the chi-square test in table 4-81, one can see that those who have and have not practiced professional photojournalism did not respond significantly differently ($p\text{-value} > 0.05$) when it comes to what acceptable dodging and burning in entails.

Table 4-80. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Is dodging and burning in with photo editing software acceptable in the case of a photograph accompanying a news article?

		Practiced professional photojournalism		Total
		Yes	No	
Is dodging and burning in with photo editing software acceptable in the case of a photograph accompanying a news article?	Dodging and burning in is not acceptable in a news photograph	2	5	7
	Very light dodging and burning in is acceptable	22	18	40
	Dramatic dodging and burning in is acceptable	10	9	19
Total		34	32	66

Table 4-81. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	1.679	2	.477
N of Valid Cases	66		

In the next couple of paragraphs, I discuss the impact of formal education on the opinions of participants, regarding how much dodging and burning in is acceptable. One can see the results in table 4-82 on page 128. Eleven point four percent (5) of the group that did study photography formally, and 9.5% (2) of the group that did not study photography formally, voted “dodging and burning in is not acceptable in the news photograph”. The results only differ 1.9%, so one can't really say that there is a noteworthy difference in attitude. The total group voted by 10.8% (7).

One can see the biggest difference in the percentage of those who voted “very light dodging and burning in is acceptable”. Fifty-six point eight percent (25) of the group who have studied photography formally voted for this option and 66.7% (14) of the group who haven't studied photography formally voted for this option. In total 60% (39) voted for this option.

The votes for “dramatic dodging and burning in” are as follows. Of those who studied photography formally, 31.8% (14) voted for this option and of those who did not study

photography formally, 23.8% (5) voted for this option. The results do not differ greatly in percentage. The percentage of the total group was 29.2% (19). I did not expect to see that those who have studied photography formally are more in favour of dramatic dodging and burning in, than those who have not studied photography formally. If one applies dramatic dodging and burning in, the chance is much greater that the photograph will contain a message which is not the same as the message prior to the alteration. I expected those with formal education to value that initial message of a photograph, that is supposed to document above all else, but contrary to what I had foreseen, those without formal education value the initial documented message more. It could be that I over value the effect of education, or it could mean that I have to reconsider the meaning of what a documentary photograph really is. As one can see below, in table 4-83, the chi-square test shows that those that have and have not studied photography formally do not significant differ ($p\text{-value} > 0.05$), when it comes to what acceptable dodging and burning in entails.

Table 4-82. How education impacts on the photographers' responses to: Is dodging and burning in with photo editing software acceptable in the case of a photograph accompanying a news article?

		Have you studied photography formally?		Total
		Yes	No	
Is dodging and burning in with photo editing software acceptable in the case of a photograph accompanying a news article?	Dodging and burning in is not acceptable in a news photograph	5 (11.4)	2 (9.5)	7 (10.8)
	Very light dodging and burning in is acceptable	25 (56.8)	14 (66.7)	39 (60.0)
	Dramatic dodging and burning in is acceptable	14 (31.8)	5 (23.8)	19 (29.2)
Total		44 (100)	21 (100)	65 (100)

Table 4-83. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.586	2	.794
N of Valid Cases	65		

Pasting in

Pasting in is not something one would expect a documentary photographer to do, yet I posed the question to see how participants would respond. I hoped that there would be an upset, but expected everyone to vote resolutely against pasting in. The results were unsettling. I show only the options which received votes in the three tables shown later. Predictably, no one voted “dramatic pasting in is acceptable”. It would have been a great cause for concern if some of the participants had voted “dramatic pasting in is acceptable”.

I did not expect to see that 12.1% (8) of the all inclusive group voted minor pasting in is acceptable, as one can see in table 4-84. If one looks at table 4-85, one can see that, predictably, those who did not practice professional photojournalism made this vote. It makes up 25% (8) of that group. It is still cause for alarm (a quarter of the non-practicing group of professional photographers), but at least one can see that the practicing group would not paste in, in any of their photographs.

Consequently, in the all inclusive results, by a majority, 87.9% (58) voted “no pasting in is acceptable in a news photograph”, which includes 75% (24) of the group that has not practiced professional photojournalism and 100% (34) of the group that has practiced professional photojournalism. In the chi-square test results (table 4-86), one can observe that statistically there is a significant difference ($p\text{-value} < 0.05$) in the responses of those who have and haven't practiced professional photojournalism, when it comes to what acceptable digital pasting in entails.

Table 4-84. The all inclusive group’s answers in response to the question: Is it acceptable to paste an object into a photograph destined to accompany a news article?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No pasting in is acceptable in a news photograph	58	87.9	87.9	87.9
	Minor pasting in is acceptable	8	12.1	12.1	100.0
	Total	66	100.0	100.0	

Table 4-85. Crosstabulation of the responses of those who have and haven’t practiced professional photojournalism: Is it acceptable to paste an object into a photograph destined to accompany a news article?

		Practiced professional photojournalism		Total
		Yes	No	
Is it acceptable to paste an object into a photograph destined to accompany a news article?	No pasting in is acceptable in a news photograph	34	24	58
	Minor pasting in is acceptable	0	8	8
Total		34	32	66

Table 4-86. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	9.672	1	.002
N of Valid Cases	66		

What is the impact of formal education, or lack thereof, on the opinions of the participants, with regards to pasting in material in the documentary photojournalistic photograph?

One would expect those who have been formally educated in photography to vote that any pasting in is unacceptable in a photo that is used as a truthful document, and yet they haven’t. Granted, the percentage of participants who did vote for “pasting in” was not large, but still large enough to be cause for concern. Thirteen point six percent (6) of the group that has been formally educated voted “minor pasting in is acceptable”, compared to 9.5% (2) of the group that has not been formally educated. Perhaps I underestimated those who were not formally

educated, because they seem more sensible in their vote, though not by a great margin. The percentage from the total group was 12.3% (8).

Eighty-six point four percent (38) of those who did study photography formally voted “no pasting in is acceptable in a news photograph”, compared to 90.5% (19) of those who didn’t study photography formally. Eighty-seven point seven percent (57) of the total group voted for this option. The majorities in both groups believe that no pasting in whatsoever is acceptable. Apparently education does not play a great role in forming an opinion regarding pasting in. As one can see in table 4-88, the chi-square test shows that there is not a significant difference (p-value > 0.05) between the responses of those who have and haven’t studied photography formally, when it comes to what acceptable digital pasting in entails.

Table 4-87. How education impacts on the photographers’ responses to: Is it acceptable to paste an object into a photograph destined to accompany a news article?

		Have you studied photography formally?		Total
		Yes	No	
Is it acceptable to paste an object into a photograph destined to accompany a news article?	No pasting in is acceptable in a news photograph	38 (86.4)	19 (90.5)	57 (87.7)
	Minor pasting in is acceptable	6 (13.6)	2 (9.5)	8 (12.3)
Total		44 (100)	21 (100)	65 (100)

Table 4-88. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.223	1	.714
N of Valid Cases	65		

Removing objects

If one removes objects from a documentary photograph it is slightly less scandalous than pasting them in. Chapter one shows how a documentary photographer lost a prestigious award for removing what he considered a minor detail.

Because no one voted for “dramatic removal of objects is acceptable”, I do not show it in the tables shown later. One would not expect a documentary photographer to remove any object from a photograph, so I did not foresee that, as one can see in table 4-89 below, 34.8% (23) of the all inclusive group of participants agreed that one can remove small unimportant objects; which is 37.5% (12) of the group that has not practiced professional photojournalism and 32.4% (11) of the group that has practiced professional photojournalism, as one can see in table 4-90 on page 133. I am concerned by the number of votes for “small unimportant objects can be removed”. Such a great portion, especially in the group that has practiced professional photojournalism, should, in my esteem, not be there.

The majority (65.2% [43]) of the all inclusive group decided that one must not remove any object in a news photograph. When one splits the all inclusive group into those that haven’t practiced professional photojournalism and those that have, one can see no significant difference. The chi-square test confirms this, as one can see in table 4-91. There is no significant difference (p -value > 0.05) between the responses of those who have and haven’t practiced professional photojournalism, when it comes to what acceptable digital removing entails.

Table 4-89. The answers of the all inclusive group in response to the question: Is it acceptable to remove an object from a news article photograph, using photo editing software?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No removing of any object is acceptable for a news photograph	43	65.2	65.2	65.2
	Small unimportant objects can be removed	23	34.8	34.8	100.0
	Total	66	100.0	100.0	

Table 4-90. Crosstabulation of the responses of those who have and haven't practiced professional photojournalism: Is it acceptable to remove an object from a news article photograph using photo editing software?

		Practiced professional photojournalism		Total
		Yes	No	
Is it acceptable to remove an object from a news article photograph, using photo editing software?	No removing of any object is acceptable for a news photograph	23	20	43
	Small unimportant objects can be removed	11	12	23
Total		34	32	66

Table 4-91. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.192	1	.797
N of Valid Cases	66		

I expected that no person who was formally educated in photography would vote “small unimportant objects can be removed”. If they did vote for that option, I would expect the percentage to be much less for those who were formally educated than for those who were not formally educated. As it turned out, participants did vote for “small unimportant objects can be removed”. As one can see in table 4-92, the percentage turned out to be less in the group that did study photography formally, but not by a great number. The percentage for those that were formally educated was 31.8% (14) and the percentage for those who were not formally educated was 42.9% (9). For this option the percentage of the total group was 35.4% (23).

I expected the voting percentage of those who voted “no removing of any object is acceptable for a news photograph”, to be much higher, which was not the case. The group that has studied photography formally voted 68.2% (30), while the group that has not studied photography formally voted 57.1% (12). Sixty-four point six percent (42) voted for this option in the total group. As one can see in table 4-39 the chi-square test indicates that there is no

significant difference ($p\text{-value} > 0.05$) in the responses of those who have and haven't studied photography formally, when it comes to what acceptable digital removing entails.

Table 4-92. How education impacts on the photographers' responses to: Is it acceptable to remove an object from a news article photograph, using photo editing software?

		Have you studied photography formally?		Total
		Yes	No	
Is it acceptable to remove an object from a news article photograph, using photo editing software?	No removing of any object is acceptable for a news photograph	30 (68.2)	12 (57.1)	42 (64.6)
	Small unimportant objects can be removed	14 (31.8)	9 (42.9)	23 (35.4)
Total		44 (100)	21 (100)	65 (100)

Table 4-93. Chi-square tests of the results in the above table.

	Value	df	Exact p-value (2-sided)
Pearson Chi-Square	.758	1	.417
N of Valid Cases	65		

National regulating body

This thesis, additionally, attempts to establish whether those who have practiced professional photojournalism believe a national regulating body in South Africa, which clearly makes known what acceptable picture taking and digital editing entails, is necessary. Here, one does not need the opinion of those who haven't practiced professional photojournalism. Those who practice professional photojournalism have a day to day experience in the field. Furthermore, their work will be affected by the outcome of such an important decision. One can deduce that it is only fair that those who have practiced professional photojournalism take a decision that deals directly with the work of practicing photojournalists.

One can see the result in table 4-94 on page 135. Since only a segment of the entire group of participants voted, one need only consider the valid percentage. A majority of 73.5% (25) were in favour of a regulating body. Professional photographers who have practised professional

photojournalism clearly feel that such a regulating body is necessary. This research paper can thus propose that there is a need for such a body. Twenty-six point five percent (9) indicated that there is no need for such a body. Twenty-six point five percent (9) is by no means an inconsequential amount. One must therefore note that over a quarter of voters saw no need for a regulating body.

In table 4-95 one can see that the residual number for those who answered yes was 8 and for those who answered no was -8. The chi-square analysis (table 4-96) shows that the amount of yes answers was significantly higher ($p\text{-value} < 0.05$) than the no answers.

Table 4-94. Those who have practiced professional photojournalism's answers to: Do you think that it would be a good idea to have a national regulating body, which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	37.9	73.5	73.5
	No	9	13.6	26.5	100.0
	Total	34	51.5	100.0	
Missing	System	32	48.5		
Total		66	100.0		

Table 4-95. This table makes clear the observed number the expected number and the residual number of the votes shown in table 4-94.

	Observed N	Expected N	Residual
Yes	25	17.0	8.0
No	9	17.0	-8.0
Total	34		

Table 4-96. Chi-square results of table 4-94.

	Only addressed to those who have practiced professional photojournalism. Do you think that it would be a good idea to have a national regulating body, which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?
Chi-Square	7.529 ^a
df	1
p-value	.006

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.0.

If one looks at table 4-97 on page 137, one can conclude that a formal education in photography predisposes the participants to see a greater need for a national regulating body. However, regardless of formal education the outcome (percentagewise) of the vote is more or less the same. Seventy-seven point three percent (17) of those who have studied photography formally voted yes, whilst 63.6% (7) of those who have not studied photography formally voted yes. Both these results are clearly majority votes. The percentage of the total group is 72.7% (24).

On the other hand, in comparison with the group who did not study photography formally (36.4% [4]), 22.7% (5) of those who have studied photography formally voted no. The percentage of the total group who voted “no” is 27.3% (9).

Table 4-97. How education impacts on the photographers’ responses to: Do you think that it would be a good idea to have a national regulating body, which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?

		Have you studied photography formally?		Total
		Yes	No	
Only addressed to those who have practiced professional photojournalism. Do you think that it would be a good idea to have a national regulating body, which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?	Yes	17 (77.3)	7 (63.6)	24 (72.7)
	No	5 (22.7)	4 (36.4)	9 (27.3)
Total		22 (100)	11 (100)	33 (100)

One can see a conclusion in chapter 6.

CHAPTER 5 RESULTS: QUALITATIVE PART

This chapter first briefly discusses the quantitative part of question 18, in order to set the stage for the qualitative part of this project. The quantitative part of question 18, segment A, states, “Due to the introduction of digital imaging technology, the practice of documentary photography...” The question then invites the respondent to pick one of two options. Either, “Is in danger of losing credibility” or “Is in no danger of losing credibility”. Then the qualitative part, segment B, is introduced; which asks why the respondent chose the option that he/she selected.

A crucial and central part of discovering whether digital imaging technology has impacted on the integrity of the documentary photograph is to ascertain whether the credibility of the practice of documentary photography has been affected. The concepts of integrity and credibility are in some instances interchangeable and are closely knit. For instance, in the Collins Thesaurus, credibility is a synonym of integrity (Mcleod, 1989:106). Therefore most of this chapter is devoted to examining views of Capetonian professional photographers concerning this issue.

In danger or not in danger of losing credibility, a simple yes or no (quantitative part)

Answers to the question of whether the practice of documentary photography is in danger of losing credibility as a result of the introduction of digital imaging technology, gave cause for concern. As one can see in table 5-1 on page 139, a majority of 56.1 percent agreed that the practice of documentary photography is in danger of losing its credibility. That is a sizable amount and does not bode well for the future of the documentary genre in the digital medium. One can observe that the digital medium has definitely eroded trust in the genre and damaged its perceived credibility.

On the other hand, 43.9 percent is still a substantial portion, displaying optimism and a reason to have hope for the credibility of the documentary genre. At the outset of writing this thesis I did not expect that so many respondents would show such confidence in the future of documentary photography in the “digital era”. The amount of confidence shown, compared to lack of trust, is not however convincing enough.

Table 5-1. Is the practice of documentary photography in danger of losing credibility?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Is in no danger of losing credibility	29	43.9	43.9	43.9
	Is in danger of losing credibility	37	56.1	56.1	100.0
	Total	66	100.0	100.0	

**The impact of digital imaging technology on the credibility of documentary photography:
A qualitative exploration**

What follows are the main themes which I extracted in qualitative analyses from the answers of respondents who answered “is in no danger of losing credibility” and “is in danger of losing credibility”. It should be noted that there were occasions when respondents gave good arguments for the opposing side in their replies.

I promised confidentiality to photographers who answered the questions, therefore if quoted they were labelled according to their number in the sequence in which the questions were analysed (photographers 1 to 66).

Arguments for “Is in no danger of losing credibility”

The character of the photographer

A recurring theme amongst those who picked “Is in no danger of losing credibility”, is that it is not the medium that determines the credibility, but the character of the photographer; and for some the sentiment is that the photographer is generally honest. For instance, photographer

number 1 responded succinctly, “Photographers are taking photos with the truth in mind and have no need to change anything in their photos”. Photographer number 37 put it differently, “Documentary photographers tend to be very passionate about their craft, so there would be little point in cheating in a picture.” Photographer 40 mentioned that, “Photographers make a great effort to tell the story like it is and generally are very proud of their won credibility and honesty.” Some respondents repeated the idea that the documentary photographer in general has self respect. For instance, photographer number 42 indicates, “While it is easy to alter digital photographs, the purpose of documentary photography to tell a truthful story, means that a self-respecting photographer will try to do that to the best of his ability without changing the image.” In his response photographer 4 made it pretty clear that, “At the end of the day it comes down to the scruples of the photographer.”

Some respondents claimed that the prevailing honesty amongst documentary photographers is not in danger of being compromised. It will remain the same as it was in the “film era”. To end this section I will quote a photographer (number 57) who did his BTech in social documentary photography:

“I firmly believe that it is not the lack of technology or the difficulty to manipulate a documentary photograph that makes documentary photography credible and trustworthy to document reality; rather it is the passion and the integrity of the photographer behind the camera to tell the truth with no hidden agenda.”

Maintaining employment and reputation

Some respondents argued that some publications and most photographers take their names and reputation very seriously and thus produce images that can be trusted. Another very prominent reason that emerged was that photographers feared foolish manipulation could possibly cost them their job and destroy their reputation. For example, photographer number 35 mentioned that the picture editor at the Burger would, without customary warning, fire any

photographer who altered “the fundamental of any image”. Photographer number 66 articulated the sentiment well, “I believe that the majority of photographers are operating with integrity and will not associate themselves with these unethical techniques since it can ruin their career and be very embarrassing to them.”

What’s done today was possible yesterday and true objectivity is impossible

Some photographers brought forward the argument that manipulation (before and after the photograph was taken) of photographs has always been possible. For instance, photographer number 31 mentioned, “Photographs have been altered since the 1800’s.” A participant said that it is now merely possible to do it “faster and with greater ease” (photographer number 52). Some photographers claimed that exposure to the digital imaging technology, and digitally manipulated photographs, have made the average person become aware that manipulation is possible. Some respondents also claimed that a documentary photograph does not tell a complete story, but only an aspect chosen by the photographer and it is “highly naïve” (photographer number 11) to believe that documentary photography conveys an objective and complete account of what really occurred. Furthermore, some photographers mentioned that merely altering something, such as direction of view, can substantially change a scene. Photographer number 53 had this to say:

“I think the concept of objective documentation is flawed to begin with. As soon as an event is documented by someone it is no longer objective, because it will always be documented from THEIR specific point of view. Hence digital photography does not pose more or less of a threat to objective documentation, because regardless of the medium ‘true’ objectivity will never be possible.”

Participants also mentioned that like with creative adjustments in the film darkroom, those in authority should make allowance for certain creative digital adjustments. Photographers particularly echoed that the digital medium is merely a tool for creating a picture, not a cause for loss of credibility. For instance, photographer number 52 mentioned that we should not fear a loss of credibility now any more than we feared a loss of credibility in the “film era”.

Checks and balances

Some participants suggested that in current times photographers should take a new approach to presenting their images for public view. For example, photographer number 7 suggested that a digital file accompany a documentary photograph so that its authenticity can be verified. For instance, photographer 64 elaborated that those in authority should be able to demand a Photoshop history log file and metadata to ensure that the photo is authentic. Other photographers (e.g. number 30 and 64) firmly indicated that there are enough checks and balances in the current system to ensure that photographs are authentic.

Ignorance of manipulation methods

There are photographers (e.g. photographer 39) who are under the impression that a large portion of the audience is still naïve and gullible and are not aware of the ease with which an image can be altered. Photographer number 39, furthermore, points out that even though people know that photos of models are altered, they still try to live up to the photographs. So how much more trusting will they be of a documentary photograph, even when told that alteration is possible?

Arguments for “Is in danger of losing credibility”

Ease of manipulation

An overwhelming theme that resonated is that the documentary photography genre is in danger of losing credibility because of the relative ease with which anyone can manipulate a photograph and how effectively it can be done. Others, as for instance photographer number 24, added that the tools for manipulation are now more accessible and manipulations more difficult to detect. Some participants believe that digital imaging technology encourages people to apply more alterations (photographer number 13) and photographers have become lazier and manipulate after, instead of preparing before taking the picture (photographer number 27).

Press coverage of fakes

Some photographers insisted that, as a result of constant coverage in the media, individuals are increasingly aware of the possibility of illicit manipulation (photographers number 10, 19 and 24). Whenever someone is caught in the act, the coverage multiplies the level of awareness and distrust. One photographer (number 10) indicated that he does not necessarily agree with the decision to accuse certain photographers of malpractice. Photographer number 10 mentioned Patrick Schneider's adjustment to the sunset (which is covered in chapter two) and declared:

“This knee jerk reaction, even within the PJ community has seen, for example, one press photographer fired for over-saturating a sunset shot and another fired for adding extra rockets into a shot of the invasion of Gaza. Now, obviously, the adding of rockets was wrong, but a bit of heavy handed photoshop (sic) work on curves and saturation is well within the realm of what could be done in the “truthful” era of film.”

The reader may find it interesting to note how some photographers refer to the film era as the “truthful” era.

Harsh criticism and failure to realise that manipulation was around even when film was used

Furthermore, participants argued that the general public was mostly unaware of the possibility of manipulation in the time prior to the introduction of digital imaging technology and is now regarding digital photography with great suspicion, believing that the technology brought about manipulation. For example, photographer number 18 stated:

“The general public does not understand that images have been altered since the beginning of photography. For some reason, the fact that images were hand painted or manipulated in the darkroom, or created through multiple exposures, has been lost from collective memory. The concept seems to be that image manipulation was born with desktop image manipulation software when, in fact, it has been in use in newspaper, publishing and design houses for decades. People immediately assume that an image has been enhanced, irrespective of whether it has or not. Even good light is considered spurious!”

Some photographers (e.g. photographer number 33) are of the opinion that even photographers themselves find it hard to believe that documentary images are genuine, due to the extent to which many manipulate their own work, even documentary work.

Photography and other mediums

Photographer 26 argued that other mediums, such as music or film, have a “distorted factor built in” due to digital imaging technology, and photography will follow the same route. In other words, people will assume that manipulation is naturally present in most images.

Traditional environment modified

Some participants suggested that the arrival of digital editing technology in the workplace significantly altered photojournalistic workspace and activities. For instance, photographer number 29 mentioned that if one were to manipulate film based material one requires “specialist knowledge of manipulation techniques”. Additionally, commissioning editors were often in charge of the darkroom. Photographers usually had no time to work on manipulating photographs and the contact sheet is a very effective regulatory mechanism. There was, in most cases, less pressure and the ethics were more established. Digital imaging technology brought the photojournalist swiftness, efficiency and tools that are easy to use and the photographer now engages in editing work prior to submitting his/her pictures to the editor. In many cases, those in authority don’t check whether manipulation was overdone and this environment is very tempting to any photographer who lacks moral fibre. However, in some cases it is the editor that does the illicit manipulations (photographer number 63).

It should be emphasized, whereas the “Is in no danger of losing credibility” group repeatedly pointed out that manipulation was always possible, some in the “Is in danger of losing credibility” group pointed out (e.g. photographer number 39) that it was decidedly more difficult to manipulate in the “film era”. You required extensive darkroom and manipulating skills to

carry out those manipulations and it took considerable time and effort. Very few people actually possessed the means to extensively doctor an image, thus it was much less prevalent.

Increasing pressure to perform and temptation

Photographer number 29 mentioned that photojournalism is in a crisis stage which promotes unethical behaviour. The market has shrunk and has been amalgamated, plus news feed services have been globalised. Publications for telling stories in several images have dwindled, forcing photographers to tell stories in a single outstanding image. Lately, especially with the arrival of the internet, audiences are fatigued with images, forcing photojournalists to come up with more captivating images. These reasons, coupled with technology that can alter images easily and substantially, put the photojournalist in the digital environment under great temptation.

Photographer number 43 mentions:

“It is possible to trust individual photographers and publications with a known history of credibility, however general media (including daily newspapers and popular magazines) are under increasing commercial pressure from publishers to generate impactful stories; this may tempt photographers, picture editors and magazine art directors to enhance, edit, crop or even manipulate photographs to this end.”

As photographer number 44 mentions, the ego of the photographer and financial considerations, amongst other things, play a great part in whether he/she manipulates or not. Because the editing is done in the private space of office or studio, with no-one looking over one's shoulder, it is all the more tempting.

Photographers strongly compete against each other (photographer number 47) and some photographers with less integrity may be tempted to manipulate. The practice of photojournalism is a constant race, with great pressure on the individual to produce extraordinary images, with the added factor of obtaining money from those images (photographer number 54). It is often a matter of getting recognition and making it in the field (photographer number 65).

Add digital editing technology to the cauldron and it will surely entice the photographer lacking moral fibre to doctor his/her photographs excessively. Furthermore, photographers manipulate most photographs (photographer number 65), which raises the question “how much manipulation is too much?”

The integrity is already compromised

Some, who maintain that credibility will not be lost, argue that it is only a very small minority that will lie. Those that believe credibility will be lost point out that documentary photography is not immune to unscrupulous photographers. One has only to look at the countless examples of over doctoring in the media, to realise that the unscrupulous portion will always be there (photographer number 54) and that it is substantially larger than a very small minority. Certain participants mentioned that the credibility of the documentary photography genre is already compromised by these “rogue” photographers (e.g. photographer number 58). Digital photographs are not even admissible in court (photographer number 60).

One can see a conclusion in chapter 6.

CHAPTER 6 CONCLUSION

In this chapter I present a conclusion to the study. The conclusion is a synthesis of the literature review, the quantitative findings and the qualitative findings. It is constructed as follows. I give a condensed version of the answers to the research sub-questions, share insights and mention whether the answers were sufficient. Furthermore, I discuss how practice in professional photojournalism and formal education is relevant in this study and what trends they reveal. Additionally, I give an example of an important idea that emerged in this academic endeavour. Furthermore, I list the achievements and contributions that this project has made. I also point out any limitations and make suggestions for future research. In places I share what I have learnt during this academic endeavour. I also make a recommendation as a result of the findings.

The research question is “What is the perspective of Capetonian professional photographers on issues of integrity in the documentary photograph, with regard to the impact of digital imaging technology?” I believe that this study has answered the research question. There may be many more perspectives, but I believe I’ve dealt with key perspectives in an effective manner. One might look at the research question and point out that not all that was asked in the questionnaire was related to the impact of digital imaging technology. Everything, except some of the necessary profiling questions was in fact related to the impact of digital imaging technology. For example the various concepts discussed where digital technology is not mentioned were dealt with in the literature review and provide a context of possibilities for lack of integrity prior to the introduction of digital imaging technology, thus they are related. Also, for example, the question about a regulating body is asked as a result of the impact of digital imaging technology on photojournalism. Questions pertaining to acceptable editing also arise

because of the impact of digital imaging technology on photojournalistic photography. In the following section, I condense the answers to sub-questions which make up the research question, share insights and reflect whether the sub-questions were answered.

Condensed answers to sub-questions, insights and a reflection of whether sub-questions have been answered

Sub-question one

Sub-question one: How does the concept of photographic integrity manifest itself throughout the history of the documentary photography genre, prior and subsequent to the introduction of digital imaging technology?

Photographic integrity was always in question (photographer number 18) (Meyer, 1995:10). Although it was more difficult prior to the introduction of digital imaging technology (photographer number 39) (Ricchiardi, 2007:36), one could still manipulate photographs by, for example painting over parts of the photo (Wheeler, 2002:20, 21). Prior to the introduction of digital imaging technology the photographer has always had the option of introducing creativity (for example lens properties, camera angle and cropping) (Davenport, 1991:44). One could stage a photograph (Goldberg, 1991:28). One could rearrange objects in a photo (Lester, 1988) and change caption and the context in which the photograph is communicated. One could order photographs differently to produce different messages (Newhall, 1999:246). One could misrepresent a photograph, for example claiming an athletic photograph taken in a training session is a photograph of an actual sporting contest (Maniscalco, 2010:7). Integrity issues after the introduction of digital imaging technology are the same, only digital imaging technology has made doctoring the photograph decidedly more straightforward, quicker and difficult to detect (Ricchiardi, 2007:36) (photographer 24). There are now a whole range of opinions regarding whether the introduction of digital imaging technology is a cause for the waning of credibility in

documentary photography. For instance there are individuals who believe the introduction of digital imaging technology has brought no real change to photography and manipulation could always be done in the film darkroom (Rohde, 1995a:26) (photographer number 31). Then there are those who believe digital imaging technology brings about the loss of integrity (Kozloff 1994: 309) (photographer number 58). Some for example argued that we will simply view photography as mostly altered (photographer number 26), where a non-altered photograph will be the exception (Orvell, 2003:206). Brian Walski and Allan Detrich are milestone examples of photographers who obviously over edited and Patrick Schneider is a milestone example of doubtful over editing.

This sub-question was answered effectively in the literature review and in parts of chapter five. Many aspects were comprehensively explored and contemplated.

Sub-question two

Sub-question two: To what extent do Capetonian professional photographers use digital imaging technology compared to film technology?

This study investigated degree of experience in capture and manipulating technology, both in film and digitally, and usage of a digital camera vs. a film camera. I found that people have more experience with digital imaging technology than film technology, both in capture and manipulating technology, but did not foresee that many more of the respondents had film experience than expected.

Here are some examples of camera usage. The majority (54.1%) of respondents use only their digital cameras. Eight point two percent of the photographers use both their film cameras and digital cameras equally often. Thirty-four point four percent of the participants indicated that they use their digital camera more often than their film camera. The statistics indicate that, among Capetonian professional photographers, film camera usage is waning. Digital camera

usage takes precedence. This has been assumed by most, but this study measured and proved it. I learnt that film has not quite vanished as I previously believed it would.

One could have answered the sub-question more specifically and comprehensively, but that is left for future research. I decided to only touch key concepts, so as not to unbalance the study as a whole by delving into this one area too intensely. It only formed a relatively small part of a large undertaking.

Sub-question three

Sub-question three: How do Capetonian professional photographers perceive various concepts related to integrity in documentary photography?

The first concept is whether respondents believe creativity can coexist with truth in photojournalism. Peterich (1957:46) maintains that photojournalism is aesthetic and interpretive, meaning that creativity forms a part of photojournalism. Only 3% of the respondents believed that one cannot be creative and truthful at the same time. Of the rest the majority (51.5%) strongly agreed and a minority (45.5) agreed. Thus the majority of the respondents agreed with Peterich in different levels of intensity. The group which has practiced professional photojournalism insisted strongly (73.5% of them strongly agreed) that it is possible to be creative and truthful at the same time. This could mean that once one has experience, one realises strongly that creativity is a possibility. According to the chi-square test, there is no significant difference in results between those that have and haven't studied photography formally. From the above, I learnt that photojournalists value their creativity. The answer to this part of the sub-question contributes in the sense that it makes one aware that one should view photojournalistic photographs also as creative works.

The second concept is whether respondents believe there is an effect on the message conveyed if angle of approach is adjusted. One can make ordinary changes to camera angle and

lighting and, “meaning can be imposed in photographic images” (Bissell, 2000:81). Sixty percent of participants strongly agree and 38.5% simply agreed. So, one can conclude that the majority of participants feel very strongly that a different angle creates a different message. According to a chi-square test there is no significant difference between the responses of those who have and haven’t practiced professional photojournalism. Additionally, a chi-square test shows that there is no significant difference between the responses of those who have and who haven’t had a formal education in photography.

The third concept is whether respondents believe the message changes based on what is included in the frame? Excessive cropping can drastically change the message of a photograph (Goldberg, 1991:94). A majority (73.8%) of participants strongly agree that different messages can be conveyed by choosing what to include in the frame. Only 26.2% simply agreed. Thus an overwhelming majority believe that what is included in the frame can change the message conveyed. According to a chi-square test there is no significant difference in the responses of those who have and haven’t practiced professional photojournalism. Furthermore, a chi-square test shows that there is no significant difference between the answers of those who have and who have not studied photography formally.

The fourth concept is whether respondents believe that order impacts on presentation of meaning. Newhall (1999:246) argues, “A series of photographs, presented in succession on exhibition walls or on the pages of a book, may be greater than the sum of the parts.” In other words meaning can change as order changes. What I learnt from the responses of Capetonian professional photographers is that the way the question was posed was problematic and caused respondents to answer in a confused fashion. This aspect of the sub-question was not resolved adequately. I attempted to introduce a negative question without success.

The fifth and final concept covered in this sub-question is the respondents' definition of what a documentary photographer does. Clarke (1997:145) believes that documentary photography is meant to be a truthful and objective account of what transpired. The overwhelming majority (83.3%) decided on the middle ground and was of the opinion that a documentary photographer records reality, but also communicates the story from his/her own perspective. The least amount of votes (7.6%) went "to the photographer is merely a recorder of reality, who does not communicate the story from his/her own perspective". This purist group agree to truthfulness and objectivity as Clarke does. Nine point one percent decided that there is no such thing as recording reality, the documentary photographer decides what story he/she wishes to communicate. This indicates that almost a tenth of the participants believe that the documentary photographer is totally in control of what message he/she conveys, arguably in the same fashion as a fine art photographer. This is an upset to what Clarke believes. I did not expect this result. I learnt that perhaps the documentary photographer truly has total mastery of which message is being conveyed. A chi-square test shows that there is no significant difference between the answers of those who have and have not practiced professional photojournalism. A chi-square test also shows that there is no significant difference between the responses of those who have and who have not had a formal education in photography.

This sub-question has been effectively answered; however, one can note that there are many more concepts to discuss. I decided to introduce only the above concepts due to practicality in the creation of concise document.

Sub-question four

Sub-question four: What do Capetonian professional photographers regard as acceptable digital editing to the photojournalistic documentary photograph?

Schwartz (1999) has found that most photojournalists agree that one must forbid the manipulation of the content of a news photograph. It is acceptable to manipulate the form of a photograph. For example, burning in, dodging, cropping, colour correction and elimination of scratches and dust spots. One must not allow airbrushing. Removing items is not acceptable, but cropping is. Here is what Capetonian professional photographers have to say:

When it comes to cropping, the greatest percentage of respondents voted that slight cropping is acceptable (47%). However a number also voted for radical cropping is acceptable (30.3%). The aforementioned is cause for concern. Twenty-two point seven believed that no cropping is acceptable in a news photograph. According to a chi-square test there is no significant difference between the responses of those who have and have not practiced professional photojournalism. According to a chi-square test there is no significant difference between the responses of those who have and have not had a formal education. It is worth pointing out that the group who did practice professional photojournalism has a higher percentage of participants (38.2%) who voted “radical cropping is acceptable” than the group who did not practice professional photojournalism (21.9%). This is cause for concern, in the sense that substantial cropping alters message and one would ideally want messengers of objective news not to be in favour of substantial alteration.

Only 10.6% of respondents believed that dodging and burning in is not acceptable in a news photograph. A majority of 60.6% of participants believed that very light dodging and burning in is acceptable. Over a quarter of participants (28.8%) believed that dramatic dodging and burning in is acceptable. Dramatic dodging and burning in can cause the message to be changed. Consequently, one has reason to be unsettled by such a result. According to a chi-square test, there is no significant difference between the responses of those who have and

haven't practiced professional photojournalism. A chi-square test also shows that there is no significant difference between the responses of those who have and haven't studied photography formally.

According to a chi-square test, there was a significant difference between the answers of those that have and those that have not practiced professional photojournalism regarding pasting in. Twenty-five percent of the group that hasn't practiced professional photojournalism believed that minor pasting in is acceptable. The aforementioned is cause for concern. Predictably, none who have practiced professional photojournalism voted for this option. Of the remaining 87.9% of the all inclusive group, 75% of those who had not practiced professional photojournalism voted that no pasting in is acceptable in a news photograph, as compared to 100% of those who have practiced professional photojournalism. A chi-square test indicated that there was no significant difference between the answers of those who have and those who haven't studied photography formally when it comes to pasting in.

Sixty-five point two percent of respondents believed no removing of any objects is acceptable in a news photograph and 34.8 % of respondents believed small unimportant objects can be removed. The latter is cause for concern. More or less half of those who voted for this option were photographers who have practiced professional photojournalism. The aforementioned is cause for concern. A chi-square test shows no significant difference between the responses of those who have and haven't practiced professional photojournalism. A chi-square test shows that there is no significant difference between responses of those who have or have not studied photography formally.

If one understands that I chose to discuss key concepts, since an exhaustive study can become a Masters on its own, the answer to this sub-question is deemed adequate.

Sub-question five

Sub-question five: Do Capetonian professional photographers believe that digital imaging technology impacted on the integrity of the documentary photograph?

Ingledeu (2005:137) posed the following question:

“But this value (photography as a factual language) is now in danger of being undermined by the ease with which photographs can be manipulated digitally. Digital photography may totally devalue the authority of photography in the public’s eye. Will we trust any image any more? Will we see the death of truth in photography and a time when every image will be altered as a matter of course?”

The Capetonian professional photographer had this to say about the credibility of the documentary photograph. Fifty-six point one percent believed that credibility is in danger of being lost, which is cause for concern. The 43.9% who believe it is in no danger of losing credibility are not sufficient a voice to convince. Further in this sub-question I show more proof, indicating dramatic lessening of trust as a result of the introduction of digital imaging technology. Photographer number 57’s reason might sound convincing, but statistics prove otherwise. This is what he has to say, “I firmly believe that it is not the lack of technology or the difficulty to manipulate a documentary photograph that makes documentary photography credible and trustworthy to document reality; rather it is the passion and the integrity of the photographer behind the camera to tell the truth with no hidden agenda.” Photographer 58’s response is quantitatively proven truer, “Rogue photographers can manipulate imagery for their own selfish needs. The digital revolution has already started destroying the ‘truthfulness’ of photography. It is easy for people with specific objectives to create their own truths to justify specific actions.” A chi-square test showed that there is no significant difference between the responses of those who have and have not practiced professional photojournalism when it comes to credibility. A chi-square test showed that there is no significant difference between the responses of those who have and haven’t had a formal education when it comes to credibility.

When it comes to the impact of digital imaging technology on ease of introduction of untruth the substantial trends were, strongly agree 42.4% and agree 53%. This serves to amplify what was previously found namely that digital imaging technology has made doctoring the photograph decidedly more straightforward (Ricchiardi, 2007:36). A chi-square test showed that there is no significant difference between the answers of those who have and haven't practiced professional photojournalism. A chi-square test showed that there is no significant difference between the answers of those who have and haven't studied photography formally.

When it comes to trustworthiness issues with digital and film newspaper documentary photographs the results prove that digital alteration corrodes integrity. Many of the respondents' answers show that digital imaging technology bids to undermine the truthfulness of photography, as believed by Kozloff (1994: 309). Noteworthy trends were 47% believed the film based photograph feels more trustworthy and 51.5% believed both digital and film photograph feels equally trustworthy. Only 1.5% believed that the digital photograph feels more trustworthy. That and the film result combined shows that trust in newspaper photography has deteriorated with the introduction of digital imaging technology. A chi-square test shows that there is no significant difference between the responses of those who have and haven't practiced professional photojournalism. A chi-square test shows that there is no significant difference between the responses of those who have and have not studied photography formally.

When it comes to the issue of consistent trust in the digital and film medium 54.5% believed that a documentary photographic essay taken in film and processed in the traditional darkroom feels more consistently trustworthy. None believed in the digital equivalent. That speaks for itself. Only an unconvincing minority of 45.5% believed that both feel equally consistently trustworthy. A chi-square test showed that there is no significant difference between

the answers of those who have and who have not practiced professional photojournalism. A chi-square test also shows that there is no significant difference between the responses of those participants who have and have not had a formal education in photography.

Does ease of digital alteration impact on trust? Yes it does. Although there is 50% in some level of agreement and 50% in some level of disagreement, there should not be a half that believes that ease of digital alteration impacts on trust. According to a chi-square test there is no significant difference between the answers of those who have and haven't practiced professional photojournalism. According to a chi-square test there is no significant difference between the answers of those who have and haven't had a formal education in photography.

The answer to the sub-question is yes, Capetonian professional photographers do believe that digital imaging technology did impact on the integrity of the documentary photograph as was elaborated above. The sub-question was well answered.

Sub-question six

Sub-question six: Do Capetonian professional photographers who have practiced professional photojournalism see the need for a national regulating body which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?

If one reviews what those who have practiced professional photojournalism regard as acceptable editing one indirectly has an answer to this sub-question. Clearly guidance is needed. There was a direct question and 73.5% of those who have practiced professional photojournalism voted that such a body is needed. Twenty-six point five percent voted that such a body is not needed. Therefore this project has shown that a national regulating body that clearly makes known what acceptable picture taking and digital editing entails for the South African professional photojournalist is necessary.

This sub-question was well answered.

Impact of having practiced professional photojournalism

In most cases there was no significant difference in the responses of those who have and haven't practiced professional photojournalism. There is, for example, a significant difference in the responses between those who have and haven't practiced professional photojournalism when it comes to the statement "A press photographer can approach his work with creativity and still tell the truth." Those who have practiced professional photojournalism strongly believe in this option to a much greater extent than those who have not practiced professional photojournalism. This implies, contrary to my previous understanding, that those who have practiced professional photojournalism value a photojournalist photograph also as a creative document. In some instances those who haven't practiced professional photojournalism seemed to be stricter than those who have practiced professional photojournalism. For instance 15.6% of those who haven't practiced professional photography voted no dodging and burning should be allowed, compared to 5.9% in the group that has practiced professional photojournalism. In some cases those who have practiced professional photojournalism voted as one would expect them to vote. For instance, a 100% voted, "no pasting in is allowed in a news photograph", whereas 25% of those who had not practiced professional photojournalism voted minor pasting in is acceptable. This constituted a significant difference. Had it been the other way round it would have been cause for concern. Consequently, when looking at the results in chapter 4, one can observe that in most cases having practiced professional photojournalism does not make a significant difference. In key areas, as shown above, those who have practiced professional photojournalism turned out to be more responsible. In a lesser amount of areas, as in the dodging and burning in case paradoxically those who haven't practiced professional photojournalism

seemed stricter. This study has shown that in key areas those who have practiced professional photojournalism were more responsible.

Impact of formal education on answers

Education does not have a significant impact on the relevant issues in chapter four. In fact, in some cases those who haven't studied photography formally seemed to give the more enlightened opinions. For example, a lesser percentage voted for "small unimportant objects can be removed" and a lesser percentage indicated that "minor pasting in is acceptable". Therefore one can conclude that lack of formal education in photography is not an indication of a lack of understanding of issues of integrity. In fact, as shown, in certain cases it almost seemed that they had more veneration for the objectivity of the documentary photograph. However I must add that on certain key issues, such as whether a national regulating body is necessary, they voted no in a greater percentage. In that instance, they are not the most conscientious group. In all measured cases the chi-square analyses showed that there was no significant difference in answers between those who have and haven't studied photography formally. What chapter four shows is that it would be a mistake to assume that lack of formal education plays a role and that both those who have and haven't had a formal education had their weaknesses and strengths and differed a bit only occasionally.

Example of an important idea that emerged in this academic endeavour

An example of a noteworthy idea is that almost a tenth of participants in this study believe that the documentary photographer is totally in control of what message he/she conveys, arguably in the same fashion as a fine art photographer. This is also in contrast to what is in the literature review, e.g. Clark's (1997:145) insight is used to show that the documentary photographic genre is meant to be a truthful and objective account of what transpired.

Achievements and contributions to research

Kozloff said, “If certainly not a clean break with our past visual culture, computer-generated imagery bids to undermine it.” (1994:309). This study quantitatively proves that the Capetonian professional photographers believe that digital imaging technology is corrosive to integrity of the documentary photograph. There may be a quantitative minority that has a different opinion qualitatively, but the quantitative statistics prove that, according to respondents, digital imaging technology erodes the integrity of documentary photography. I make this claim because the study has measured and proved that 47% of Capetonian professional photographers believe that the photojournalistic photograph is more trustworthy in film than digitally. The study has measured and proved that a majority of Capetonian professional photographers believe that a documentary essay taken in film and processed in the traditional darkroom feels more consistently trustworthy than its digital equivalent. This study has measured and proved that half of respondents believe ease of digital alteration impacts on trust. The study has measured and shown that according to the majority of respondents documentary photography is in danger of losing its credibility.

This study has shown that there is a need for a body that clearly makes known what acceptable picture taking and digital editing entails for the professional photojournalistic photographer in South Africa.

This study has given a measurement of how the introduction of digital imaging technology has influenced the extent of experience in digital imaging technology, as opposed to film technology and the degree of camera usage, comparing digital cameras to film cameras.

This study has given a voice to the Capetonian professional photographers. Their views were noted and discussed against a backdrop of a global perspective.

This study has measured and concluded that the Capetonian professional photographers who have practiced professional photojournalism value creativity as well as truth in their photographs. This confirms what is said in the literature review (Peterich, 1957:46), namely that photojournalism is in part aesthetic art. The respondents who have practiced professional photojournalism see themselves as creative agents.

Limitations

This project did not set out to create a regulating body. It did not set out to create electronic solutions to regulating integrity in documentary photography. One limitation of this thesis is that the scope of information covered is so vast that one has to only include key information in some instances, such as for example the showing to what extent Capetonian professional photographers use digital imaging technology compared to film technology and the examination as to what acceptable editing entails.

Recommendation

As a result of this study, I recommend that a body that makes known what acceptable digital capturing and editing, such as the NPPA of the USA and Canada be created in South Africa. I recommend that if appropriate measures are introduced, such as, for example, a universal pledge gaining publications a badge that sets their visual journalism apart as ethical and trustworthy to the consumer (Wheeler, 2002: 207, 208). Members of the public must be made aware through advertising that these publications can be trusted. These publications must let their members sign a commitment to the regulating body and if they commit illicit manipulation they should be ostracised from the body and the publication.

There are freelance documentary photographers, but publications should make it a prerequisite that they belong to the regulating body, before contributing work. Of course even if there is such a regulating body, one cannot guarantee that photographers will not overstep the

bounds, but it is a substantial step in the right direction. As photographer 64 stated, those in authority should be able to demand a Photoshop (or whichever software is being used) history log file and metadata to ensure that the photo is authentic.

As shown earlier in this chapter, certain individuals who have practiced professional photojournalism showed that they favour extreme editing in some cases, which is cause for concern. I recommend that in a code of ethics this body not only make vague recommendations, but go into detail and say which types of manipulations are allowed (Rohde, 1995a:26) and to what degree it is allowed.

Suggestions for future research

After careful deliberation and consideration I realised that the following subjects are worthy of further research.

Since this Masters thesis only endeavoured to explore some aspects of certain subjects I suggest that a person or group makes an in depth and exhaustive study into what digital editing is acceptable to the photojournalistic documentary photograph. Furthermore, I suggest that a person or group makes an in depth and exhaustive study into what extent digital imaging technology is used by Capetonian photographers, as compared to film.

Since it will result in a more academically sound argument, I suggest that a person or group extends the range of this study, so that it covers the whole of South Africa. Although it would be a very arduous task, it would be well worth measuring the reactions of professional photographers throughout the country.

This study showed that there is a need to establish a body that decides what acceptable picture taking and editing is for the South African photojournalist. I suggest that a person or group makes a study on how to implement such a body and possibly takes steps to initiate it.

I conducted this study to ascertain the perspectives of Cape Town professional photographers on issues of integrity in the documentary photograph, as a result of the introduction of digital imaging technology. I suggest that an individual or group make a study to show the perspective of the public on integrity related questions, due to the introduction of digital imaging technology, especially whether the public's trust has been eroded too.

APPENDIX A
QUESTIONNAIRE

See the questionnaire on the following page.

Obtaining the perspective of the Capetonian professional photographer on issues of integrity in the documentary photograph, with special emphasis on the impact of digital imaging technology

For the purpose of this questionnaire a *documentary photograph* is defined as a *photograph taken with the purpose of recording a subject authentically*. A documentary photograph can, for example, be found in a documentary photographic essay on exhibition or as a photojournalistic photograph in a news publication.

1. In your day to day practice of photography, what is your one most preferred genre of practice (e.g. wedding photography or photojournalism)? *Even if you work in multiple genres, please mention your one most preferred genre from amongst those that you work in daily. If you are a final year photography student, or a lecturer in photography, please mention that in your answer, along with your one most preferred genre.*

Write your answer here:

2. Have you taken documentary photographs? *Select all relevant boxes.*

- I have taken documentary photographs for a newspaper
- I have taken documentary photographs for a non-fiction publication
- I have taken documentary photographs for a public exhibition
- I have taken documentary photographs for a project when I was a student
- I have taken documentary photographs to document a wedding or other social ceremony
- I have taken documentary photographs for personal purposes

If you have additional examples, please write in:

3. Have you had experience with a film camera?

- No experience
- Limited experience
- Considerable experience

4. Have you had experience with a digital camera?

- No experience
- Limited experience
- Considerable experience

5. If you selected "Considerable experience", in both in no.3 and no.4 above, which one of the following currently applies to you?

- I use only my film camera
- I use my film camera more than my digital camera
- I use both my film and digital camera more or less equally often
- I use my digital camera more than my film camera
- I use only my digital camera

6. Have you had film darkroom experience?

- No experience
- Limited experience
- Considerable experience

7. Have you had experience with photo editing software?

- No experience
- Limited experience
- Considerable experience

8. In your one most preferred genre of practice (your answer for no.1), what is important, creativity or truthfulness?
- Creativity
 - Truthfulness
 - Both are equally important
 - Both are important, but creativity is more important
 - Both are important, but truthfulness is more important
9. A press photographer can approach his work with creativity and still tell the truth.
- Strongly agree Agree Disagree Strongly disagree
10. Different messages can be conveyed by photographing a subject from different angles.
- Strongly agree Agree Disagree Strongly disagree
11. Different messages can be conveyed by choosing what to include in the frame.
- Strongly agree Agree Disagree Strongly disagree
12. In a documentary exhibition, the order in which photographs are arranged cannot change the meaning of the essay.
- Strongly agree Agree Disagree Strongly disagree
13. Which one of the following sounds most accurate to you?
- A documentary photographer merely records reality, he does not communicate the story from his own perspective
 - A documentary photographer records reality, but also communicates the story from his own perspective
 - There is no such thing as recording reality, the documentary photographer decides what story he wishes to communicate
14. It is easier to introduce untruth with digital photo editing software than in the traditional film darkroom.
- Strongly agree Agree Disagree Strongly disagree
15. Which one of the following feels more trustworthy to you? A film based documentary photograph published alongside a news article in the Sunday Times in 1975, or a digitally obtained photograph published alongside a news article in the Sunday Times in 2010?
- Digital photograph, 2010 Film based photograph, 1975 Both feel equally trustworthy to me
16. Which one of the following feels more consistently trustworthy to you?
- A documentary photographic essay taken in film and processed in the traditional darkroom
 - A documentary photographic essay taken with a digital camera and processed using digital photo editing software
 - Both feel equally consistently trustworthy to me
17. I distrust documentary photographs more, now that I know how easy it is to digitally alter them.
- Strongly agree Agree Disagree Strongly disagree
18. Due to the introduction of digital imaging technology, the practice of documentary photography...
- Is in no danger of losing credibility Is in danger of losing credibility
- Please explain *why* you chose to pick this option.
- Write your answer in the space provided on this page and the next page if needed:

19. Is it acceptable for a photograph appearing alongside a news story to be cropped using photo editing software (reframed, by excluding some of the subject matter)?

- No cropping is acceptable in a news photograph
 Slight cropping is acceptable Radical cropping is acceptable

20. Is dodging and burning in (lightening and darkening areas of a photograph) with photo editing software acceptable in the case of a photograph accompanying a news article?

- Dodging and burning in is not acceptable in a news photograph
 Very light dodging and burning in is acceptable Dramatic dodging and burning in is acceptable

21. Is it acceptable to paste an object into a photograph destined to accompany a news article (with photo editing software)?

- No pasting in is acceptable in a news photograph
 Minor pasting in is acceptable Dramatic pasting in is acceptable

22. Is it acceptable to remove an object from a news article photograph, using photo editing software?

- No removing of any object is acceptable for a news photograph
 Small unimportant objects can be removed Dramatic removal of objects is acceptable

23. This question is addressed only to respondents who have practiced professional photojournalism: Do you think that it would be a good idea to have a national regulating body, which clearly makes known what acceptable picture taking and digital editing entails, for the South African photojournalist?

- Yes No

24. In which age category do you fall?

- 18-25 26-35 36-45 46-55 56 +

25. Have you studied photography formally (technikon, university, or private institution)?

- Yes No

26. How many years/months have you practiced professional photography? *For the purpose of this questionnaire, years of study in an institution, assisting and lecturing also qualify as professional photography.*

Years: _____ Months: _____

If you have any insights you would like to share, please write them here:

LIST OF REFERENCES

- Abilock, D. 2008. Visual information literacy: Reading a documentary photograph. *Knowledge Quest*, Vol. 36(3), p7-13.
- Adams, A. 1984. *The print: The new Ansel Adams photography series / book 3*. Boston: Little, Brown and Company.
- Adobe Systems Incorporated. 2004. *About metadata*.
http://www.adobe.com/digitalimag/pdfs/about_metadata.pdf [01 August, 2011]
- Anderson, S. D. 2011. Digital image analysis: Analytical framework for authenticating digital images. Unpublished MSc thesis, University of Colorado Denver, Denver.
- Antonius, R. 2004. *Interpreting quantitative data with SPSS*. London: SAGE Publications Ltd.
- Bersak, D. R. 2006. Ethics in photojournalism: Past, present and future. Unpublished MSc thesis, Massachusetts Institute of Technology, Cambridge.
- Biernatzki, W. E. 2002. *Wheeler, Thomas H. Phototruth or Photofiction? Ethics and Media Imagery in the Digital Age*, by Thomas Wheeler. Reviewed in: *Communication Research Trends*, 21:3, Fall.
- Bissell, K. L. 2000. A return to 'Mr. Gates': Photography and objectivity. *Newspaper Research Journal*, Vol. 21(3), p81.
- Block, M. 2003. Interview: Patrick Schneider discusses the ethics of traditional photo-altering techniques in news photography. *All Things Considered (NPR News)*. [Online], 29 August. Available:
<http://web.ebscohost.com/ehost/detail?vid=6&hid=16&sid=410ba4df-b137-479f-97ee-996ddb03ac19%40sessionmgr9> [3 July 2007].
- Caplan, L. 2008. Playing it straight. *Afterimage*, Vol. 36(2), p24.
- Clarke, G. 1997. *The photograph*. Oxford, New York: Oxford University Press.
- Collins English Dictionary. 2010. *Collins: English Dictionary Definition (Meaning) of integrity*.
<http://www.collinslanguage.com/results.aspx?context=3&reversed=False&action=define&homonym=0&text=integrity> [03 August 2010]
- Cryer, P. 2005. *The research student's guide to success*. Maidenhead: Open University Press.
- Davenport, A. 1991. *The history of photography*. Boston: Focal Press.
- Davies, M. 2007. *Doing a successful research project*. New York: Palgrave Macmillan.

- Deacon, H.C. 2006. The influence of digital technology on editorial portrait photography. Unpublished BTech thesis, Cape Peninsula University of Technology.
- Farid, H. n.d. *Digital forensics and tampering*.
<http://www.cs.dartmouth.edu/farid/research/tampering.html> [07 November 2009]
- Farid, H. n.d. *Photo tampering throughout history*.
<http://www.cs.dartmouth.edu/farid/research/digitaltampering/> [03 June 2009]
- Finnegan, C. A. 2001. The naturalistic enthymeme and visual argument: Photographic representation in the “skull controversy”. *Argumentation and Advocacy*, Vol. 37(3), p133-149.
- Freund, G. 1980. *Photography & society*. London: The Gordon Fraser Gallery Ltd.
- Gefter, P. 2006. Photographic icons: Fact fiction or metaphor. *Aperture*, 185, p50-55.
- Gillham, B. 2004. *Developing a questionnaire*. London: Continuum.
- Goldberg, V. 1991. *The power of photography: How photographs changed our lives*. New York, London, Paris: Abbeville Press.
- Goldberg, V. 2004. When the shooting started: A century and a half ago, Britain’s Roger Fenton pioneered the art of war photography.(Indelible Images). *Smithsonian*, Vol. 35(7), p23.
- Golden, R. 2008. *Masters of photography*. London: Carlton Books Ltd.
- Grundberg, A. 1999. *Crisis of the real: Writings on photography since 1974*. New York: Aperture Foundation, Inc.
- Hague, P. 1993. *Questionnaire design*. London: Kogan Page Limited.
- Hancock, M. 2009. *Ethics in the age of digital manipulation*.
<http://www.globaljournalist.org/stories/2009/07/01/ethics-in-the-age-of-digital-manipulation/> [23 October 2009]
- Hindman, B. 1996. Perceptions, perspectives, parameters: the DM/nature debate. *PSA Journal*, Vol. 62(8), p16.
- Howe, P. 2002. Exposure to light: the photographer’s eye in the digital world. *Columbia Journalism Review*, Vol. 41(2), p22.
- Ingedew, J. 2005. *Photography*. London: Laurence King Publishing Ltd.
- Jammes, A. & Janis, E.P. 1983. *The art of French calotype*. USA: Princeton University Press.

- Johnston, C. 2003. Digital deception (Photo Journalism Ethics). *American Journalism Review*, Vol. 25(4), p10.
- Kember, S. 2003. 'The shadow of the object': Photography and realism. In Wells, L. (ed). *The photography reader*. London: Routledge: 202-217.
- Kozloff, M. 1994. *Lone visions, crowded frames: Essays on photography*. Albuquerque: University of New Mexico Press Albuquerque.
- Lang, D. 2006. *Charlotte Observer photographer fired for altering colors*.
http://www.pdnonline.com/pdn/newswire/article_display.jsp?vnu_content_id=1002914629 [21 July 2007]
- Langford, M. & Bilissi, E. 2011. *Langford's advanced photography: The guide for aspiring photographers*. Oxford: Elsevier.
- Leedy, P.D. & Ormrod, J.E. 2005. *Practical research: Planning and design*. Upper Saddle River: Pearson Education, Inc.
- Lester, P. M. 1988. Faking images in photojournalism. *Media Development*, 1, p41-42.
- Lister, M. 1997. Photography in the age of electronic imaging. In Wells, L. (ed). *Photography: A critical introduction*. London: Routledge: 249-291.
- Lister, M. 2003. Extracts from Introduction to the photographic image in digital culture. In Wells, L. (ed). *The photography reader*. London: Routledge: 218-227.
- Library of Congress. n.d. *A Tluwulahu mask--Tsawatenok*.
<http://www.loc.gov/pictures/collection/ecur/item/2003652778/> [23 January 2014]
- Library of Congress. 2010. *The valley of the shadow of death*.
<http://www.loc.gov/pictures/collection/ftncnw/item/2001698869/> [23 January 2014]
- Library of Congress. 2013. *Dorothea Lange's "Migrant Mother" Photographs in the Farm Security Administration Collection: An Overview*.
http://www.loc.gov/rr/print/list/128_migm.html [23 January 2014]
- Lubetkin, S. 2006. *Excuse me, could you move those pyramids over there where the light is better?* http://www.lubetkin.net/blog/archives/2006_08_01_archive.html [23 October 2009]
- Maniscalco, L. 2010. Photojournalism (PJ) ethics question. *PSA Journal*, Vol. 76(7), p7.
- Maniscalco, L. 2011. What is an eligible photojournalism image? *PSA Journal*, Vol. 77(2), p19.

- Manovich, L. 2003. The paradoxes of digital photography. In Wells, L. (ed). *The photography reader*. London: Routledge: 240-249.
- McLeod, T. M. et al. (eds). 1989. *The Collins paperback thesaurus in A-to-Z form*. London: Collins.
- Meyer, C. n.d. *The FSA photographs: Information, or Propaganda?*
<http://128.197.26.34/cas/writing/docs/wrjournal1meyer.pdf> [29 September 2009]
- Meyer, P. n.d. *The L A Times fires a photographer*.
<http://www.zonezero.com/magazine/articles/altered/altered.html> [21 February 2013]
- Meyer, P. n.d. *Why World Press Photo, is Wrong!*
http://www.zonezero.com/zz/index.php?option=com_content&view=article&id=142:why-world-press-photo-is-wrong&catid=1:pedro-meyers-editorial&Itemid=1&lang=en [04 October 2010]
- Meyer, P. 1995. *Truths & fictions: A journey from documentary to digital photography*. Los Angeles: Aperture Foundation, Inc.
- Meyer, P. 2003. *In defense of photographer Patrick Schneider and the fiction of a "Code of Ethics"*. <http://www.zonezero.com/editorial/octubre03/october.html> [18 March 2007]
- Moorhead, T. J. 1996. Defining photojournalism. *PSA Journal*, Vol. 62(3), p16.
- Mouton, J. 2006. *How to succeed in your Master's & Doctoral studies*. Pretoria: Van Schaik Publishers.
- National Press Photographers Association. 1991. *Digital manipulation code of ethics*.
http://www.nppa.org/professional_development/business_practices/digialethics.html [19 October 2009]
- National Press Photographers Association. 1999. *National Press Photographers Association code of ethics*. <http://www.asne.org/ideas/codes/nppa.htm> [17 May 2007]
- Neidich, W. n.d. *Contra-curtis early American cover-ups*.
<http://www.americanhistoryreinvented.com/main.html> [24 September 2009]
- Neri, G. n.d. *Ethics and photography*. <http://digitaljournalist.org/issue0101/neri.htm> [05 July 2007]
- Neuman, 2000. *Social research methods: Qualitative and quantitative approaches*. Needham Heights: Allyn & Bacon.
- Newhall, B. 1957. Photography as documentation. *Image*, Vol. 6(10), p232.

- Newhall, B. 1999. *The history of photography*. Boston, New York: The Museum of Modern Art, New York.
- Openheim, A. N. 1973. *Questionnaire design, interviewing and attitude measurement*. London: Educational Books Ltd.
- Orvell, M. 2003. *American photography*. Oxford: Oxford University Press.
- Peterich, G. 1957. Photojournalism, pictures for magazines and newspapers. *Image*, Vol. 6(2), p46.
- Petrovic, P. 2005. Between visibility and invisibility: Baudrillard, Jean-Luc Marion and Lance Olsen's Girl Imagined by Chance. *Extrapolation*, Vol. 46(2), p 246.
- Price, D. 1997. Surveyors and surveyed. In Wells, L. (ed). *Photography: A critical introduction*. New York, London: Routledge: 55-102.
- Price, D. & Wells, L. 1997. Thinking about photography. In Wells, L (ed). *Photography: A critical introduction*. London: Routledge: 9-54.
- Pyke, R. E. 1998. Digital images and photojournalism. *PSA Journal*, Vol. 64(7), p22.
- Randhawa, B. S. & Coffman, W. E. 1978. *Visual learning, thinking and communication*. New York: Academic Press.
- Ricchiardi, S. 2007. Distorted picture: thanks to Photoshop, it's awfully easy to manipulate photographs, as a number of recent scandals make painfully clear. Misuse of the technology poses a serious threat to photojournalism's credibility. *American Journalism Review*, Vol. 29(4), p36.
- Rohde, R. A. 1995. Manifesto for digital imaging and manipulation. *PSA Journal*, Vol. 61(3), p26.
- Rohde, R. A. 1995. Tune-up or major overhaul: whiter truth? *PSA Journal*, Vol. 61(12), p8.
- Rouges, L. 2007. *Photos d'histoire*.
<http://lunettesrouges.blog.lemonde.fr/2007/02/02/photos-dhistoire/> [20 July 2007]
- Schwartz, D. 1999. *Photographs as facts*.
http://sjmc.cla.umn.edu/faculty/schwartz/contents/photographs_as_facts/photographs_as_facts.html [21 October 2009]
- Silverman, D. 2003. *Doing qualitative research*. London: SAGE Publications Ltd.
- Slade, G. & Stahl, J. R. 1995. *Truths & fictions*, by Pedro Meyer. Reviewed in: *Art Documentation: Bulletin of the art libraries society of North America*, 14:4, Winter.

- Somekh, S. 1996. Conventional versus digital: parting ways? *PSA Journal*, Vol. 62(8), p14.
- Sontag, S. 1986. *On Photography*. Harmondsworth: Penguin Books Ltd.
- Spain is Culture. n.d. *Joan Fontcuberta*.
http://www.spainisculture.com/en/artistas_creadores/joan_fontcuberta.html [9 January 2014]
- Stolte, J. 2005. Photojournalism: connections. *PSA Journal*, Vol. 71(8), p32.
- Taylor, J. 2005. Iraqi torture photographs and documentary realism in the press. *Journalism Studies*, Vol. 6(1), p39-49.
- Van Riper, F. n.d. *Manipulating truth, losing credibility*.
<http://www.washingtonpost.com/wp-srv/photo/essays/vanRiper/030409.htm> [22 February 2013]
- Vervoort, P. 2004. Edward S. Curtis's "representations": Then and now. *American Review of Canadian Studies*, Vol. 34(3), p463.
- Wehmeier, S. et al. (eds). 2005. *Oxford advanced learner's dictionary*. Oxford: Oxford University Press.
- Wells, L. 2002. (ed). *Photography: A critical introduction*. London: Routledge.
- Wells, L. 2003. (ed). *The photography reader*. London: Routledge.
- Wheeler, T. 2002. *Phototruth or photofiction?: Ethics and media imagery in the digital age*. Mahwah: Lawrence Erlbaum Associates, Inc., Publishers.
- Winslow, D. 2006. *A QUESTION OF TRUTH: Photojournalism and visual ethics*.
http://www.nppa.org/news_and_events/news/2006/08/ethics.html [22 October 2009]
- Winslow, D. 2007. *Toledo Blade discovers dozens of doctored Detrich photos*.
http://www.nppa.org/news_and_events/news/2007/04/toledo05.html [19 October 2009]
- World Press Photo. 2010. *Announcement of disqualification*.
http://www.worldpressphoto.org/index.php?option=com_content&task=view&id=1819&Itemid=50 [04 October 2010]

Personal references

- Meyer, I. 2007. Comments by lecturer 12 April 2007, Cape Town.

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BIOGRAPHICAL SKETCH

I matriculated at Abbot's College with numerous academic awards. Subsequently, I studied Hotel Management at Varsity College in Rondebosch. After this, I completed a beginner's course in photography at BC Productions. Thereafter, I completed a three year National Diploma in Photography at Peninsula Technikon, which is now known as the Bellville campus of the Cape Peninsula University of Technology. Following this, I completed my Bachelors Degree of Technology in Photography at the Cape Peninsula University of Technology. I lectured in photography, for a year, at the Cape Peninsula University of Technology. I am currently in the process of finalising my Masters Degree of Technology in Design, specialising in photography, at the Cape Peninsula University of Technology.