

Bibliography

Books, monographs and exhibition catalogues

Ameluxen, Hubertus von Stefan Iglhaut, and Florain Rötzer, eds. *Photography after Photography: Memory and Representation in the Digital Age*, Amsterdam: G+B Arts, 1996.

The exhibition catalogue *Photography after Photography*, accompanied an exhibition of the same name, organized in Munich in 1995. The exhibition explores the shifts in photography as it moves from analog to digital and touches upon the anxiety surrounding the truth of digital imagery.

Batchen, Geoffrey, *Burning with Desire: The Conception of Photography*, Cambridge, MA: MIT Press 1997.

An analysis of photography's origins, beginning with the Age of Enlightenment and concluding with computerized imagery's threat to photography. The final chapter, *Epitaph*, effectively summarizes the two key issues facing photography in the digital age, one technological and the other epistemological. The former is a loss of faith in photography's claim to objectivity and the latter refers to the inability to distinguish an original from its simulations and by extension truth from falsehood. Batchen concludes that photography has always been marked by technological development and therefore digital imaging is simply another marker. Photography may be ending yet the photographic as a set of conceptual relationships will continue to expand.

Batchen, Geoffrey, 'Photogenics', *History of Photography* 22 (Spring 1998), 18-26.

The article explores digital imaging and the changing emphasis upon originals, duplicates and copyright. Corbis, the image bank founded by Bill Gates is the focus of Batchen's article; specifically their approach to copyright, authorship and licensing. The article raises questions concerning the future of photography, such as, acknowledgement of the artist, and the integrity of the original image.

Besser, Howard, *Introduction to Imaging*, rev. ed., Introduction To series, eds., Sally Hubbard and Deborah Lenert. Los Angeles: Getty Research Institute, 2003.

See literature summary.

Druckrey, Timothy, ed., *Electronic Culture: Technology and Visual Representation*, New York: Aperture 1996.

A compilation of texts that assess the impact of the digital revolution on culture and visual literacy in the late twentieth century. The introduction of digital imaging has changed our understanding of photography and its claim on representing the 'truth'.

Essays by David Tomas and Kevin Robins address the contextual differences between traditional or representational photography and the post-photographic practice of virtual reality.

Druckrey, Timothy, ed., *Iterations: The New Image*, New York: International Center of Photography 1993.

The publication accompanies the exhibition of the same title, *Iterations*, and contains introductory essays, artist statements and images that address the role of technology in sculpture and screen-based art with emphasis on photography-based artworks. Druckrey's essay titled *Revisiting Technology*, explains the rise of photography in art history and its relationship with popular culture. Druckrey discusses the distinctions between photography, interactive media, and computer art. He concludes with instructions to distinguish between communication and discourse and to disregard the outdated concern over fact or fiction.

Goodman, Nelson, *Languages of Art*. Indianapolis: Bobbs-Merrill Co. Inc., 1968.

See Literature Summary.

Gross, Larry, John Stuart Katz, and Jay Ruby, ed., *Image Ethics in the Digital Age*, Univ. Minnesota Press. 2003.

A collection of essays authored by individuals from the fields of journalism, media studies, and law that address the challenges presented by technology and assess their implications for personal and societal values. Topics include the threat to the integrity of photojournalism in the face of visual editing software, the monopolization of image archives, and the increasing complexity of copyright and fair use laws. Beginning with early photojournalism and documentary film, the book charts the development of visual media and image ethics.

Kroker, Arthur and Marilouise Kroker, eds. *Digital Delirium*. New York: St.Martin's Press, 1997.

A collection of interviews and essays that explore the theory and expression of techno-culture in the United States, Japan and Europe. Lee Manovich's essay titled *The Aesthetics of Virtual Worlds*, discusses digital realism and representation starting with the introduction of photographic montage and assembling collage from existing cultural production.

Lister, Martin, ed. *The Photographic Image in Digital Culture*. New York: Routledge, 1995.

This text explores the technological transformation of the photographic image. Contributors investigate the relationship of technological change to visual culture; the new discourses of "techno-culture"; the abstraction of visual information into data; the questions posed to artistic originality and authorship as photography moves from documentation to art.

Lovejoy, Margot, *Postmodern Currents: Art and Artists in the Age of Electronic Media*, Englewood Cliffs, NJ: Prentice Hall 1992.

An overview of how technology has changed the manner in which art is created as well as the reason why. Lovejoy presents a cross-disciplinary analysis of the relationship between technological development and aesthetic change throughout the twentieth century. The prejudice

against electronic media is related to the fear of mechanical devices as a substitute for art, likened to the response photography received in its infancy. Lovejoy raises concern with the cost of technology and its alliance with elite power structures in society. By highlighting the work of artists such as Andy Warhol and Jenny Holzer, Lovejoy explains the methods by which artists subvert technology.

Mitchell, William J., *The Reconfigured Eye: Visual Truth in the Post-photographic Era*, Cambridge, MA: MIT Press 1992.

See Literature Summary.

Penny, Simon, ed., *Critical Issues in Electronic Media*, Albany, NY: State University of New York Press 1995.

A collection of essays that explore the relationship of culture and art from within the framework of technological change. The anthology addresses the way in which the digital era is redefining our experience of space and time. The confusion surrounding intellectual copyright, mass production and loss of the original are some of the techno-cultural topics discussed by authors from varied disciplinary backgrounds.

Ritchin, Fred, *In our own Image: The Coming Revolution in Photography*. New York: Aperture 1990.

Ritchin explores the impact of technology on visual literacy and cultural definition. With an emphasis on photojournalism, Ritchin discusses the role of documentation and the future possibilities of incorporating the computer and the camera. The chapter titled "Bringing Back Marilyn and Other Complications," discusses the malleability of digital imaging and how this affects the concept of an original. The role of the photographer is questioned in light of images simulated by mathematical equations. Ritchin's conclusion heralds a redefinition of the relationship between photography and society, a shift from perception to conceptualization.

Ritchin, Fred. "Photojournalism in the Age of Computers." In Carol Squiers, ed., *The Critical Image: Essays on Contemporary Photography*. Seattle: Bay Press, 1990.

See Literature Summary.

***The Second Emerging Expression Biennial: The Artist and The Computer* (exhibition catalogue), Bronx, NY: The Bronx Museum of the Arts 1988.**

The exhibition catalogue presents a curatorial overview of the artists and their work. Artists working with computers and photography are discussed separately from artists working with digital video and film. The objectives of the exhibition are to explore and document the methods in which contemporary artists are using computer technology. The production of a catalogue enables a larger audience of curators, critics and art historians to view work on exhibit.

Wombell, Paul, *Photovideo: Photography in the Age of the Computer*, London: Rivers Oram Press 1991.

The theoretical and physical shift from photography to digital media is explored in this collection of essays accompanying the exhibition Photovideo. The works and writings redefine photography as an interactive medium made possible through technological innovations. Fred Ritchin's essay on the malleability of digital imaging questions the power of photography to represent objectivity to the public. Ritchin posits that the power of photography to incite debate and to outweigh words has ended. A series of interviews conducted by Trisha Ziff with exhibition artists' Esther Parada, Hector Méndez Caratini and Pedro Meyer reveals the challenges of creating interactive digital art. Pedro Meyer discusses the presentation platform of his digital works, however issues of preservation and longevity are not addressed.

Chapters in books

Benjamin, Walter, 'The Work of Art in the Age of Mechanical Reproduction', in *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn, New York: Harcourt Brace & World, 1955.

See Literature Summary.

Grundberg, Andy. 'Photography in the age of electronic simulation,' in *Crisis of the Real*, 222-229, New York: Aperture, 1990.

Grundberg charts the development of photography and its alignment with technology since the nineteenth century. The shift is located in the manner by which we as a society understand photographs. The role of the photograph in society is changing from an objective mirror to an artifact. Additionally, the digital image disrupts our faith in photographic objectivity and replaces the value of the original with an abundance of disposable multiples. Grundberg concludes by stating that the electronic future is inevitable.

Lister, Martin. 'Photography in the age of electronic imaging', in *Photography: a Critical Introduction*, ed. Liz Wells, 249-291, London: Routledge 1997.

The chapter aims to review the debate surrounding the significance of new image technologies, identified as the 'post-photographic era'. Emphasis is upon the ideas that explore the shift in photography from analog to digital as opposed to the actual changes in practice and production. Changes to visual culture, social use of photography, and public views on the truth of photographs are discussed in the chapter. Lister concludes with an explanation of how digital image technology has built upon the existing framework of photographic culture, yet surpasses it. The 'post-photographic era' should not be simplified into an opposition or refutation of traditional photography, instead Lister encourages a discourse that explores alternative ways of thinking about visual culture.

Journal articles

Ainsworth, John, 'Taking a Straight Approach', *Photographic Journal (UK)* 136 (May 1996), 255-257.

This essay draws a parallel between image manipulation by computers and photographic manipulation by darkroom techniques.

Aoki, Akira, 'Digital photography's promises and challenges', *Photographic Journal (UK)* 136 (September 1996), 374-75.

The essay combines text and image to explain the process of digital photography. Aoki defines digital photography as the creative product of either an analog photograph that is scanned, digitally processed and outputted or a photograph that is captured with a digital device, and similarly processed and outputted. Emphasis is made of the capability to store images on compact discs without risking the physical deterioration commonly found when preserving analog film and prints.

Awe, Janet, 'Digital Imaging and the Copyright Traps', *Photographic Journal (UK)* 135 (October 1995), 360-364.

Awe explains the copyright challenges posed by image manipulation, such as digitally cropping or altering existing photographs with computer software. A summary of the current copyright laws for computer generated art and photography are offered.

Batchen, Geoffrey, 'Phantasm: digital imaging and the death of photography', *Aperture* 136 (Summer 1994), 46-51.

An essay about the theoretical and practical repercussions of computer-driven imaging on photography's alleged 'truth value.' Batchen offers a future in which computer operators are able to produce printed images that are "indistinguishable in look and quality" from traditional photographs. Batchen equates traditional pictorial and darkroom techniques with digital manipulation. The difference rests in photography's claim to objectivity and digital imaging's "overtly fictional process." (48) Batchen explains the shift as both a question of seeing and of being. Photography in the electronic age requires a rethinking of its meaning in both the past, present and future.

Druckrey, Timothy, 'From Dada to digital: montage in the 20th century', *Aperture* 136 (Summer 1994), 36-59.

Druckrey places photography and montage into a historical framework. Photography's alignment with 'truth' and 'fact' is traced throughout art movements such as Dada, Surrealism and Pop. Druckrey recognizes that digital technology vacillates between being and not, 'the actual and the virtual' and in turn disrupts photography's grasp on reality. He concludes with the observation that "objects are not recorded in this medium as much as they are rendered." (7)

Handy, Ellen, 'Fixing the art of digital photography: electronic shadows', *History of Photography* 22 (Spring 1998), 7-13.

The title refers to the origins of photography as the 'fixer of shadows', yet pushes it further by stating that digital images are 'shadows of thoughts'. Digital image is an umbrella term that encompasses four categories: digital prints produced from a photographic image, digital prints produced from a digital file in which a computer has manipulated a photographic image, digital prints produced from a digital camera or capture device, the last category exists on the computer screen and is disseminated as data and is not produced as a digital print. Each category challenges existing beliefs about photography. Handy asserts in her conclusion that traditional and digital photography are equally subjective in their representation and thus digital imaging does not herald a revolution.

Martinez, Cristina Sofia, 'Art and law in the age of digital production', *History of Photography* 22 (Spring 1998), 14-17.

A discussion on the ways in which technology dismantles the boundaries between the disciplines of law and art. Many of the challenges faced by visual art in the digital environment are also confronting law. The concepts of original and fixed, copyright law, authenticity and legal evidence requirements, and the role of artists and lawyers are no longer adequate when applied to new media. Electronic technology presents lawyers and artists with new methods for accessing and using vast amounts of information. Law libraries and art museums are digitizing their holdings in an effort to make them available to a larger audience.

Pollard, John P., 'Threats and New Challenges: effects of digital imaging', *Photographic Journal (UK)* 135 (October 1995), 356-58.

Pollard discusses the effects of digital cameras and processing techniques on the availability of traditional and alternative analog photographic materials. He concludes that digital options will not invalidate traditional photography, however it will cause a re-assessment of the direction of photographic practice.

Schwartz, Joan M., 'We make our tools and our tools make us: Lessons from Photographs from the Practice, Politics and Poetics of Diplomats', *Archivaria*, 40 (Fall 1995): 40-74.

See Literature Summary.

Thompson, Jerry L., 'Truth and Photography', *Yale Review*, 90 (Jan 2002):25-53.

See Literature Summary.

Warburton, Nigel, 'Authentic Photographs', *The British Journal of Aesthetics*, v37, n2, (April 1997): 129-138.

See Literature Summary.

Online

McCarvel, Roderick T. *You Won't Believe Your Eyes: Digital Photography as Legal Evidence.* (April 15, 1995)

Available Internet:

<http://www.seanet.com/~rod/digiphot.html>

See Literature Summary.

Chess, Shira . *Cyborg Children in Digital-Land: the Works of Simen Johan,* (2003).

Available Internet:

<http://www.google.com/search?q=cache:Df19qDyVOmgJ:pages.emerson.edu/courses/Spring03/MA663/papers/shirachess.pdf+Shira+Chess,+Cyborg+Children+in+Digital-Land:+the+Works+of+Simen-Johan&hl=en&ie=UTF-8>

See Literature Summary.

Literature Summaries

Article Summaries from the Digital Photography Bibliography

(May 30, 2004)

Marta Braun

RA Jessica Bushey

No.1

Ritchin, Fred. "Photojournalism in the Age of Computers." In Carol Squiers, ed., *The Critical Image: Essays on Contemporary Photography*. Seattle: Bay Press, 1990.

Ritchin presents an overview of the implications arising from the application of computer technology to photography, concentrating on the realm of photographic journalism. In contrast to earlier methods of manually altering photographs, current computer driven manipulation is quick and seamless. Ritchin addresses the ethical and factual problems that arise out of computer alteration and suggests redefining photojournalism as editorial photography.

Ritchin also raises question with the ownership and copyright of images taken by one person, yet digitally manipulated by another. He questions the path of ownership and the ability to locate the original image or source of digital photographs. Furthermore Ritchin points to the lack of an actual negative or "original" in digital cameras as the cause of additional problems of image authentication.

Ritchin proposes a method of redefining photography to ensure the public's trust in photography. Specific terminology should be employed to differentiate physically manipulated photographs from other types of images. The photographer must be respected as the author of the image and tampering by others would violate this point of view. Ritchin concludes that without these measures, confidence in photography as evidence will not survive.

"Or, conversely, a photographer may decide to significantly modify the image before transmitting or printing it, and the editor might then be unable to detect what has happened. The problems of image authentication become less obvious not only in photojournalism, but also in a court of law, the enforcement of missile verification treaties, and other documentary uses of the photograph." (35)

"What can be done to safeguard the photograph's documentary authority in the age of the computer? It seems inevitable that the photograph will be thought of as both less reliable and more inventive in its public and private applications, extending from its use on the front page of a newspaper to snapshots of one's relatives." (35)

"The photographer will have to be considered to be the author of his or her images, responsible for the accuracy of what is in them." (36)

For the terminology group, keywords and concepts that occur within this work:

- Accuracy

- Authentication
- Authority

No.2

Besser, Howard, Introduction to Imaging, rev.ed., Introduction To series, eds., Sally Hubbard and Deborah Lenert. Los Angeles: Getty Research Institute, 2003.

The revised edition of *Introduction to Imaging* offers the basic principles and technical terms associated with the creation and management of a digital image collection. Besser frames the procedures in a manner that offers varying levels of control depending on the predicted use or purpose of the digitized images. An introduction to concepts such as master files, metadata, security and long-term management are located throughout the separate chapters. An overall concern for the creation of digital images that can remain relevant and accessible in the future makes this a unique and invaluable text. Besser concludes that current digital preservation strategies are flawed and therefore an ongoing maintenance strategy must be upheld along with policy reassessment and technological upgrades.

“The masters should then be processed into the chosen preservation strategy, and access to them should be controlled in order to ensure their authenticity and integrity.” (45)

“Concerns about data integrity, authenticity, and security are not unique to image management but are common to the management of all types of networked information resources.” (57)

“Migration, the periodic updating of files by resaving them in new formats so they can be read by new software, is where preservation starts to become more problematic.” (61)

“Emulation takes the alternative approach of using software to simulate an original computer environment so that ‘old’ files can be read correctly, presuming that their bit streams have been preserved.” (61)

“Authenticity refers to the trustworthiness of a digital entity, to its being what it professes to be, as regards its identity, origin, history, authorship, integrity, and/or the accuracy with which it documents an original work. The degree to which authenticity can be ascertained or guaranteed is likely to be determined by the quality of custody or management an entity enjoys over its life cycle. “ (Glossary 68)

“A digital entity has integrity when it is whole and sound or when it is complete and uncorrupted in all its essential respects.” (Glossary 75)

For the terminology group, keywords and concepts that occur within this work:

- Authenticity
- Integrity
- Migration
- Emulation

No.3

Mitchell, William J., *The Reconfigured Eye: The Visual Truth in the Post-Photographic Era*. Cambridge: MIT Press, 1994.

Mitchell explores the capacity of photography as evidence, of depicting Aristotle's definition of truth - to say of what is that it is. Mitchell investigates the subversion of photography's claim to truth by the emergence of digital imaging.

Mitchell explains a spectrum of creative production with algorithmic and nonalgorithmic end points. He places photography closest to algorithmic conditions because they are automatically constructed with little information about the intent of the artist. Mitchell concludes by pointing out that algorithmic images provide trustworthy evidence. One can defend trustworthiness by proving that standard procedures were followed, and if need be, the original can be produced for inspection. Mitchell questions where digital images fall within the spectrum and how they can be proven.

Mitchell examines verifying the provenance of a photograph as a method of establishing its authenticity. Mitchell questions the tradition of attributing status to photographic originals and copies by posing that if the negative is the original than who is the author of the printed image if it differs from the author of the negative?

Mitchell introduces the problems posed by the digital image, an entity that has no unique negative. He proposes that the rendering procedure may stand for the original in the digital environment. Mitchell concludes that the only difference between an original digital file and a copy is in the tag recording time and date of creation.

Mitchell further investigates the claim that the lineage, or authorial intention of an image file is untraceable. He likens the digital image to an intellectual structure having its own dynamics and values. The digital structures do not just refer to each other file, they are actually made from each other.

The confusion surrounding ownership and copyright of digital images is in part determined by their fundamental differences from photography. The digital image does not have a negative and the distribution of copies cannot be controlled. By disconnecting images from solid substance, Mitchell purports that visual truth can no longer be guaranteed.

“Finally, in addition to examining an image for internal coherence and considering whether it can stand up to cross-checking against what we know of a situation, we might ask for evidence that it is an authentic record – just as we might question whether a contract or will is genuine.” (43)

“But most discussion focused on the question of whether the image had a verifiable provenance that could establish its authenticity.” (47)

“So the claim of authenticity was based on identification of a photographer..., a time and place of exposure..., and a chain of transmission.” (47)

“As framed above, the question of authenticity suggests that images are unique, that they are produced by individuals, and that there is a fundamental difference between originals and copies.” (49)

“As digital images have become increasingly important items of exchange in the worldwide electronic-information economy and as traditional conceptions of image truth, authenticity, and originality have consequently been challenged, ethical and legal dilemmas have emerged.” (52)

For the terminology group, keywords and concepts that occur within this work:

- Authenticity
- Authentic
- Original
- Copy
- Unique

No.4

Thompson, Jerry L., ‘Truth and Photography’, *Yale Review*, 90 (Jan 2002):25-53.

Thompson discusses the concept of truth throughout the development of photography during the late nineteenth and early twentieth century.

“By the 1860’s, America was awash in photographs, and the term photographic had entered the language as a measure of accurate verisimilitude. For these early workers, verisimilitude equaled truth. For them, truth in a photograph meant that the picture looked exactly like a view seen from a camera’s exact position (with one eye closed).” (27)

“Truth in photography may involve some degree of verisimilitude to the object seen, but the primary reference shifts from object to subject. Truth now refers not to accurate representation of the object seen but, rather, to accurate representation of the artist’s response to the object or view.” (28)

“The truth it [photography] contains is based on the accuracy of its grasp of the visible, physical reality – on its accurate report of the scene in front of the lens – but the larger truth, greater than this, is the picture’s fidelity, its correspondence, to Stieglitz’s experience of life as it was felt at the moment of the picture’s making.” (36)

For the terminology group, keywords and concepts that occur within this work:

- Accuracy
- Accurate

No.5

Schwartz, Joan M., ‘We make our tools and our tools make us: Lessons from Photographs from the Practice, Politics and Poetics of Diplomats’, *Archivaria*, 40 (Fall 1995): 40-74.

Schwartz discusses the nature of photographic archives through the application of diplomatic concepts. The subject of Schwartz's analysis is traditional ‘chemical-based’ photography, not digital/ electronic imaging.

“Its [diplomats] origins were ‘strictly linked to the need to determine the authenticity of documents, for the ultimate purpose of ascertaining the reality of rights or truthfulness of facts.’ How do the concepts of authenticity, authority, and validity relate to photographic documents?” (44)

“What in fact do we really seek when we apply the concepts of authenticity, authority, and validity to photographs? While the visual authority of the photograph is now increasingly undermined by the wizardry of digital technology, the ‘truthfulness of facts’ in a photograph has always been presumed to reside in its verisimilitude.” (44)

“Photographs derive the authority of their content from realism and accuracy, what J.B.Harley calls ‘talismans’ of authority: archival photographs convey their message through function and context. Photographs derive the authority of their content from realism and accuracy, ... in the case of photographs, truthfulness and authority are based on mechanical origins.” (44)

“In the process of inquiring into the authenticity and genuineness of photographs, we are forced to examine the photograph as a physical object and a visual image. The former requires optical or chemical verification to confirm its origins in processes that are considered photographic... It is here that the diplomatic notion of authenticity is useful, because it requires that we analyze the photograph in terms of its physical composition, the correspondence between the image and reality it depicts, and the relationship between the image and its label in order to understand the functional context in which the photographic image is transformed into a photographic document.” (45)

“While the negative may in fact be ‘the truest record’ of what was in front of the lens, it is not the document intended to convey a message to an audience.” (46)

“In a theoretical exploration of the ‘true nature’ of photographs, Rudolf Arnheim suggests that, ‘in evaluating the documentary qualities of a photograph we ask three questions: Is it authentic? Is it correct? Is it true? Authenticity... requires that the scene has not been tampered with.’ (Footnote #34, 68)

For the terminology group, keywords and concepts that occur within this work:

- Authority
- Accuracy
- Authenticity

No.6

Benjamin, Walter, ‘The Work of Art in the Age of Mechanical Reproduction’, in *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn, New York: Harcourt Brace & World, 1955.

Benjamin discusses the invention of photography and film within a socio-political framework. The key component to Benjamin’s analysis of art (camera based) is the principle of reproduction. He asserts that the introduction of mechanical reproduction alters the nature of art and our perception of reality.

“The presence of the original is the prerequisite to the concept of authenticity.” (3)

“The authenticity of a thing is the essence of all that is transmissible from its beginning, ranging from its substantive duration to its testimony to the history which it has experienced.” (3)

“From a photographic negative, for example, one can make any number of prints; to ask for the ‘authentic’ print makes no sense. But the instant the criterion of authenticity ceases to be applicable to artistic production, the total function of art is reversed.” (5)

For the terminology group, keywords and concepts that occur within this work:

- Authenticity
- Authentic
- Original

No. 7

McCarvel, Roderick T. *You Won’t Believe Your Eyes: Digital Photography as Legal Evidence*. (April 15, 1995)

Available Internet:

<http://www.seanet.com/~rod/digiphot.html>

McCarvel gives an overview of digital photography and the ability of digital images to be accepted in court as real evidence, not demonstrative. McCarvel is concerned with the integrity of visual evidence. Digital photography is described as: images captured with a digital camera, images captured by a scanner or computer, sonograms, infrared images and X-rays.

“Some courts will rule that a photograph is self-authenticating, or presumptively authentic. If the authenticity of a photograph is challenged, it is usually a question for the trier of fact to settle.” (Part 3: Existing approaches to Photographic and Computer Evidence)

“The Federal Rules of Evidence go further, defining ‘any printout or other output readable by sight, shown to reflect the data accurately’ as an ‘original’ of the digital record.” (Part 4: Computer Data as Evidence)

“By expressing a judicial preference for originals over copies, the rule presumes that originals are distinguishable from copies – and ignores the possibility that perfect copies may be more accurate than an edited ‘original.’” (Part 3: Can Existing Doctrine be Applied to Digital Photographs?)

“As the conventional photograph goes the way of the horse drawn carriage and the vinyl phonograph record, courts and legislatures will have to establish procedures to assure the accuracy and integrity of visual evidence admitted into legal proceedings.” (Part 4: Responding to the Problem of Digital Photography.)

“As digital cameras replace conventional cameras, courts and legislatures have the power – and the responsibility – to require a stronger showing of authenticity than has been required to date when photographs are offered in evidence.” (Part 4: Responding to the Problem of Digital Photography.)

“A society which has learned to presume that ‘seeing is believing’ may well prefer image-capturing devices that retain, by design, an assurance of authenticity.” (Part 4: Responding to the Problem of Digital Photography.)

For the terminology group, keywords and concepts that occur within this work:

- Authenticity
- Integrity

No.8

Warburton, Nigel, ‘Authentic Photographs’, *The British Journal of Aesthetics*, v37, n2, (April 1997): 129-138.

The article examines candidates for authenticity in photographic art to provide a framework for deciding what is as an authentic photograph. Warburton attaches the question of authenticity to the process of creation. Warburton asserts that the electronic environment will force a shift in authenticity due to increasing copy capabilities. Warburton draws on the work of Nelson Goodman in an effort to explain photography as a two stage art form likened to the musical score and its performance.

“Authenticity is usually only discussed in relation to photography when there is a question of deception. “ (1)

“The authenticity of a photographic print should be based on certification by the photographer.” (1)

“The authenticity issue arises for photographic art not only because of questions about deception, but also because there are no coherent criteria, or at least no universally accepted conventions, about what, if anything, is to count as an authentic photographic print.” (2)

“As Goodman points out, the print need not be made by the artist, though this is often the case: ‘authenticity in an autographic art always depends upon the object’s having the requisite, sometimes rather complicated, history of production but that history does not include ultimate execution by the original artist.’ “ (5)

“However, as we shall see when we turn to photography again, the question of the authenticity of a print, at least in the realm of art, is intimately connected with the embodying of artistically relevant intentions.” (6)

“Here I shall outline the main features of the existing conventions of authenticity in photographic art. An authentic print is one which has been certified. What I mean by this is that status has been conferred upon it by the photographer. Consequently only the photographer can determine that a print is of sufficient quality for it to count as an authentic print.” (6)

“Even if two prints were virtually (or even actually) indistinguishable, only the one certified by the photographer would count as genuine or authentic.” (7)

“A consequence of this conception of authenticity is that uncertified prints can never be authentic.” (8)

For the terminology group, keywords and concepts that occur within this work:

- Authenticity
- Authentic
- Genuine

No.9

Chess, Shira . *Cyborg Children in Digital-Land: the Works of Simen Johan, (2003).*

Available Internet:

<http://www.google.com/search?q=cache:Df19qDyVOmgJ:pages.emerson.edu/courses/Spring03/MA663/papers/shirachess.pdf+Shira+Chess,+Cyborg+Children+in+Digital-Land:+the+Works+of+Simen-Johan&hl=en&ie=UTF-8>

(last accessed on Feb.22.04, also avail. as downloadable pdf)

Shira Chess analyzes the digital photography of Simen Johan as an example of current artistic practices that are blurring the boundaries of reality and fiction as well as technology and nature. Chess asserts that Johan’s work raises questions about the authenticity of photography.

“A photo, more-or-less, was once an assurance that an event indeed took place, and was witnessed the way it is depicted in the photo. ... Because digital images are completely (and easily) malleable, they no longer provide any guarantees of accuracy. Moreover, because any image can be printed onto negative film and represent itself as an analog photograph, the entire process becomes even more questionable.” (2)

“Not only does the verisimilitude of the image come into question, but digital photographs make it more difficult for the viewer (or in some cases, expert) to tell which images have been

manipulated, and to what extent. Hence, digital photographs make all photography (manipulated or not) questionable.” (3)

For the terminology group, keywords and concepts that occur within this work:

- Authenticity
- Accuracy

No. 10

Goodman, Nelson, *Languages of Art*. Indianapolis: Bobbs-Merrill Co. Inc., 1968.

Goodman’s work is a theoretical and scientific exploration of perception and knowing in relation to all artistic disciplines. He states his objective as “an approach to a general theory of symbols.” (Goodman xi) The six chapters inquire into the varieties and functions of non-verbal symbols. Goodman pursues two paths of investigation, the first is concerned with representation and our formation of knowing or understanding of the relationship between reality, symbol, and a copy, the second path addresses the role of authenticity in the various artistic disciplines. The role of notation figures heavily in the latter investigation. Goodman devises a terminology of classifying a work of art as autographic or allographic and as one-stage or two-stage depending upon the importance of the original and the factor of multiplicity.

Much of what Goodman discusses is relevant to current concerns with digital data and methods for identifying source files and proving authorship. Additionally his discourse on knowing and perception in relation to authenticity is the forerunner for contemporary epistemological theory centered upon digital imaging and cultural expectations of truth in a post-photographic era.

“Resemblance and deceptiveness, far from being constant and independent sources and criteria of representational practice are in some degree products of it.” (3)

“In other words, my present (or future) inability to determine the authorship of the given picture without use of scientific apparatus does not imply that the authorship makes no aesthetic difference to me; for knowledge of the authorship, no matter how obtained, can contribute materially toward developing my ability to determine without such apparatus whether or not any picture, including this one on another occasion, is by Rembrandt.” (110)

“Let us speak of a work of art as *autographic* if and only if the distinction between original and forgery of it is significant; or better, if and only if even the most exact duplication of it does not thereby count as genuine.” (113)

“To be original a print must be from a certain plate but need not be printed by the artist. Authenticity as an autographic art always depends upon the object’s having the requisite, sometimes rather complicated, history of production; but that history does not always include ultimate execution by the original artist.” (Footnote #12, 119)

“When the works are transitory, as in singing and reciting, or require many persons for their production, as in architecture and symphonic music, a notation may be devised in order to transcend the limitation of time and the individual.” (121)

“A forgery of a work of art is an object falsely purporting to have the history of production requisite for the (or an) original of the work.” (122)

“Authority for a notation must be found in an antecedent classification of objects or events into works that cuts across, or admits of a legitimate projection that cuts across, classification by history of production; but definitive identification of works fully freed from history of production, is achieved only when a notation is established. The allographic art has won its emancipation not by proclamation but by notation.” (122)

“Is it theoretically possible to write a score so defining a work of painting or etching that objects produced by others, before or since the usually designated original or originals, and by other means (than, e.g., the ‘original’ plate) may comply with the score and qualify as equal instances of the work? In short, could institution of a notational system transform painting or etching from an autographic into an allographic art?” (195)

“Both authority and means are required; a suitable antecedent classification provides the one, a suitable notational system the other. Without the means, the authority is unexercised; without the authority, the means are footless.” (198)

For the terminology group, keywords and concepts that occur within this work:

- Authenticity
- Authentic
- Original
- Authority
- Authorship
- Genuine