"Kunstwerk" in the age of holography

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Abstract. In 2007 one auction shocked collectors and artists: Two art works of Rudie Berkhout were offered for one thousand dollars on eBay. The closing down of museums for holography in Cologne, New York and Washington DC paid a big price of respect for true art. Benjamin's vision about "Art in the Age of Mechanical Reproduction" found a new expression in abuse and ignorance. Beautiful sculptures of Art are reduced to "Holograms" like Rudie's "Cairo Aspect" placed in a rummage sale, covered by fingerprints of ignorance.

1. Introduction
The artists of holography failed quite often to use the same professionalism as photographers, possibly not warned by Walter Benjamin uplifted finger. Single artworks or limited editions on glass have been unexpectedly reproduced on open edition on film. Quite a few collectors stopped investing in holographic art because of this practice. To separate technical beauty and true art is with the elaborate possibilities of photonics media challenging. However, difficult color control in holography might have been one (among other) criterion for art critics and visual artists to consider holographic works without paying attention to their artistic content. But history of art shows that colors have been rendered progressively. To study "Painting Material and its use in the painting" from Max Doerner (1992 München-Berlin-Leipzig) you learn that malachite makes a beautiful green in a Fresco.(1) To create a Fresco like Benozzo Gozzoli, e.g. the Procession of the Magic in the Palazzo (1459) Merici Riccardi, you need to have the whole painting already finished before you take the brush in your hand. To appreciate the variety of green in the breathtaking Fresco becomes even greater, if we know that Chromoxid was first described by Vauquelin in 1809, and emerald green patented in 1850 by the French paint producer Pannetier. Then, we can appreciate the pseudo color display holograms of artists like Inaki Begusristain and Margaret Benyon. Still both works cannot be analyzed in the same context. The paper will identify some of the hindrances of the holographic art in regards with these past 40 years in Europe and America, based on the insider experience of the authors. Crossing their perspectives, Odile Meulien Ohlmann, a French/American curator, collectors and culture analyst, and Dietmar Ohlmann, a German artist and 3D designer will show that the education in art history and humanities need to make some evolution or revolution!

2. Art and Reproduction
When Walter Benjamin wrote before 1940 his essay about art in the time of mechanical reproduction, he described the rise of photo and film, not the manual reproduction of Graphic and painting.(2) A permanent exhibition of the live of Frida Karlo in Baden Baden, Germany, used mainly licensed
replicas from © Banco de México Diego Rivera & Frida Kahlo Museums Trust and fast no originals. (3) If you have a walk around Montmartre in Paris, there are mainly galleries employing painters who paint the whole day the Eiffel tower. None of them speaks French, a good sample of successful immigration and a good prove of Benjamins thesis about iconic perception about art. For him, just a photo of a portrait has the aura of art. What is the original, replica, licensed replica, limited edition or open edition? Does it make sense to ask to deliver the real photo, the original? Or the true digital images in the internet or on youtube? Benjamin wrote in a small history of Photography: “…Daguerre’s images of light were iodinated and he lightened them in camera obscure, forming light-sensitive silver plates which were moved back and forth, till we could see in the correct lightning a recognizable soft gray picture”. They were unique piece; in 1839 the price for one Photo was 25 Gold Frank. Often they have been kept like jewels in caskets…” (4) We could use the same description for a single beam Denisyuk hologram, which was said impossible to copy. The original, iconic work was clear for artists and collectors. The technical evolution of holographic techniques brought the distinction between Master and Copy, Reflection and Transmission, limited edition on glass and open edition on film. People involved in Holography mentioned on the market, that just expert could answer the question: “Do I have the artwork or the Pin Up? Do I have the original first copy or the mass produced hologram?” Already Benjamin said in 1934, it is senseless to ask for the first copy of a photo. (2) Today, digital holography makes the copying of the hologram even easier, and opens a new question: “Is this a copy from the artist or from the manufacture?” Before the little plant of holographic art could grow, the capitalization of the market swapped it together with all junk of simple replicas, gimmicks and “funny staff”, no more question about use, emotion, content.

3. What is Art?
Vittorio, a figure in the roman “Vittorio the Vampire” from the American author Anne Rice (1941), filled his eyes with bloody tears as he looked at the painting from Fra Filippo Lippi in Florence (1406-1469). As Vittorio saw the master surrounded by true angels raised his thirst to see more creations. (5) Rice’s visit in the Italy of the 1400 awakes emotion of ecstasy between fiction and true visual art. If we continue the history of art, we see the need for beauty did not decreased; at the reverse it accelerated the creativity with the spatial paintings of Jacopo Tintoretto (1518-1594) in Venetia, or the flight into space with Giovanni Battista Tiepolo (1696-1770), and Michelangelo (1475 –1564) in Rom.
The world already loved 3D. It was the time of glasses free spatial theatre, the Fan Club of Michelangelo celebrated the stars, till someone else came and made his self portrait, in a way we would say: expressionism. El Greco (1541-1614) was too modern, his style did not fit next to Michelangelo, and people asked: “Is this art?” Lucky that he moved to the next town and created paintings like the Laokoon of the Washington National Gallery. (6) So the question “Is this Art?” exists in all epochs. Taste and social representation of reality are constantly changing, from the Greek Mimesis to Marinetti and his Manifesto. In matter of fact, it is not the proper of art historians, to anticipate and reveal what their contemporaries will understand years later! Art has always been a process of experimentation, and it is also true with new media. Experimentation conducts to better understand and transform technique and give access to new perceptions. Especially in our time where new visual techniques allows us to discover and see images of the nano and macro universe, a fantastic exploratory trip now available to artists interrogation. In the “Micro Hologram”(13) I fully used this new possibility of exploration, and access to the atomic force microscopy to analyze and compare patterns of the hologram, showing a trip of a spatial landscape, and the holographic dots in which I place a macro image of a woman looking at herself in water. Finally I was showing different realities of a dot, a universe hidden to our visual organs, unfolding another nano dimension and possibly others ones we do not even consider at our present time.

Just a fool cans believe that art and technology are separated. If we read books about history of arts, like those ones of Herbert Read or Rene Huyghes, their books are filled with a kaleidoscope of senses, intuition, rationality, research, techniques. They described artists’ quest for conceiving the world by all matter, emotion, accident, misunderstanding, reinterpretation of science, philosophy, and alteration of perception in a flux which offers us new creative works. At school, we do learn to place art in categories, like impressionism and expressionism, so that collectors and spectators are able to adjust, recognize, and identify a form to represent the world.

We find in holographic art a similar evolution of subjects than in painting, like copy of subjects, portrait, nude, and iconic presentation. Margaret Benyons’ cosmetic series shows different images than the reflection in a mirror like a Rembrandt 1606-1669, or Félix Vallotton 1865-1925. It did not bring the spectator to the same controversial reaction than works like those ones of Egon Schiele, 1890-1918, rather more indifference and misunderstanding, because unclassified. The process of painting gives the artist more freedom, to observe, to reflect, and to change the concept on the canvas. The creation of a photo or a hologram pushes the artist to plan, create one chosen technical setting and then finally, “Click!” Nevertheless, the creation is not just in the final process of visualization it is before in the wish, the motivation to create an image. This is where we can see the difference between an artwork who reflects a personal, individual expression of his/her time, and the wish to copy an object or subject and make it technically perfect. The first so called artworks were trying to copy and reproduce the nature or be the visual element which would help to reconstruct a story. This, was the function of these images we now call art pieces. The goal, the search makes the difference, like a work of Margaret Benyon and the work of Inaki Beguristain. One intends to express an inner feeling, the other one
wants to copy an object like a vase. Still in exhibition, and because, spectators are still not able to
capture the meaning of the content, an Begusristain ‘s vase and its wonderful immaterial color might
talk more directly to the public than the intrusion of the multidimensional consciousness represented
by animals portrayed in Benyon’ face. This explains, without excuses for artists, why, in most of
exhibitions of holography, some holograms are still placed next to holographic artworks.
Among artist holographers, we have the constructivist. Rudie Berkhout was all of them, his Hologram
Cairo Aspect moved me as much as Fra Filippo moved Vittorio in the roman of Anne Rice. John
Kaufmann used the notion of time, his series of Rocks replacing time, and substituted it with the
matter earth. As I explains in the paper “Artists and Collectors”(7), 20 years ago, and it is still true,
the institutions of the art world are always late in the presentation of the art also some institutionalized
fine arts museums already courageously presented holograms to the public. But the press, the critics,
and collectors and in general the art communities were not supporting these audacious attempts. And
holography remains for the time being a fascinated field of techniques and science, before, in some
time from now, entering the pantheon of art.

4. Value?
Benjamin defined art and its function is its secularized ritual, iconic magic or a kind of theology of
art:”l’art pour l’art.” (2) Photography shacked the tower of profound service of beauty as an
“evolutionary means of reproduction” (in the dawn of socialism). Benjamin reduced for
further analysis the perception about art to two major parts: the
social cultural value and its exhibit value.
One of the first and largest event of Photography was in 1951 the work
of Edward Steichen with the
exhibition of “Family of Man.” (8)
It started in Museum of Modern
Art New York, traveled until the
border of communism and still
found its place in Luxemburg. If
we are reading the thesis of Silke
Walther from the Staatliche
Hochschule für Gestaltung
Karlsruhe, we find that photography is extremely political.(9) The simplest images can be composed
to any kind of social messages, like the idea of the good democrat.
Holography never appeared to be very political. Fascinations of Light in London, Art, Science and
Technology in Washington DC, Museum of Holography in New York and Cologne have been the
forum of holographic art. However, most of exhibitions have been a strange mixture of holographic
art, industrial holography and some nice pictograms. The images in the exhibition screamed at our
mind, it transgressed all our visual aesthetic we have been confronted before, still it did not reveal any
echo known as art forum. Even when Bruce Nauman and Dali encountered the media, the reaction has
been quite and without too much emotion. After more than 800 years history of painting, changing the
clerical subject, changing form and color, 100 years of photography and only 60 years of holography,
the public is still in expectation and suspicious about the immateriality of these objects of light. I
always remember this sentence repeated by several collectors; “Finally with a hologram, what do I
buy, a frame, a lass plate, what?
5. No Border?
James Elkins from the School of the Art Institute of Chicago complains, that the history of image making has too much been focused on fine art, otherwise the images of the Hubble Deep Field would be one central work of art of our epoch. His philosophical essay about “Kants’s Reflections on the Sublime and the Infinite,” questions the meaning of emptiness and infinity of the Universe.(10) While the first photo from the NASA has been illustrated by artist into “pretty pictures,” the infinite eye is transgressing all our previous aesthetic about image making. Andreas Ruby presents Zaha Hadid Architecture, her sketch and her transformation of form as excessive. Nicole Stöcklmayer describes the production of the hologram and its presentation into the building of the Phaeno Museum itself, in Wolfsburg Germany, the tip of her excessive presence. (11) This doubling of this presence, the digitalized sketch illustrated into Andrea Rubys Space ship and transformed by the artist Dietmar Öhlmann into a digital Hologram, makes it an iconic piece of work, as Dr Börner, Curator of the Exhibition at the Phaeno Museum, stated too. Digital Holography makes it possible, to transform CGI (computer generated images) into an art creation using expression and techniques, of the present time, and combining real and virtual reality. However, if you exhibit this Holographic Phaeno out of the context, it becomes just a hologram; the art stays in the paradox. The art history gets a new form in writing, like the publication from Ingeborg Reichle and Steffen Siegel with their international research of new aesthetic of images making. Analog photography and holography vanished like HTML5 might remove Flash on the market. But the issue of visual creation is the same, just like in language; the grammar and vocabulary are changing.

6. Conclusion
This June 2012, Madonas’ live show in Tel-Aviv has used big LED’s panels. Everybody called it 3D and holographic projection. In Forum, like the holography group in Linked-in, people deliver a fight about the definition of a hologram. Some people claim that they do art, but talk just about technique. Some holographic artists do not want to be mixed with other media, so for an art historian it is difficult to find out what kind of art they are talking about. I believe, in holography we are back in the quatrocentro of the renaissance, in the experimental stage of Leonardo mixing visual and technique. In the past, the artist has been a hard worker. He mixed paint and placed it in the correct context so that, the authority of clergy and nobility would accept the work and its artist. Some artists need pats of recognition like a cat. Benjamin stated; Artists, like actors are very often cut, separated from their public, e.g. the movie stars and the spectators in cinema. This is the reason why we invented the stars, to give them some pats. If Fluxus and Dadaism is the reaction on photography, holography might wait to find its proper place, and this might take some time. Indeed if the form created by art always anticipated the structure of the societies like demonstrated René Huyghes in “Le pouvoir de l’image” (12), we can wonder what kind of structures holographic art is shaping for our upcoming societies.

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9. Silke Walther, Ingeborg Reichle / Steffen Siegel *Fotografie als Weltsprache zum Theater der Realität* p379-398 (Maßlose Bilder: Visuelle Ästhetik der Transgression, Munich Fink)

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11. Nicole E. Stöcklmayr *Architektur ohne Maßstab: Digitale Visualisierungen im Entwurfsprozess*, in p. 279-294.

12. René Huyghe 1967 *Sens et destin de l’Art, De l’art gothique au XXème siècle* (Edition Flammarion)

13. Dietmar; Ohlmann, Odile Meulien Hans Danzebrink 2005 Photo The *Micro Hologram* artwork first shown in Montreal and San Jose The philosophy of this ongoing project has been presented in: *The matrix of inspiration* (Practical Holography XIX: Materials and Applications Proc. SPIE 5742 p 71-78)

**Autres references**

**Pic 1**: Hans Vredeman de Vries, (1604) *Perspectiva in Monasterie Bad Gandersheim* © Germany, copy with permission of „Portal zur Geschichte“; Zur Abbildung: Bildfeld aus dem "Saal der Perspektive" (Nordwand, Sockelzone) im Fürstlichen Haus der Äbtissin Elisabeth Ernestine Antonie von Sachsen-Meiningen (1716-1726), Kloster Brunshausen, Bad Gandersheim

**Pic 2**: Dietmar Öhlmann, 2005 *Micro hologram* © Germany

**Pic 3**: Dietmar Öhlmann 2007 *Phaeno hologram* © Phaeno Museum with Friends of the Museum’s Association, illustration of the architectural model of Zaha Hadid.