B
THE END OF PHOTOGRAPHY

Throughout the 1970s and the 1980s, the convergence of various curatorial and editorial projects established photography as an autonomous art form by resorting to a re-actualization of the history of the medium. The German documentary paradigm was built upon the rereading of preceding visual and theoretical models, inscribing author photography into a newly discovered tradition. Klaus Honnef's *documenta 6* contribution explicitly invokes that tradition to circumscribe the preconditions of specifically German documentary forms. But this return to the origins of photography is counterbalanced with a discursive field emerging almost simultaneously, governed by a virtually antithetical position: the (re-)birth of the history of photography and the recognition of its contemporary expressions is opposed by the potential disappearance of the medium: digital technologies seemingly uproot photography's newly gained independence and even proclaim its imminent "death." Although no strict causality can be established between both phenomena, they theoretically collide in the Düsseldorf context, when in the late 1980s and early 1990s Thomas Ruff, Andreas Gursky and Jörg Sasse endorse digital technologies.

The emergence of digital post-production tools in photography in that period has brought forth a complex and heterogeneous discourse that has yet to be investigated in correlation with photography-specific theories and contemporary artistic practices. Apart from traditional art historical approaches, a wide array of theorists from different methodological and cultural backgrounds – mainly media and cultural studies in the Anglo-Saxon field; aesthetics, semiology

and philosophy in the French field; and *Bildtheorie, Bildwissenschaften* and *Medienästhetik* in the German field – have reflected upon the appearance of those technological developments in various ways. Since the study of those developments exceeds the scope of this research, they are approached to understand the context in which Düsseldorf photography, and in particular its use of digital technologies, emerged. Interestingly, there seems to be a differentiated reaction to those technologies. While in the Düsseldorf context, digital technologies were not received as such, an incredibly strong discursive impetus theorized the apparition of digital imaging in a larger context. The amplitude of the theoretical production addressing the appearance of digital technologies in photography is rather puzzling: until the late 1970s, the field of photography theory remains rather scarce, scholars having recourse to a fairly small amount of key texts of Siegfried Kracauer, Walter Benjamin and André Bazin. Digital photography, on the other hand, has induced a substantial theoretical debate.

The response of the wide range of positions reflecting upon those technological changes – as much in their theoretical articulation as in their artistic expression – can be schematically broken down into two dominant positions. On one hand there has been a predominantly theoretical discourse, largely Anglo-Saxon but whose ramifications extend to France and to a certain extent Germany, which is based primarily on reinterpretations of semiological readings of photography. The central claim of those theories resides in their categorical proclamation of a "post-photographic" era, synonymous with the end of photography as it was conceived previously – a break chiefly enacted by the supposed loss of the indexical relationship between depictured object and photograph. The second category rallies more pragmatic approaches (e.g., historical, cultural studies, etc.), which did not focus on the alleged ontology of photography, but rather emphasized the uses of the "digital" image, independent from their technological preconditions.

The recent historiography of the concept shows to which extent the object "digital photography" itself seems to escape comprehension or categorization. The variety of discourses, differing in the definition of the object, in the theoretical field they are inscribed in, the methodological orientation they are connected to and the epistemological project they can be related with seems only to show, as some have stated, that "digital photography does not exist."[152] Considering the importance of the phenomenon in the 1990s, it seems nevertheless necessary to survey the main positions and theoretical endeavors attempting to define this object, to establish which methodological orientations those theories embody, and to try to outline geographical particularities. To understand the lack of reaction toward the use of digital technologies in Düsseldorf photography, it is necessary to understand those theoretical interrogations and the core ideas or approaches

152 Lev Manovich, "The Paradoxes of Digital Photography," in Hulbertus von Amelunxen, Stefan Iglhaut, Florian Rötzer, Alexis Kassel and Nikolaus G. Schneider (ed.), *Photography after Photography. Memory and Representation in the Digital Age*, Basel, G&B Arts International, 1996, p. 58.

they rely on. The fact that history, as a discipline, has not reflected upon a contemporary phenomenon that even in 2014 is only twenty to twenty-five years old seems quite logical. But the fact that some theoretical approaches have reflected upon these developments, while others totally disregarded the "digital revolution" or re-interpreted its consequences, even stating that there is no specifically digital photography, remains more difficult to explain.

As of today, several projects surveying the discourse addressing the "post-photographic" condition of photography have already been undertaken. Theoretical histories of photography[153] or recent editions of introductive literature[154] have dealt with the appearance of those technologies, categorizing and systematizing their theorization. But it also seems necessary to explore how various sets of discourse have impacted the reception of particular images. Why were some photographs acknowledged as digital, while others weren't? The evaluation of this history of theories shows the complexity of the object "digital photography," whose full understanding would require another step: it would be necessary to confront this incredibly complex theoretical corpus with a larger contextual field, defined by the produced images, their relationship to the theoretical production and reception and by a spectator adapting to a new visual culture. There emerges a paradox and methodological knot, which is tied to the approach of the digital. Since the theoretical debate is *fundamentally* dissociated from practice – as will become apparent, there is hardly any reading of images using those theories, except maybe to pinpoint the idea of digital manipulation – the understanding of artistic practices reflecting or enacting digital technologies becomes problematic. Considering the spread and amplitude of this theoretical discourse, it seems unconceivable to consider a body of artists – in our case Düsseldorf photography – without tying them to the latter.

One particular study, now paradigmatic in the German field, is exemplary of this phenomenon. The editorial project supervised by Herta Wolf, *Paradigma Fotografie. Fotokritik am Ende des Fotografischen Zeitalters*[155] and *Diskurse Fotografie. Fotokritik am Ende des Fotografischen Zeitalters*[156] offers a broad view of the interrogations that appeared concomitantly with digital technologies. It offers a great variety of approaches, linked to various geographical and cultural areas, and covers a broad range of methodologies and discipline-specific fields. While the constellation of articles represents most of the major protagonists of the "post-photographic" discourse, it also reflects the intricacy of the manifold, sometimes considerably differing methodologies. The particularity of those approaches though, is that they mostly remain on a theoretical level, without engaging with actual images, artistic or other. Mostly, they study

153 Bernd Stiegler, *Theoriegeschichte der Photographie*, op. cit.

154 Martin Lister, "Photography in the Age of Electronic Imaging," in Liz Wells (ed.), *Photography. A Critical Introduction*, New York and London, Routledge, 2004 (1996).

155 Herta Wolf (ed.), *Paradigma Fotografie. Fotokritik am Ende des Fotografischen Zeitalters*, op. cit.

156 Herta Wolf (ed.), *Diskurse der Fotografie. Fotokritik am Ende des Fotografischen Zeitalters*, Frankfurt am Main, Suhrkamp, 2003.

photography as a theoretical entity, eluding the relationship to a material, contextual and visual object. *Paradigma* and *Diskurse der Fotografie*, as its title explicitly states, covers a strictly theoretical and discursive ground, making clear the complexity of photography-related studies addressing the digital, and also reflecting the fundamental geographical differences in visual studies and the transformations in their conception in the last decades of the twentieth century.[157] Our aim isn't, of course, to condemn a theoretical survey for its theoretical mindset. Rather, it is to pinpoint the fact that the discourse on the digital, similar to other photography-specific discourses – the short historical retrospect may arguably play an important role in this situation – is extremely dissociated from artistic practices.

But while the use of digital technologies in Düsseldorf is hardly discussed, there is a concrete artistic imagery associated with the theoretical discourse on the digital: "post-photography." Traditionally epitomizing digital aesthetics, those images are often discussed as the hypothetical outcome of the "digital revolution" and the formalization of those theoretical developments, even though they are often not, in fact, technically digital. But most of the time they are acknowledged by critics or curators only, and they are read as being the output of the digital revolution, while being dismissed by the theoretical corpus. The study of relevant theories, with a particular emphasis on a central work in the discourse on the digital – William J. Mitchell's *The Reconfigured Eye. Visual Truth in the Post-Photographic Era* (1992)[158] – ought thus to be correlated with that post-photographic body of work, to evaluate the critical reception of these "digital" images.

1 MEDIA THEORIES AND PHOTOGRAPHY THEORIES

In an early stage of the theoretical debate on the appearance of digital technologies, until the early 1990s, photography was often used as a "starting point or example" for the establishment of a much wider project of media theory. Those projects were often carried out an "analysis, diagnosis or prognosis" of societal developments,[159] usually looking far beyond the implications photography itself might engender or express. In one of the first exhaustive studies of the history of photography theory including the impact of digital technologies, Bernd Stiegler suggests a generic classification of those early debates to label this stage, "photography and media-theories,"[160] reflecting the convergence of two rather dissimilar objects. Through the analysis of key

157 Embodied by scholars such as Michel Foucault (discourse analysis), William J. T. Mitchell (visual turn) or Gottfried Boehm (iconic turn).

158 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, Cambridge (MA), MIT Press, 2001 (1992).

159 Bernd Stiegler, *Theoriegeschichte der Photographie*, op. cit., p. 391. For an exhaustive account of those developments, see chapter 8 "Photographie und Medientheorie. Zur Theorie der Photographie bei Vilém Flusser, Jean Baudrillard, Paul Virilio und Norbert Bolz."

160 Ibid., p. 8.

scholars – along with Vilém Flusser, he mentions Jean Baudrillard, Paul Virilio and Norbert Bolz – Stiegler emphasizes the importance of photography in the constitution of a general media theory project. Photography, as a representational system, existed before the advent of digital technologies and the fact that it was an image – a well-known concept theorized for centuries – permitted the apprehension of new media, a rather abstract object, through something familiar in form and use. Networks, computing mechanisms or interactive designs were something rather unsound, which the study of photography would give access to. But Stiegler also points out that in a simultaneous, "hyperbolic"[161] movement, photographic theory would borrow from media history and theory to constitute a more autonomous, medium-related, discourse.

While photography definitely acquired an important role in the early theoretical developments addressing the impact of new media on culture or society – Flusser equals the importance of the invention of photography to the invention of writing[162] – those early observations are seldom reflected upon in later photography-specific theories, despite their spreading and wide reception in media studies. But interestingly, while photography as an artistic image (as opposed to photography as a mass-medial expression) has not become central to media studies, photography as media has not been absorbed by photography-specific theories. Flusser, for example, is hardly mentioned in latter photo-theoretical discourse, his contribution being commonly absorbed by a general media theory. Despite writing one of the first books on photography and digital technologies, his legacy has been largely disregarded by photo theorists, even more so outside Germany.[163] A repeatedly quoted interview between Thomas Ruff and Philip Pocock in the *Journal of Contemporary Arts* (1993), in which the photographer mentions the cross-over categorization of photography established by Flusser, whose name the interviewer does not know, is symptomatic of this tendency.[164]

An important publication, which already suggested a synoptic view of media theories is Florian Rötzer's *Digitaler Schein. Ästhetik der elektronischen Medien*.[165] Published by the theory-oriented Suhrkamp Verlag in 1991, which plays a key role in the history of ideas in the German field in general and the history of photography theory in particular – it edits or translates key works of Adorno, Kracauer, Barthes, Benjamin, Bourdieu and Brecht –, Rötzer's reader compiles important texts of the main theorists addressing digital media, such as Jean Baudrillard, Vilém Flusser, Peter Weibel, Frank Popper, Fred Forest, Paul Virilio and Jochen Gerz. While approaching new media

161 Ibid., p. 390.

162 Vilém Flusser, *Für eine Philosophie der Fotografie*, Göttingen, 1983, p. 16, quoted by Stiegler, op. cit., p. 395.

163 Flusser's *Philosophie der Fotografie* (1983) has been translated into Portuguese in 1986, into French in 1996 and into English in 2000.

164 Philip Pocock, "Thomas Ruff (Interview)," *Journal of Contemporary Arts*, Vol. 6, Summer 1993, p. 78 – 86.

165 Florian Rötzer (ed.), *Digitaler Schein. Ästhetik der elektronischen Medien*, Frankfurt am Main, Suhrkamp, 1991.

from a multitude of angles – networks, techno-aesthetics, virtual spaces, immateriality and data circulation – those contributions clearly reflect the quantitatively immense production of media theories deriving (chronologically more than thematically) from Marshall McLuhan's early thoughts on new technologies, epitomized by his famous book *Understanding Media*.[166] Originating from numerous scientific fields such as philosophy, sociology, anthropology or aesthetics, most of the essays of *Digitaler Schein* enact the unclear differentiation between artistic and non-artistic images, which seems to be a direct consequence of an interrogation of the place of art in society. That indistinctness further derives – as stated by Rötzer in the introduction – from the interaction of a generalized euphoria provoked by new media and the social changes it might imply, and the art field which seems necessarily defined by – in opposition or in continuity with –, those fundamental changes. Nevertheless, despite a certain indeterminacy, the editorial project explicitly aims to define the impact of new technologies on artistic practices, with a particular concern for the "aesthetic and artistic implication of perceptual conditions" [Wahrnehmungsverhältnisse].[167] The hetereogeneity of the editorial project thus reflect, as Rötzer himself states, the "splintered aspects of the techno-imagination."[168] In a retrospective reflection upon the early 1990s and the fascination of the potentialities of virtuality – which has considerably shaped the theorization of digital photography – Lev Manovich retrospectively notes that many of those utopias did not come true and that the imagined "virtual spaces" had actually become augmented realities[169] in which digital technologies serve physical spaces. This idea of the collusion of two entities – reality and its visual augmentation – stands at the core of the reconfiguration of photographic representation by the Düsseldorf photographers explored in this research, although realities are shifted more than they are augmented: a reconfiguration ironically foreseen by William J. Mitchell[170] in *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*,[171] despite his more commonly taken-up claim of the "end" of photography.

166 Marshall McLuhan, *Understanding Media. The Extensions of Man*, New York, McGraw-Hill, 1964.
167 Florian Rötzer (ed.), *Digitaler Schein. Ästhetik der elektronischen Medien*, op. cit., p. 16 – 17.
168 Ibid.
169 Lev Manovich, "Pour une poétique de l'espace augmenté," *Parachute*, No. 113, Jan./Feb./March 2004.
170 At this point it seems necessary to draw attention to the very equivocal names of two key image theorists repeatedly mentioned in this research: William J. Mitchell, author of *The Reconfigured Eye. Visual Truth in the Post-Photographic Era* (1992) and William J. T. Mitchell, author of the concept of pictorial turn (William J. T. Mitchell, "The Pictorial Turn," *Artforum*, No. 30, March 1992) the same year.
171 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit.

2 "THE RECONFIGURED EYE. VISUAL TRUTH IN THE POST-PHOTOGRAPHIC ERA" (1992)

A multitude of scholars have reflected upon the appearance of digital technologies in photography.[172] However, one book is systematically quoted in the histories and theoretical efforts of what became to be known as "digital photography." William J. Mitchell's *The Reconfigured Eye. Visual Truth in the Post-Photographic Era* (1992) has not only become the programmatic essay delineating the characteristics and implications of new media and photography but is also often attributed the paternity – etymologically and conceptually – of a theoretical movement that could be tagged "post-photography," a terminology often rejected today because of the obsolescence of its correlated ideas. The term "post-photographic" was used for the first time by David Thomas in his article "From the Photograph to Postphotographic Practice. Toward the Postoptical Ecology of the Eye" in 1988.[173] It is commonly Paul Wombell though, who uses the term in the catalogue of an exhibition at the Photographers' Gallery in London in an early curatorial attempt to address "digital photography," which is repeatedly mentioned as the first to use the term.[174] But William J. Mitchell, published by the influential MIT Press in Boston, has indubitably contributed to its widespread adoption. His paradigmatic book published in 1992 and the idea of rupture it advocates – of photography *after* photography –, was at the time widely taken up directly or indirectly by numerous scholars and is still advocated by some.[175]

Throughout the 1990s particularly, his book is (almost) systematically mentioned in every project, curatorial or theoretical, addressing the digital in photography, benefitting from a momentum only few photography theory books have. The wide reception of his main text[176] makes his case historiographically and epistemologically interesting, despite its apparent obsolescence. "Post-photographic" theories are largely regarded today as a reaction to a new technology, and the phenomenon can thus be connected with similar mechanisms of redefinition in the history of representation, in the arts or science, which herald the disappearance of an anterior medium. The appearance of photographic imagery in the mid-nineteenth century has been interpreted as

172 See for example William J. T. Mitchell, "Realismus im digitalen Bild," in Hans Belting (ed.), *Bilderfragen. Die Bildwissenschaft im Aufbruch*, Munich, Wilhelm Fink Verlag, 2007.

173 David Thomas, "From the Photograph to Postphotographic Practice. Toward Postoptical Ecology of the Eye," *Substance*, No. 55, 1988. Earlier examples of texts discussing the loss of photography's function as trace or imprint can be found, although without the mention of the term post-photography. See for example Steward Brand, Kevin Kelly and Jay Kinney, "Digital Retouching. The End of Photography as Evidence of Anything," in *Whole Earth Review*, July 1985. Quoted by François Brunet, "Plus ça change, plus c'est la même chose?," on blog.fotomuseum.ch, January 14, 2014. Available at http://blog.fotomuseum.ch/2014/01/1-plus-ca-change-plus-cest-la-meme-chose/#more-1758, accessed on June 27, 2018.

174 Paul Wombell (ed.), *PhotoVideo. Photography in the Age of the Computer*, London, Rivers Oram Press, 1991.

175 Lately André Rouillé, *La photographie. Entre document et art contemporain*, Paris, Gallimard (coll. Folio essais), 2005 or Jonathan Lipkin, *Photography Reborn. Image Making in the Digital Era*, New York, Harry N. Abrams, 2005.

176 After *The Reconfigured Eye*, Mitchell has predominantly published on the impact of new media on architecture and urbanism, addressing more specialized research fields.

the end of painting in general, the growing artistic photographic practices in early twentieth century as the end of painting in the arts, the generalization of television and video in the 1960s as the end of cinema, the inscription of photography in the institutional and economical entities of the art field in the 1960s and 1970s is yet again depicted as the death of painting, and so forth. Clearly, there has been an equivalent phenomenon in the perception of digital photography, which led to the idea that digital technologies induced a new medium and system of representation and that photography was accordingly endangered. While he evokes – incidentally indeed –, hypothetical cultural consequences of such technological developments and cautiously suggests an epistemological reading of technological change,[177] the argumentation of many of his followers, and for that matter the prevalent perception of his study, is predominantly based on technological determinism[178] deriving from an ontological conception of photography. Notwithstanding its validity or relevance today, it has to be emphasized how that biased reading of *The Reconfigured Eye*, omnipresent in the theoretical discourse, exhibitions and editorial projects addressing those technological changes, became epitomic of the discourse on the digital. The status of Mitchell's book in the history of discourse addressing the digital, thus calls for a (re)assessment.

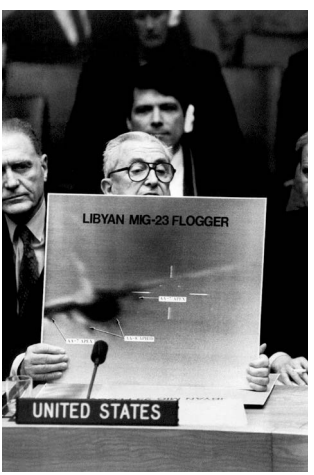

Fig. 21: Photograph of armed Libyan plane shot down by US military in 1989 used as evidence, *The Reconfigured Eye*, p. 22

One of the central assertions that Mitchell's argumentation revolves around is made explicit already in the introduction of his essay; it schematically states that photography has undergone a radical shift. The recent technological developments have allegedly challenged photography as a technical apparatus and as a system of representation.

177 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 19 – 20.

178 Martin Lister, "Photography in the Age of Electronic Imaging," in Liz Wells (ed.), *Photography. A Critical Introduction*, New York, Routledge, 1997, p. 315.

Mitchell argues that photography is "dead – or more precisely, radically and permanently displaced."[179] His affirmation stems from the certitude that the "digital revolution" has fundamentally changed the medium in its ability to represent, inducing new artistic and vernacular practices and requiring new methodological tools to be apprehended. Numerous pragmatic aspects are dealt with in his study, such as technical issues, contextual questions, historical examples of truth claims or manipulation in photography (see Fig. 21), or the epistemological relevancy of his hypothesis, but it is mainly the idea of rupture due to an ontological displacement – much more than to the actual concrete uses he addresses – that will be hung onto by his followers. While the concrete elements will be explored subsequently to show how they contrast with the ontology drawn from *The Reconfigured Eye*, it is the purely theoretical articulations that shall be addressed henceforth.

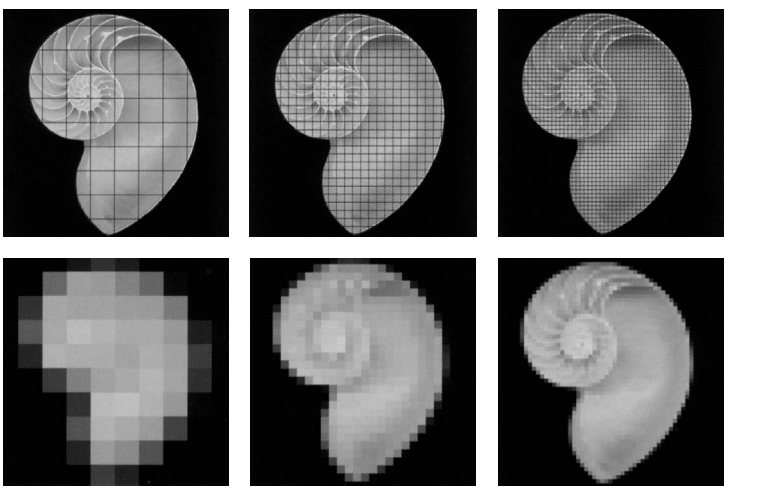

Fig. 22: Examples of "sampling and quantization" of an image, *The Reconfigured Eye*, p. 61

Picture resolution

As most of the theories professing the end of photography, post-photographic theories come into being in the trail of semiotic and post-structural thought. Rather than addressing actual images, artistic practices or discourse in their social, cultural and institutional context, it is the sole *idea* of digital photography that is analyzed. The digital image is thus apprehended through the characteristics it supposedly bears as a medium, establishing the ontology of the so-called post-photographic image. The main feature, among some others, coopted to support the claim of disruption resides primarily in the relationship between the image and the represented: according to Mitchell, digital capturing and retouching devices have fundamentally displaced photography, because the link between image and "reality"

179 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 20.

has been forfeited. The ability to capture reality, because it relies on strict indexicality, seems to be exclusively possible with film photography. Digital imagery on the other hand, due to technical limitations, is reduced to an "artifice." To demonstrate his claim, Mitchell mobilizes several supposed characteristics of the medium, which the digital nature of the pictures has allegedly changed.

While an analogue photograph has "a continuous spatial and tonal resolution" and an "indefinite amount of information," a digital image contains a "fixed amount of information" and "limited spatial and tonal resolution"[180] (see Fig. 22). Due to extremely low resolutions in the early 1990s, this assertion might have been correct at the time. One of the first recorded digital cameras built in 1975 by Kodak had a resolution of 0.01 megapixels (i.e., 10'000 pixels); in the mid-1990s Kodak or Apple mainstream cameras offered resolutions in the range around 0.3 megapixels (i.e. 300'000 pixels) and a very expensive professional system such as the Kodak DCS approached 6 megapixels (i.e., 6'000'000 pixels).[181] Every mainstream camera nowadays achieves around 12 megapixels (12 million pixels), with professional systems reaching 100 to 150 megapixels (100 – 150 million pixels) and images composed of numerous shots, as they have become increasingly available on the Internet, even much more.[182] The theoretical resolution of a 35 millimeter film (24 by 36 millimeter surface) reaches around 9 millions pixels, but a digital image only needs half that amount to be printed with comparable quality,[183] which shows that the relevance of defining an image through its resolution is problematic if addressed on a theoretical level only, even if one disregards the exponential growth of resolutions.

If we were to follow Mitchell's methodology – equating "visual truth" with picture resolution – today's imaging technologies exceed by far the resolution of silver-print standards, which undermines one of the key arguments Mitchell's followers have adopted, at least on a technical level. But while that particular aspect has often been quoted and reflected upon, few commentators have mentioned the fact that Mitchell was very well aware of the implications of such technical limitations, and that the definition of digital imagery was also connected with the way a spectator perceived it, thus introducing a phenomenological or cultural parameter. In a note of the first chapter, he argues that "early digital images [...] were considerably inferior to the best silver-based photographs, and limited its application. But the level of quality obtainable in digital images is primarily a function of available digital storage capacity and processing speed, and they constantly improve, so the digital image will seem increasingly attractive as time

180 Ibid., p. 5 – 6.

181 Todd Gustavsson, *Camera. A History of Photography from Daguerreotype to Digital*, New York/London, Sterling Innovation, 2009, p. 335 – 341.

182 The italian HAL9000 company produced a 16 gigapixel image (e.g., 16 billion pixels) of Leonardo Da Vinci's *Last Supper*, available on the Internet as a Flash interface. All Google Maps images put together constitute a (theoretically) even bigger file.

183 Emmanuel Bigler, "Film contre silicium. Est-ce seulement une question de résolution?" April 2007. Available on http://www.galerie-photo.com/film-contre-silicium-resolution.html, accessed on June 15, 2018.

goes by."[184] But even if Mitchell has foreseen the hyperbolic development of digital imaging technologies and a phenomenon of acculturation to the visual output of digital technologies, the conclusions he draws as to the status of photography suggest why his book is so widely quoted. The function and importance of picture resolution in Mitchell's theory only becomes apparent if it is understood through the role it plays in a wider concept, central in photography theory: the physical relationship to reality.

The "physical" relationship to reality

If one is to compare representativeness of film-based photography and digital imaging on a technical level, one is soon confronted with the claim that there is a physical bond – Mitchell reintroduces the often-quoted term acheiropoetic[185] to define its modalities – between the depicted reality and the image. The chosen terminology, which emanates from the theological field, originates from the characterization of the imprint of Christ's body on the veil, which supposedly covered his corpse, thus suggesting a magical or mystical relationship between image and reality. Such a relationship, in its common interpretation by photography theory, not only implies the "truthfulness" of the image, but also allegedly guarantees a total absence of agency by the photographer. "We can point out that there is no human intervention in the process of creating the bond between photograph and reality,"[186] he emphatically argues. The fact that this supposedly privileged contact has been undermined by digital technologies was extensively reflected upon in the early 1990s, Mitchell being one of the first to formulate that claim. Its main argument derives from a technical reading of digital imaging technologies in which the physical bond between the image and the represented reality is lost. While the light is physically imprinted on a silver-based photograph, it is captured by a sensor and electronically processed in a digital image. As such, digital imageries would not be photographic anymore, because that physical bond is purportedly broken. While many have "lamented" the end of photography[187] and the belief in its ability to represent reality, it seems today patent that this "function" is based on ideological and not technical mechanisms[188] and that the belief in digital photographic imagery endures. But in the early discourse on digital photography, there have

184 Footnote 36 in William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 231. There is no mention that the 2001 edition (fourth printing) we are using has been revised, and it can thus be assumed that the footnote is present in the original 1992 edition already.

185 Ibid., p. 28.

186 Ibid.

187 For a short summary of those historiographical developments, see for example Corey Dzenko, "Analog to Digital. The Indexical Function of Photographic Images," *Afterimage*, Vol. 37, No. 2, September/October 2009.

188 See for example Tom Gunning, "What's the Point of an Index? Or Faking Photographs," *Nordicom Review*, Vol. 5, No. 1/2, September 2004 or Damian Sutton, "Real Photography," in Damian Sutton, Susan Brind and Ray McKenzie (ed.), *The State of the Real. Aesthetics in the Digital Age*, London, I.B. Tauris, 2007, p. 165, mentioned in Corey Dzenko, "Analog to Digital. The Indexical Function of Photographic Images," op. cit., p. 21.

been numerous discussions about the supposed loss of that privileged physical link. On a strictly technical level, the imprint of light in film-based photography and digital photography obviously differs considerably, as will be discussed hereafter. But those differences have clearly been overstated, for several reasons.

First of all, the visual differences and their implications in terms of representativeness and perception have to be mentioned. In 1990, a digital image contained a rather poor amount of data, which obviously contributed to the idea that photography was now endangered and that we had to cope with a "worse" medium in terms of representativeness. Then, there is the fact that the viewer wasn't acquainted with the formal differences between analogue and digital and logically perceived the new visual output suspiciously, which is not the case anymore, at least not to the same degree. The belief in the depictured reality in a digital photograph, printed in a newspaper or displayed on a smartphone screen, has not been impaired. On the contrary, it is often the digital nature of images that today allows corroboration of their origin. The often discussed images of torture in the prison of Abu Ghraib in Iraq,[189] whose surprisingly low quality and strong pixilation indicate their digital source, have not been perceived as authentic *despite* their nature, but partly *because* of it. The fact that they had been compressed to circulate on the Internet improved their credibleness, instead of degrading it. But in the early 1990s, digital images were new and were not inscribed in a history which attested to a certain extent to their veracity. Film-based photography on the other hand had been given a "truth value" through specific practices such as scientific representation, photo-reportage or documentary images throughout the twentieth century.[190]

Another feature that stems the rupture claim – symptomatic of a certain ontology-based theorization of photography – is the very fact that photography has often been addressed on that level solely, with scholars trying to define it through its ontological status. Resulting from a structuralist reading, defining *photography* as a theoretical object, those approaches (Barthes,[191] Bazin,[192] etc.) reject the analysis of actual images with a context, materiality or history, suggesting a definition of the medium in which the physical bond between image and represented reality occupies a central role. While this bond constitutes a fundamentally given parameter in film-based photography – it basically derives from Peircian semiology and has remained prevalent in photography theories ever since – it seemed suddenly endangered by digital imagery, which allegedly undermines it. In Mitchell's analysis of that connection, the ontological approach derives from a primarily

189 For a full history of their diffusion, see for example André Gunthert, "L'image numérique s'en va-t'en guerre. Les photographies d'Abu Ghraib," *Etudes photographiques*, No. 15, November 2004.

190 For an account of the construction of scientific objectivity in photography, see Lorraine Daston and Peter Galison, *Objectivity*, op. cit.

191 See Roland Barthes, "Le message photographique," in *Œuvres complètes*, Seuil, Paris, 1993 (first published in *Communications*, No. 1, 1961), p. 938 – 949 and more prominently in Roland Barthes, *La Chambre claire, Note sur la photographie*, Paris, Gallimard/Le Seuil, 1980.

192 See André Bazin, "Ontologie de l'image photographique" [1945], in *Qu'est-ce que le cinéma?*, Paris, Ed. du Cerf, 1981, p. 9 – 17.

technical reading of the digital apparatus, which is allegedly unable to represent in the same manner because of its electronic nature. Mitchell even goes as far as inscribing that theoretical approach into a more pragmatic reading, stating that "although a digital image may look just like a photograph when it is published in a newspaper, it actually differs as profoundly from a traditional photograph as does a photograph from a painting."[193] The focusing on the physical bond itself thus shows to which extent the contemporary response to the appearance of digital technologies is subordinated to a philosophical doctrine, which is rather surprising if we consider the fact that Mitchell's book discusses numerous technical aspects of digital images, addressing the various retouching tools that digital post-production allows, discussing digital brushstrokes, computer collages or algorithmic image constructions, and that he actually analyses many scientific, vernacular or artistic images in detail. It is surprising also to which extent the well-handled historicization and contextualization and the pertinent examination of numerous examples loses relevance because of the overall inscription of his endeavors in photography-theory specific idiosyncrasies. Retrospectively, it has to be argued that *The Reconfigured Eye* contains extremely valuable reflections on the appearance of digital technologies in photography, but they have been considerably neglected. Mitchell's reception predominantly consists of an endorsement or reinterpretation of the idea of rupture between photography and its post-medial condition.

A fourth element which today explains that unabated endorsement is the position toward a "new" phenomenon whose technical and social evolution had not been foreseen. A comparison of those technical developments with an interestingly similar antecedent evolution – we assume the fact that it is not fully comparable, but that it is exemplary of the methodological standpoint of those early theories – shows how the idea of rupture itself is problematic. If we consider a wider media archaeology of the digital image, which takes into account its structural mechanisms and not only its "physical" condition, we could argue that any mechanical reproduction of photographic material using raster grids (e.g., offset prints, serigraphy, half-tone process or rotogravure)[194] can be seen as a primitive form of digitalization,[195] with a limited amount of data (or at least a much smaller amount than the original picture). A key point to the understanding of the digital in Düsseldorf photography – as will be argued in section four – resides in the connection between the grid structures, which emerged in the Bechers' work and in numerous photo-conceptual strategies, and their re-enactment by Thomas Ruff, Andreas Gursky and Jörg Sasse. Some recent histories of mechanical images have, for instance, proposed categorizations based on processes rather than

193 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 3

194 See for example Anne-Cartier Bresson (ed.), *Le vocabulaire technique de la photographie*, Paris, Marval/Paris Musées, 2008, chapter 6.

195 Susanne Holschbach, in "Foto/Byte. Kontinuitäten und Differenzen zwischen fotografischer und postfotografischer Medialität," in *Medien Kunst Netz*, available at http://medienkunstnetz.de/themen/kontinuitaeten_differenzen/, accessed on June 25, 2018.

technology. *The Printed Picture* exhibition of The Museum of Modern Art (2008), for example, exhibits images made with "traditional" printing technologies (etching, woodcuts, lithographs, etc.), with photographic processes (daguerreotypes, tintypes, non-silver processes, gelatin silver processes, etc.) and digital photographic processes (inkjet, dye sublimation, digital c-prints, etc.), thus blurring the distinction between printing and photo-development.[196] Another example can be found in the exhibition *Neue Realitäten. FotoGrafik von Warhol bis Havekost* of the Kupferstichkabinett of the Staatliche Museen zu Berlin (2011), which has a similar curatorial stance, although all photographic sources are in this case printed through mechanical processes and not using light-sensitive paper. The title of the exhibition even highlights the relationship of photography and graphic arts with a wordplay combining the terms *Foto* and *Grafik*, visually disjoined with a typographical trick.[197] Logically, these new systems of representation should also have suffered from a similar dismissal, as subdivision in a discrete number of picture elements resembles digital technologies and its derivative pixilation. But mechanically reproduced photographs such as those currently used in newspapers or magazines (offset, etc.) – probably the most current media through which photography is seen – have never been perceived as non-photographic. Commonly, the difference between analogue and digital technologies in photo-specific discourse suffers from a surprising attachment to the idea of indexicality, which the study of other media like film has overcome. The reception of the shift from the analogue moving image to its digital counterpart has been somehow tempered by the existence of video (VHS), an analogue capturing system that functions as an intermediary form between film and digital video. "In the progression from material object to electronic signal to computer media, the first shift is more radical than the second," Lev Manovich argues, considering that digital media are above all, electronic.[198] Not only has the existence of this intermediary state allowed an evasion of the discourse of rupture – there haven't been many theories advocating the end of film, despite attempts to undermine its technical characteristics or economy[199] – but it has also allowed for understanding the structural mechanisms of "new" and "old" media, conceiving a methodological framework that is not, like a great deal of the photographic discourse, based solely on an ontological approach. Based on a strict interpretation of the indexicality between photograph and depicted object, Mitchell's technological determinism exemplifies methodological specificities of the theory and history of

196 See Richard Benson, *The Printed Picture*, exhibition catalogue (Museum of Modern Art, New York, 2008 – 2009), New York, The Museum of Modern Art, 2008.

197 See *Neue Realitäten. FotoGrafik von Warhol bis Havekost*, exhibition catalogue (Kupferstichkabinett of the Staatliche Museen zu Berlin, 2011), Cologne, Wienand, 2011.

198 Lev Manovich, *The Language of New Media*, Cambridge (MA)/London, The MIT Press, 2001, p. 133. Quoted in Slavko Kacunko, *Closed-Circuit Videoinstallationen*, Berlin, Logos, 2004 – 2005, p. 76, who reviews this question in the chapter "Analog und Digital," p. 71 – 76.

199 See for example Claus Gunti, "Post-, para- et champs élargis. Quelques réflexions sur les catégories alternatives à la photographie et au cinéma," *Décadrages. Cinéma, à travers champ*, No. 21 – 22 ("Cinéma élargi"), Winter 2012.

photography, disregarding images to delineate theoretical objects devoid of context, materiality or history. The predominance of such approaches in the photo-theoretical discourse and its convergence with artistic practices seemingly embodying them, has clearly shaped the idea of digital photography, thus also altering the perception of documentary practices in which a transparent depiction is paramount, such as photography from Düsseldorf. The understanding of the reception of digital technologies in Düsseldorf photography thus requires the exploration of a wider epistemological framework interrelated with those technologies even if, as mentioned above, Düsseldorf photography has hardly been connected to the imagery and theoretical discourse of digital photography. If post-photography, in its discourse or artistic expression, cannot be directly linked, the reasons why those contemporary phenomena do not interact directly still need to be investigated.

Manipulability and closure

Besides picture resolution and the apparent loss of connection between image and reality, another feature of digital technologies central in Mitchell's essay has been repeatedly invoked to differentiate both technologies: the potential mutability and manipulability of digital imagery.[200] Mitchell admits that photography has always been retouched, and his study extensively discusses historical examples such as Le Corbusier's retouched architectural photographs[201] illustrating *Vers une architecture*, Alexander Gardner's famous staged *Slain Rebel Sharpshooter*[202] and the well-known picture of Lenin addressing the crowd in which Trotsky had been removed.[203] Those examples are not simply anecdotic in his argumentation. All along *The Reconfigured Eye* Mitchell invokes concrete historical examples to show that retouched photography has always existed. But despite discussing numerous examples throughout his books, he emphasizes the fact that "extensive reworking of photographic images to produce seamless transformations and combinations is technically difficult, time-consuming and outside the mainstream of photographic practice,"[204] while the raster grid system that digital images are based on allows easy retouching. To support his argument, he confronts musical scores and literary texts, which would traditionally have "final, definitive, printed versions"[205] (i.e., traditional photography), with computer files for which there is "no corresponding act of closure,"[206] to claim that digital photography is "open to endless modification."[207] Basically, Mitchell invokes the hypothetical abilities of digital imagery (e.g., unlimited manipulation, etc.), without engaging in a concrete examination

200 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 5ff.
201 Ibid., p. 201 – 202.
202 Ibid., p. 42 – 44.
203 Ibid., p. 199 – 200.
204 Ibid., p. 6.
205 Ibid., p. 51.
206 Ibid.
207 Ibid.

of digital images. Digital imagery still was, at the time, rather uncommon and thus outside of everyday or artistic practices. But his rapprochement nevertheless poses a methodological problem, since he compares a theoretical object – he actually addresses the digital image file – to concrete images, and his projective analysis of what the digital image could become counterbalances his historical demonstration on retouching. Mitchell compares an object (a printed score or a film photograph) to an abstract concept (the digital file). For almost any use made of digital photography in the early 1990s, there is an actual physical output that Mitchell dismisses. He envisions the potentialities of digital imagery but disregards their actual use. He envisions digital imagery as "fragments of information that circulate in the high-speed networks now ringing the globe, that can be received, transformed and recombined like DNA to produce new intellectual structures having their own dynamics and value,"[208] while they are in fact strictly images, often printed out or used on standalone computers, Internet connections speeds and image compression algorithms forbidding a convenient and widespread circulation. His position thus reflects primarily an interrogation of the potentialities of digital imagery and of what photography could look like, and a certain fascination with digital technologies, which his scientific background and institutional attachment – he is Professor of Architecture and of Media Arts and Sciences at the Massachusetts Institute of Technology (MIT)[209] – might partially explain.

What is particularly interesting is the fact that his argumentation is surprisingly twofold. On one hand it shows to which extent indexicality and the relationship to the real are concepts deeply rooted in the history of photography theory. Basing an important part of his study upon the idea that there is an indexical link to reality in analogue photography, Mitchell endorses the never-ending and systematically reoccurring claim that photography is imbued with a privileged relation to the real, an idea exhaustively and repeatedly deconstructed since the post-structural effort, which reads photography as a visual language based on signs. But Mitchell also proves extremely perspicacious methodologically, wondering how the change he describes could be understood epistemologically, evaluating the nature of such change. Questioning theories addressing the birth of photography and epistemological re-readings of their implications, Mitchell invokes Jonathan Crary's recently published *Techniques of the Observer. On Vision and Modernity in the Nineteenth Century* (1990)[210] and suggests that "sometimes it is argued (usually by radical historians or theorists) that technical innovation results from irresistible social pressure."[211] "Symmetrically," he suggests another reading of technological change, arguing that "it can be proposed (typically by commentators of more positivistic and conservative outlook) that technical innovations

208 Ibid, p. 52.
209 Pioneer in the development of computing and networking technologies.
210 Ibid., footnote 37, p. 20.
211 Ibid., p. 19.

emerge autonomously and create new social and cultural potentials."[212] He further exemplifies his alternative reading with Erwin Panofsky's analysis of film: "It was not an artistic urge which gave rise to the discovery and gradual perfection of a new technique; it was a technical invention that gave rise to the discovery and the perfection of a new art."[213] It can thus be argued that Mitchell's mention of art historical tendencies aims to understand the history of technologies outside of a strict history of technical apparatuses.[214] But rather than actually confronting the two antagonistic positions of Panofsky and Crary, he reads them both as supporters of a discourse of rupture: "Either way, we can identify certain historical moments at which the sudden crystallization of a technology (such as printing, photography, or computing) provides the nucleus for new forms of social and cultural practice and marks a new era of artistic exploration."[215] Concentrating predominantly on the nineteenth century, Crary originally meant to evaluate the appearance of digital imaging systems much like Mitchell, also evoking a potential rupture. "The formalization and diffusion of computer-generated imagery heralds the ubiquitous implantation of fabricated visual 'spaces' radically different from the mimetic capabilities of film, photography and television,"[216] he argues. But Crary's hypothesis, similar to very recent attempts that try to formalize those technological changes which also advocate a fundamental break,[217] resides on an epistemological level, while Mitchell's, despite a certain awareness of those approaches, resides predominantly on an ontological level.

The paradox in *The Reconfigured Eye* thus resides in the parallel use of antithetical methodologies. The title of the book itself implies a spectatorial alignment on new technologies (the eye is *reconfigured*), thus evaluating epistemological implications of digital imaging systems, and the idea that photography has lost its prevalence as an "authentic" media, through the loss of relationship to the reality of digital media (the post-photographic era). Numerous aspects suggest that Mitchell does not fully believe in the death of photography. The formulation "photography was dead – or more precisely, permanently displaced"[218] clearly shows the ambiguity. The epistemological implications of digital imaging systems and the deceptive potential of photography – analogue or digital – is discussed in the text, yet the discourse often falls into the binary opposition of true versus false. Mitchell argues that "our capacity to evaluate plausibility [of a

212 Ibid., p. 20.
213 Erwin Panofsky, "Style and Medium in the Moving Pictures," in Daniel Talbot (ed.), *Film*, New York, Simon and Schuster, 1959. Quoted in William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., footnote 38, p. 20.
214 In the mid-1990s, Lev Manovich or Martin Lister drew attention to the flaws of a purely technical reading of digital photography. See Martin Lister, "Photography in the Age of Electronic Imaging," op. cit., p. 333.
215 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 20.
216 Jonathan Crary, *Techniques of the Observer. On Vision and Modernity in the Nineteenth Century*, op. cit., p. 1.
217 See for example Bernd Stiegler, "Digitale Fotografie als epistemologischer Bruch und historische Wende," in Britta Neitzel (ed.), *Das Gesicht der Welt. Medien in der digitalen Kultur*, Munich, Wilhelm Fink Verlag, 2004.
218 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op.cit., p. 37.

photograph] is [...] constructed by our positioning within discourses"[219] and that it depends on an "ideological framework, [...] an existing knowledge structure"[220] and on a credible source and provenance. But he concludes that while analogue images are not necessarily trustworthy, digital images "stand at any point from algorithmic to intentional. [...] The referent has come unstuck."[221] He emphatically concludes that "the emergence of digital imaging has irrevocably subverted these certainties [photographs as a truthful "report" of the world], forcing us to adopt a far more wary and more vigilant interpretative stance."[222]

3 WILLIAM J. MITCHELL'S SELECTIVE ENDORSEMENT

The threatened referentiality brought forth by digital photography has considerably impacted the reception of Mitchell's work. Numerous aspects of his argumentation have been dismissed or disregarded, which has given an impression of homogeneity to his discourse and paradigmatic or programmatic status to his book. A quote from Herta Wolf in the introductory text of one of the major theoretical compounds of the post-photographic debate in Germany – *Paradigma Fotografie* and *Diskurse der Fotografie* – interestingly points at the selective reading of texts in the history of photography in general, and the history of the discourse on the digital in particular:

> *There are key texts that are repeatedly quoted by those concerned with photography and that [...] act as paradigms for the scientific community. It is surprising, however, that these essays about photography predominantly serve as evidence, and that at the end of the twentieth century only few scholars have read those key texts of the history of photography critically.*[223]

In that period of intense theorization, numerous scholars endorsed Mitchell's rhetoric of rupture. To name a few who are commonly quoted in the lineage of Mitchell or explicitly endorse him, one could mention Göran Sonnesson, who literally adapts Peircian semiology to the digital image,[224] Peter Lunenfeld, who evokes the "dubitative" status of digital imagery that challenges the "Primus inter pares of media of representation,"[225] Lev Manovich or Edmond Couchot, who imagine

219 Ibid., p. 20.
220 Ibid.
221 Ibid., p. 31.
222 Ibid., p. 225.
223 Introduction of Herta Wolf (ed.), *Paradigma Fotografie, Fotokritik am Ende des Fotografischen Zeitalters*, Frankfurt am Main, Suhrkamp, 2002, p. 13.
224 Göran Sonesson, "Post-Photography and Beyond. From Mechanical Reproduction to Digital Production," *Visio (International Association for Visual Semiotics)*, No. 4, Vol. 1 ("Postphotography"), p. 11 – 36, n.d.
225 Peter Lunenfeld, "Digital Photography. The Dubitative Image," in Peter Lunenfeld (ed.), *Snap to Grid. A User's Guide to Digital Arts, Media and Cultures*, Cambridge (MA) and London, MIT Press, 2001 or in its German translation in "Digitale Fotografie. Das dubitative Bild," in Herta Wolf (ed.), *Paradigma Fotografie*, op. cit.

constantly moving images, opposing analogue to digital photography because of its (theoretical) lack of materiality. But paradoxically, while there seems to be a common theoretical ground that enables Mitchell's followers to state the idea of rupture, significant differences appear throughout what seems to be a coherent discursive entity.

If an exhaustive reception of Mitchell has yet to be established, a superficial assessment of his impact on those theories already shows to which extent his ideas were only partially dealt with. Selected structuring ideas serve as paradigmatic examples for the explanation of the death of photography, even though they only constitute particular elements in the argumentation of the author. Mitchell's text rather acts as source material or manifesto, rather than being a theoretical model his followers actually discuss or engage in. This phenomenon of the endorsement of Mitchell's ideas can be broken down schematically into two levels of argumentation. On a strictly argumentative level, it appears that related theorists concentrate on a limited number of quotations that are repeatedly mentioned. Not only do they invoke the same arguments, but they also have recourse to the same citations. On a superimposed level, it is the notion of "truth value" and the issue of "primacy"[226] toward other means of representation – in this case the hypothetical supplanting of chemically produced images by digitally produced images – that are most commonly re-used. To exemplify the first level of interaction between Mitchell and subsequent post-photographic theories – the reclamation of argumentative elements expressed through the reuse of particular quotations –, we shall examine one particular example. A single example only offers a partial understanding of that phenomenon and cannot pretend to consistently establish a phenomenon. The repeated quoting of that particular argument nevertheless shows to what extent paradigmatic ideas, rather than actual theoretical developments, have been re-used by Mitchell's endorsers.

One of the key arguments of Mitchell's discourse of rupture is the idea that an analogue photograph possesses a "continuous spatial and tonal variation,"[227] while a digital photograph is based on a raster grid structure (Fig. 23, 24). The implications of such an apparently trivial technical feature are, in Mitchell's as in his followers' argumentation, considerable. The claim that digital images are not "photographic" any longer derives directly from Mitchell's technical differentiation of the digital and the analogue image. The grid pattern structure based on pixels and the processualization that digital photographs are based upon, opposed to the supposedly continuous analogue image, is primarily responsible for the loss of relationship to the real, the "acheiropoetic" contiguity to the represented object, disregarding obvious counterexamples (e.g., offset printing in newspapers). Rather than the argument itself, it is its function that ought to be discussed here in order to understand why that particular aspect is

226 Steven Skopik, "Digital Photography. Truth, Meaning, Aesthetics," *History of Photography*, Vol. 27, No. 3, 2003, p. 264.

227 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 4

found repeatedly in Mitchell's historiography. Why has this particular argument been given such an importance? Peter Lunenfeld for example suggests an alternative proposition, one in which the truth claim does not rely on single images, as in Mitchell's book, but on image systems. He suggests that the digital revolution does not lie in the shift from "chemical to digital systems of production"[228] but in the shift from the "discrete photograph to the essentially unbound graphic,"[229] envisioning photography as a multimedia object which only exists digitally, in networks or computers, and in perpetual interaction with other kinds of media (sound, motion graphics, etc.). But despite that relevant analysis, which merges with recent views on that particular question, he nevertheless quotes Mitchell's idea of rupture based on the supposed loss of "continuous spatial and tonal variation" in digital photography.[230]

More than the consequences he draws from the use of that particular argumentative element, it is the fact that Mitchell's legacy is selectively interpreted that is noteworthy in this context. The quote "the continuous spatial and tonal variation of analog pictures is not exactly replicable"[231] is further taken up by Lev Manovich in "The Paradoxes of Digital Photography."[232] While critically approaching Mitchell's text – and conclusively stating that digital images are not less true than analogue images[233] – Manovich discusses realism in both imaging systems. Although he does not endorse Mitchell's position, the context of publication of the article – its title reads "the paradoxes of digital photography" and the exhibition "photography after photography" – contributes to a discourse suggesting hypothetical changes or shifts. While the discourse addressing digital photography is extremely diverse, and this particular text does not necessarily advocate an alleged rupture or shift, the concurrence of various factors – its association with post-photographic imagery or with the idea of such shift – produces a discursive ground that seems to suggest otherwise. As Martin Lister notices, "with the coining of the term 'post-photographic' in the early 1990s, a decisively historical and epochal dimension was given to the thinking about the impact of new image technologies upon photography."[234] The *idea* of the post-photographic thus played a key role in the reception of the digital – and the non-reception of the digital in Düsseldorf – much more than the actual, circumstantial response to specific images or theories. This idea further collided with another important preoccupation of that time, the interrogation of the supposed reconfiguration of the human body in physical space and representation, a collusion which further conditioned the understanding of digital technologies in a broader context.

228 Peter Lunenfeld, "Digital Photography. The Dubitative Image," op. cit., p. 58 – 59.
229 Ibid.
230 Peter Lunenfeld, "Digitale Fotografie. Das dubitative Bild," in Herta Wolf (ed.), *Paradigma Fotografie*, op. cit., p. 163.
231 William J. Mitchell, *The Reconfigured Eye. Visual Truth in the Post-Photographic Era*, op. cit., p. 6.
232 Lev Manovich, "The paradoxes of digital photography," in Hulbertus von Amelunxen, Stefan Iglhaut, Florian Rötzer, Alexis Kassel and Nikolaus G. Schneider (ed.), *Photography after Photography. Memory and Representation in the Digital Age*, Basel, G&B Arts International, 1996, p. 59.
233 Ibid., p. 65.
234 Martin Lister, "Photography in the Age of Electronic Imaging," in Liz Wells (ed.), *Photography. A Critical Introduction*, op. cit., p. 304. See especially chapter "A Post-Photography Era?," p. 304 – 307.

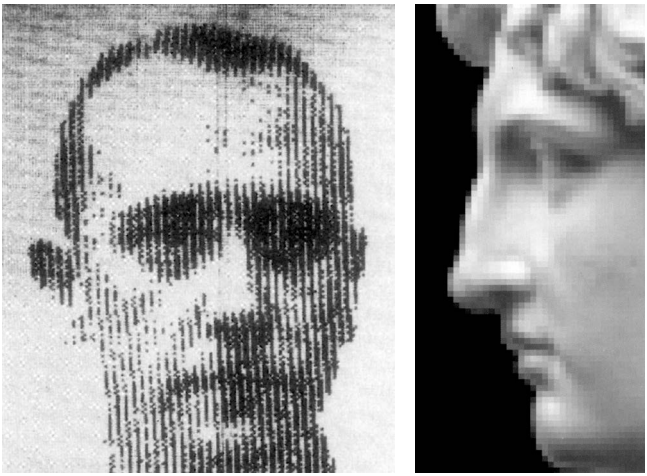

Fig. 23: One of the first digital images made with an NBS mechanical drum scanner used as an example of raster grid in digital images, *The Reconfigured Eye*, p. 4
Fig. 24: Enlargement of a digital image exemplifying the discrete pixels, *The Reconfigured Eye*, p. 5