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Thinking it through – the photograph

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Opener

"Thought is the very essence of fragmentation. Thought is from the outside. It can turn inward, but it is still outside. Thought is the response of memory, knowledge and experience. Therefore it is the past." 1

The photograph, like thought, is born of the past, of a time that no longer is. Existing in the present as a trace of what was.

I have studied photography now since I was 14. My earliest memory seems to be a mix of what I experienced and my mother's perspective. Curiously though, years later, I came across a photograph which resembled the exact visual memory I had had of myself and began to wonder had I seen this as a youngster to form part of my earliest memory?

I began with a quote. One jumping into the crux of this paper: the role of thought, and hereby what can the photograph reveal to us about this.

Growing up bi-lingual it became clear to me that the world is not always exactly as we say it is. We use words as tools to communicate with each other, and with ourselves. Photographs too seem to be tools in a similar way. With the English language, and it's limitations, along with photographs I will be alluding to a non-verbal process - the process of looking.

In studying photography I began to notice we often describe photographs in the same way we describe the world around us, by noting, projecting, the contents of what we recognise in the photograph. And I wondered, with this process of recognition, does the photograph offer us the potential to understand how we perceive the actual world around us? Does that process of recognition, our way of perceiving a photograph, reveal to us the way we perceive reality itself?

Naturally I had then to understand the common language. A language that had to be grounded, not in the process of creating a photograph, but in the very nature of perception. The photograph, with its static nature, became an extraordinary vessel to begin conveying this exploration.

This curiosity would have me needing to simplify the nature of reality as we perceive it. Through founding our understanding of space/time to the perception of matter itself, bringing in the role of the camera as a fundamental component in this progression. Then to bring this back to the personal

¹ Jiddu Krishnamurti, *Public Talk 3 in Bombay*, 26 January 1974 [online].

process through the way each of us looks at photographs, and therefore the way we look at, and create, our versions of reality itself.

Whilst the inquiry itself may at times be methodical in expression – the hope is that this exposure of such a common every day, every moment process, will have the reader feeling as though they better understand themselves and their version of reality.

Time

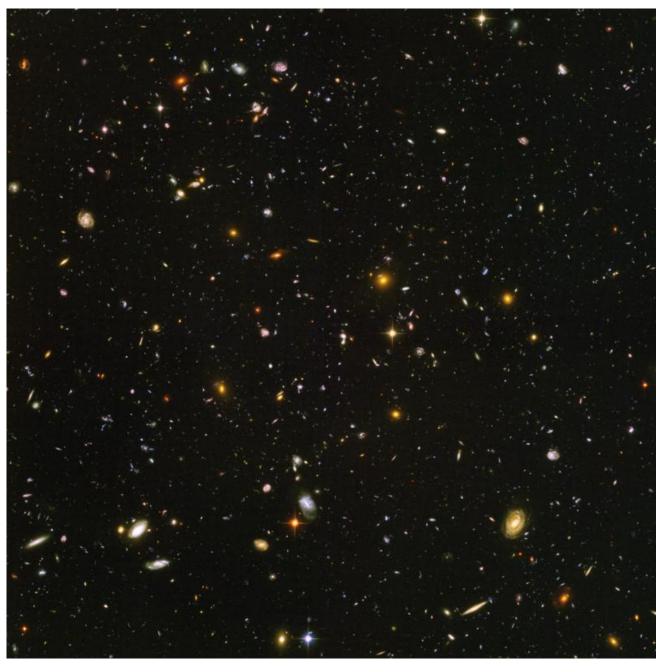
The camera is the tool from which photographs are made through harnessing a relationship between visible light and time.

Time can be illustrated through the motion of cause and effect: an event occurred and thus as a consequence the effects happened. This is dramatically shown in the theory of the Big Bang and what followed. It is possible to understand what is meant by 'time' by the way in which it is measured. To measure requires a standard.

Distance is quantified by the use of a model such as metres or miles - and motion is measured by a means of time, say miles per hour. So by time we are in fact dealing with some form of motion – the movements of the sun and moon for example to create the cycles of years and months and so on.

This is what photography confronts us with – the way we structure time.

Time in the photograph



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The famous Hubble Ultra Deep Field image depicts the deepest photograph of the visible 'universe' thus far. It is a reminder, not just of the basics of photography, but also the act of looking. Within the frame we see light which has managed to reach the camera throughout the duration the shutter was open. We are literally looking back in time.

² Hubble Site, 2004. *Understanding the Discovery* [online].

When we stargaze at night looking into the sky, the stars we witness are light which has passed. "Beginning in the 11th century, Arab astronomers probably used the camera obscura to observe solar eclipses." To look at the stars and galaxies is to look back in time. Many of the fragments of light and colour we can observe in this image existed long before even our own sun. The image is an extraordinarily striking example of how the photograph always offers a perspective impossible to the naked eye, and later we will see how this unique quality reveals and even changes the way we think. "Thus I [the camera] explain in a new way the world unknown to you."⁴

This subtle difference between our ability to 'see' on the one hand and the camera on the other is far more complex to observe when the contents of the photograph are much more familiar – as for instance in a family portrait or video. In the Hubble photograph we have such little experience and prior knowledge - thought - with which to identify and thus rationalise into our own perspective of reality what we are witnessing in the frame of the image: existence outside earth's atmosphere. "The Hubble observations detected objects as faint as 30th magnitude. The faintest objects the human eye can see are at sixth magnitude."⁵

The Hubble Ultra Deep Field reveals how time, which we arrange as seemingly linear, is in fact a movement of perspective relative to observation. Events happening simultaneously at this very moment will not be possible to witness or even acknowledge until millennia have passed. To look at the stars is an everyday reminder of this fact; even to look at a mirror requires time to pass for the reflection to be perceptible. Much in the same manner, the photograph cannot be witnessed until after the duration of the shutter has passed, and only then are we able to see what the camera could.

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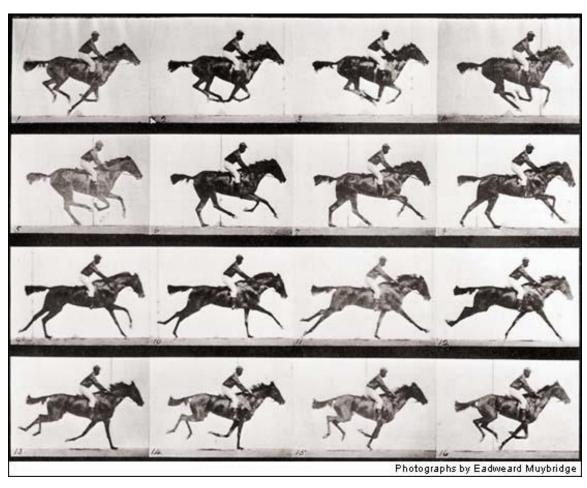
³ Hubert Damisch, Five Notes for a Phenomenology of the Photographic Image (Connecticut: Leete's Island, 1980)

⁴ John Berger, Ways of Seeing 1972 < http://www.youtube.com/watch?v=LnfB-pUm3el>

⁵ Hubble Site, 2004

Cinematic Time

"It was as though he had grasped time itself, made it stand still, and then made it run again, over and over. Time was at his command as it had never been at anyone's before."



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Ed Muybridge did what had never been achieved before and created motion with the photograph – creating film. This series of stills alludes to movement because we recognise (recognition being a process of thought) that each successive image after the initial one has altered slightly and thus, in creating a relationship between the two, we witness, or believe we witness, genuine movement.

Muybridge was interested not only in studying the movements of the horse, but also in creating motion. In his work we see the first image labelled negative '1' which intensifies the effect, and from this we remember briefly the initial position of the horse within the photograph and thus compare

⁶ Rebecca Solnit, *River of Shadows* [online]. (New York: Penguin, 2004) p. 1

⁷ Ed Muybridge, 1878. *The Horse in Motion*. Digital Journalist [online].

the sequential images to the previous to create the illusion of movement —the same principle of course for all of film and cinematic motion — just as in a child's 'flick book'. This may be why Mary Ann Doane refers to it as "The Emergence of Cinematic Time". From Muybridge's work we can understand how the perception of a photograph is itself entwined with thought.

So we recognise time by a process of change. Recognition requires something already known, and what is already known is of the past. Thus we recognise time in film through change from what was – by a comparison of what is to what was. To clarify, or put another way, recognition of change does not require aesthetic vision: a blind person can still recognise motion and time.

The camera is just a tool; it has no effects without human intervention. Photographs can transform our perception into moments as opposed to a constant flow, and they make time stand still – something which we cannot do without the help the camera.

When we look at a photograph we know that the event has happened and no longer is. Another way of expressing this might be to say that all exists as the present, from within which exists the past as memory and the future as possibility.

So photographs reveal to us the ways in which we structure time. My two languages are English and Finnish. And curiously, contrary to most European languages Finnish has no future tense. It is unlike the languages which structure time through past/present/future and so conjure a seemingly linear movement. "The three-tense system of SAE (Standard Average European) verbs colours all our thinking about time."8

Our models of reality have become localised according to this conceptual arrangement, and we see that the contents of the photograph are of the past because of this structure. It is our memory, thought, which gives existence to past events. And the photograph, being of what we would call the past, has the potential to modify what we remember as past events, because it presents us with a tangible, physical perspective - whether as an object or on a screen - of the event which did happen in reality, but no longer is.

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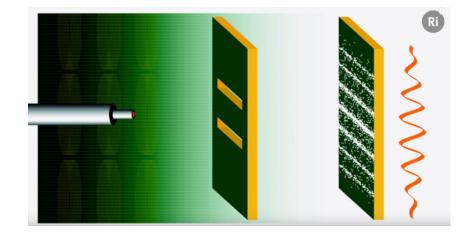
⁸ Benjamin Whorf, *The Relationship of Habitual Thought and Behaviour to Language*. In: PICKERING, J., and SKINNER, M., eds., *From Sentience To Symbols: Readings on Consciousness* (Toronto: University Press, 1990) pp.250

Matter matters

"Early in this century it became evident to all physicists that the observer is an intrinsic component of every physical observation. Physical reality is what physicists recognise to be real. One cannot separate the recognition of existence from existence."9

The thinking opened by Quantum Mechanics completely transformed human life on earth. An early revelation discovered was that the very atoms all matter is made of behave in a way dependent on observation.



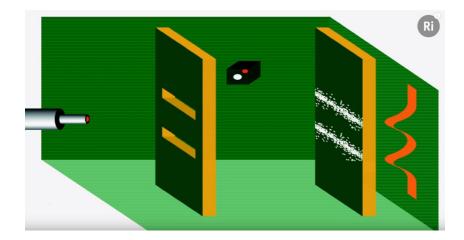


Individual atoms, with synergy, travel in what appears to be a wave form. In this diagram, showing the double-slit experiment, we see that atoms when shot individually towards the slits appear en mass to always end up forming the pattern of movement a wave creates.

⁹ George Wald, *Life and Mind in the Universe*. In: PICKERING, J., and SKINNER, M., eds., *From Sentience To Symbols: Readings on Consciousness*: (Toronto: University Press, 1990) pp.73

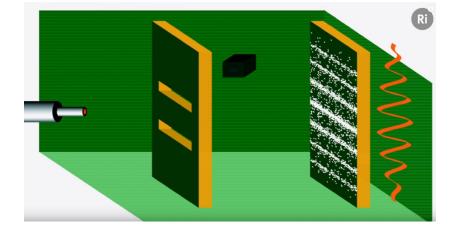
¹⁰ The Royal Institution, *Double Slit Experiment explained! By Jim Al-Khalili* 2013 [online]

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However once a sensor, a form of camera for monitoring, is placed to recognise when an atom passes through one of the slits, curiously the atoms begin to move as particles would, thus forming two dense patterns where 50% move through one slot and the other 50% through the other.

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All becomes extraordinary when the sensor is switched off as the atoms once again move in a wave form despite the presence of the dormant sensor.

¹¹ The Royal Institution, *Double Slit Experiment explained! By Jim Al-Khalili* 2013 [online]

¹² The Royal Institution, *Double Slit Experiment explained! By Jim Al-Khalili* 2013 [online]

What this reveals, awesomely, to the human intellect is that the world around us, the very material it is made of, behaves in a way dependent on the experiment - signifying the truth that the observer and the observed are one of the same movement.

"What we observe is not nature itself, but nature exposed to our method of questioning." ¹³

The relevance this has to the photograph is that what the viewer sees is a reflection of the way the observer is thinking - not of the thing itself. For the thing itself, as revealed by the double slit experiment, is not available to us. All we are able to interact with is our model of reality - albeit our models naturally culturally overlap as we have formed them together over generations.

...we live "inside" an "external universe" and make a picture or model of it "inside" our brains by adding together, or synthesising, and interpreting, our pictures, or models of parts of the universe called "objects". Then, it follows that we never know the "external universe" and its "objects" at all. We know the model of the "external universe" inside our brains, which exist inside our heads. In that case, everything we see, which we think of as existing externally, actually exists internally, inside our heads. ¹⁴

From this oversimplification I want to consider how the photograph, as a tool of visual experimentation, never reveals what is actually there; it reveals the way we think through what we see.

To look with a camera, or to look through our eyes, requires light.

¹³ Werner Heisenberg, *Physics and Philosophy*. (London: Penguin Classics, 2000)p.58

¹⁴ Robert Anton Wilson, Quantum Psychology, p.33-34

Light: Eyes and Cameras

"We see objects in the "external universe" through our eyes and then make pictures – models – of them in our brains. The brain "interprets" what the eyes transmit as energy signals." 15

All of our sensory organs are incredible for what they have evolved to do – human eyes interpret light for the brain. Although they are, like everything biological, finite in purpose. This holds true for all of our senses; the range of frequencies we are able to hear is finite, evident simply by using a dog whistle. "Humans have 200,000 cells per square millimetre of retina, while eagles have around a million cells for the same area." ¹⁶ From the phrase 'eyes like an eagle' we refer to the quality of vision beyond our own eyes – even with cameras.

Visible light is composed of a small range of frequencies that are visible to the human eye.

Other possible frequencies of electromagnetic energy, which we call the electromagnetic spectrum, are outside our visible limits.¹⁷

The camera allows light in where it is then, either chemically or digitally, registered as information formulating a record of the light that reached the sensor or film. Whilst the eye is a far more complex organism, the camera has, as an extension of our eyes in its adoption in daily life, transformed the way we see the world around us. And it has become a tool for understanding the way we think. Thus the camera, like our eyes, has become a tool in our evolution.

"All tools are externalizations of originally integral functions." Buckminster Fuller revealed the importance of thinking in whole forms. By understanding the human species to be part of a larger system - Universe - he was able to think in terms of evolution and thus the responsibility of survival as a species within the larger system. His significant revelation was that we have the potential to innately create the tools to facilitate the prospects of our survival. Photographs created a new way of understanding the models of reality we have psychologically constructed.

¹⁵ Robert Anton Wilson, *Quantum Psychology* 2nd ed (Colorado: Hilaritas Press, 2016) p.33

¹⁶ Optimax, Eagle eyes: Where does the saying come from? [online]

¹⁷ FactMyth, Visible Light is Electromagnetic Radiation [online]

¹⁸ Buckminster Fuller, Operating Manual for Spaceship Earth (Switzerland: Lars Muller, 1969) p.118

What photographs reveal is a perception impossible to our natural eyes and then naturally a new way of modelling the universe. It has allowed us constantly to revaluate the world around us in ways which previously were impossible - allowing us to manage the perception of the past itself. Thus it has become a tool to influence the way we think. From birth photography has, perhaps without us necessarily acknowledging it, changed the way we live.

As part of our evolution we have naturally come to embrace the photograph in daily life.

The Event

"The language which photography deals in is the language of events." 19

In considering the relationship between the photograph and the way we think, the actual act of using the camera is naturally paramount. To look at a photograph and for thought to arise mutually is the result of identifying that the image has happened in the past and thus it is the event which we are reminded of. The photograph itself is present while our perception, with the influence of thought, reminds us of what is also the absent, which is everything outside of the contents.

The scars created in the past we can see in the present. Whether these are the scars on, say, the body of a living creature, a tree stump, or perhaps the photograph itself, these are remnants, physical signs of an event which has happened. But the past as it was no longer exists, only in thought; the past is now the present.

Often the photograph is talked of as being the past, but by this we really mean that what is perceived relates the contents of the in-frame to the absence of the "off-frame"²⁰ and thus we identify an event, which has taken place.

Anything made with a camera is thus, in itself, a form of scarring, of trauma - not in the morbid sense of the words, but as an act that has taken place with its residue remaining present, visible because of the marks it has left: the photograph, which signifies the event. To look at a scar (photograph) for the first time, we know nothing of its origins, when it happened, who, or why. All these curiosities may arise, but we cannot know about them, "The spectator has no empirical knowledge of the contents of the off-frame,"²¹

A photograph is not only an image (as a painting is an image), an interpretation of the real; it is also a trace, something directly stencilled off the real, like a footprint or a death mask.²²

Or perhaps a scar on one's body.

"One learns to read photographs as one learns to read footprints or cardiograms.."²³ Anything made with a camera is a result of human choice, an exercise of observation. What the work of a camera

¹⁹ John Berger, *Understanding a Photograph, The look of Things*, 1974. In: TRACHTENBERG, A., ed., *Classic Essays on Photography*. 5th ed. (Connecticut: Leete's Island, 1980) pp.p. 293

²⁰ Christian Metz, *Photography and Fetish* pp.81-90 [online] *October*, 34, 1985 p.86

²¹ Christian Metz, p.87

²² Susan Sontag, p.154

²³ John Berger, *Understanding a Photograph, The look of Things*, pp. 291-92

shows is a distinct choice to frame this and not that. "The choice is not between photographing x and y: but between photographing at x moment or at y moment."²⁴

It is to release the shutter at a given time of observation. The subtle mistake is to think 'I observe this thing and thus will photograph it', whereas in fact it is 'I will photograph at this time of observation.' "Yet this apparent limitation gives the photograph its unique power. What it shows invokes what is not shown.²⁵

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²⁴ John Berger, *Understanding a Photograph*, *The look of Things*, p.293

²⁵ John Berger, *Understanding a Photograph, The look of Things*, p. 293



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One afternoon I walked into a cheap cinema in the East Village with a large-format camera. As soon as the movie started, I fixed the shutter at a wide-open aperture. When the movie finished two hours later, I clicked the shutter closed. That evening I developed the film, and my vision exploded behind my eyes. ²⁷

With Sugimoto's Theatre series we see the evidence of using a camera to show reality in a way impossible to the organic eye. Taken over the entire length of a film the resulting still has over an hour of light reaching the sensor, presenting us with what could be described as a time capsule. Thousands of stills of a film are turned into a single still itself. In a 120min film there would, at a minimum of ~24 frames per second, be at least a total of 172,800 frames/stills to create a continuous flow of movement.

²⁶ Sugimoto, Hiroshi, *Theatres*, [online] 1993

²⁷ Sugimoto, Hiroshi, *Theatres*, [online] 1993

What is incredible about this series is the eeriness that, upon understanding the process, is evoked by witnessing time held still. Here the awareness that what we are seeing is only possible because of human decision with a camera opens a reflection of how limited our perspective can be. Such a simple image presenting us with a version of reality we will never have experienced.

His work opens up questions. The series invites us to speculate what we are seeing - an introspective challenge which knows no bounds. The prolonged exposure leaving a white screen leaves almost a blank canvas frame into which we may ourselves project and contemplate.

Naturally, as we look, we see a frame within a frame. The composition itself invokes an importance of what was within the screen. The empty theatre itself creates a feeling of absence. Perhaps almost as a metaphor for the nature of using a camera that what we are seeing paradoxically also includes all that we are not seeing. What we are being shown is a decision to show this and not that - in a way seeing the blank white screen is in itself showing what we cannot see.

Here we see the use of a camera as a tool for thinking. Sugimoto is using the camera to further explore curiosities, to materialise them - then interact with them externally - using the photograph as a tool to be able to think again.

This is a truly innovative way that the simplicity of using a photograph can eloquently open a conversation often so linguistically complex. The photograph will always remain as we see it, only our understanding will be transformed.

"A photograph, whilst recording what has been seen, always and by its nature refers to what is not seen. It isolates, preserves and presents a moment taken from a continuum."²⁸. This is one of the dualisms of photography: it is entwined with memory, not just in reference to thoughts of personal consequence, but also the movement of thoughts, memory, in time.

The photograph is a record due to the interaction of light with the camera over a particular duration of time of a given event: "... yet it uses the given event to explain its recording. Photography is the process of rendering observation self-conscious."²⁹ Thus the inseparable relationship of the photograph and reality can be presented as the inseparable perception of the present and the absent. To identify something as present is also to recognise absence.

²⁸ John Berger, *Understanding a Photograph, The look of Things*, p. 293

²⁹ John Berger, *Understanding a Photograph, The look of Things*, p 292

The Language of Events

So photography deals in the "language of events." Looking at the photograph is an event. That looking then invokes the event of photographing. And together those are part of the whole event which we see as the photograph itself.

The very act of looking must always include by its nature the one who looks, for there is no looking without the onlooker. These are events of time which we fragment into separate identities. In other words we separate them into duality for use of thought; but they arise mutually and are inseparable. It does not make sense to speak of these as concepts in their own right. There can be no awareness of the photograph having occurred, been taken, without the absence of the actual event.

Considering the camera as dealing in the 'language of events' simplifies the complicated perspective of the photograph as being the past. It reveals how the actual photograph, by being a record of light, transmits both by what it shows and what it does not show. The perspective of the photograph being an image of reality is due to our awareness also being concerned with the real event which happened in the past. "What I see has been here." 30

So the photograph, being a signifier of the past, is understandably perceived or used as a tool to portray our thoughts of reality. For, by its very nature, the photograph refers to the absent, to the event (the photographing). And so the camera offers a new perspective of that reality – and this is most easily recognised with personal photographs. Perception can thus be transformed by photographs as they present us with a view that we did not have of the experience from that time. So photography by its very nature has the potential to modify our perception of reality: we can 'project' the present photographs stillness into the thought – that which is now the past. This is all a part of looking.

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³⁰ Roland Barthes, p. 77

Looking

"Making a definitive declaration of intent or meaning kills the photograph." 31

When we look at a photograph we are confronted, but this confrontation is not really with the photograph itself. Rather it is within our reaction, our perception which arises from the image; it is a confrontation with our own observation. It is a meeting of the observer and the observed.

In today's world we are bombarded with imagery. Alongside the written word, photographs are the most widely used form of information, propaganda and advertisement. To pass a day without witnessing any images - although we may not be aware of doing so - would be highly unusual. Even our food packaging is saturated by an image of what the content will 'look like' once ready to consume.

To look at a photograph, we may identify the content, perceive the depth, the motion, and so on, but all this comes as a result of awareness that the event of photographing has taken place – for otherwise looking would amount to no more than seeing a two-dimensional surface with an arrangement of shapes and tones.





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³¹ Moriyama, Daido, The Shock From Outside. Interview 2010 [online].

³² Chaplin, Charlie, Special effects of roller skating scene in Modern Times explained [online] 2017

In the charming Charlie Chaplin "Modern Times" roller skate scene we are instilled with comical fear as he almost falls over the edge skating backwards. Or so we are meant to believe. The first image shows us the final edit, the second the way in which it was made, displaying a clever use of combining images in front of the camera to create a faux version of reality. This early example is to show how the camera has, for its lifetime, been mastered as a tool to influence what we think we are seeing.

Parallax is the term used for depth perception, and this in principle is partly why we project the notion of three-dimensional 'space' into the contents of images both moving and still. This seems to be due to the experience of reality that objects that are closer appear larger than those at a distance - the perspective for example that, viewed up close, one's thumb is larger than the moon when held up to the sky. This is the reason that we so often mistake the photo to have depth, for it is an illusion of sight. "The photograph is flat, platitudinous in the true sense of the word, that is what I must acknowledge." ³³

By way of illustration, if we search for one of the many examples on YouTube of videos displaying the "Hollow Face Illusion," a mask spins around and the concave inner side appears to the camera as a normal face, but this is because;

...your brain refuses to see it as hollow, simply because it is so unlikely. This demonstrates the immense power of top-down knowledge, which will actually counter signals bottom-up from the senses, and forces an extraordinary illusion in which the sensory information of the present is cancelled by immense knowledge derived from the past.³⁴

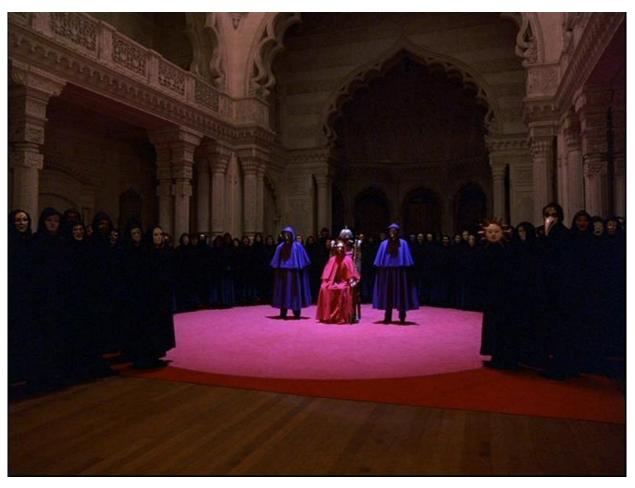
This example shows how subtle the illusion created by the camera is, how what we see in the photograph is really a result of memory-thought. The camera, in a way, is a tool that transforms a three dimensional world into a two dimensional reality.

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³³ Roland Barthes, *Camera Lucida* (London: Vintage, 2000) p.106

³⁴ Anonymous, Hollow Face Illusion [online]. 2006

Looking back at us



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Here we are being looked at, we step into the shoes of the camera. The masked crowd is all facing directly towards the lens. We see the grandeur of the location; a sinister air with concealed figures; a vast space at the forefront detaching us, as viewers, from them. We are not part of their meeting - we even appear to have disturbed it for they are all looking at us. Being a still frame from Stanley Kubrick's last film - Eyes Wide Shut - we already know this an exclusive party, one that the main character had to connive his way in to. Unknown to him though were the consequences of his actions. In knowing the narrative of Kubrick's film itself the power of this image resides in the grandeur secrecy of such a scene: looking at an image where the viewer is being looked at.

³⁵ Film-Grab, Eyes Wide Shut, [online]

What do I see? I may ask. Instantly I think of the parties, the rituals, these scenes were apparently portraying. I think of the occult, free masons, secret societies. I think of the things people still alive today may have seen with their own eyes, that I hopefully never will, yet lived to share their tale. I think of how invigorating, how fortunate, it feels to be able to entertain different perspectives of the world without ever forming a calcified belief system. And I think of the vast spectrum of the human experience Kubrick covered through his short portfolio of extraordinary films. The power of looking at a photograph resides not solely in the image itself, but in the relationship the viewer has with the way they see.

While the act of looking may be apparent, more subtly the importance of diversifying this inspection overall is highlighted by the significance of the viewer in interpreting what he or she is seeing. For we could take any image and, with self-awareness, realise that what we are seeing is always as much a reflection of ourself as what the photographer, or in this case director, intends us to see. The power of the camera resides in its potential to limit what others witness within the frame; what the viewer perceives though is completely limited personally.

Our responses

We may find images that please us, or are memorable for particular social reasons. Sometimes we feel that one presents the photographer's intention fairly well. In these we feel that we have understood the intentions behind the choice that was exercised to release the shutter.

This is what Barthes identifies using the Latin term "studium"³⁶. This refers to an almost habitual response to the process of looking at photographs. One may be able to read them through the signs, and cultural content, which we have collated in memory, resulting in this "general interest" in the photos. It is by this general interest, and means of reading images that we gloss over and indulge in the simple pleasure of looking at so many photographs.

In essence this is the interaction between an observer witnessing and reading his or her own thoughts, his or her own observations, and conditioned reactions;

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³⁶ Roland Barthes p.27

Such signs are signposts, boundary-stones, the mariner's storm-cone, signals, flags, signs of mourning, and the like. Indicating can be defined as a "kind" of referring. Taken in an extremely formal sense, to refer means to relate.³⁷

This 'studium' is a process of reading photographs according to one's own knowledge.

Barthes also uses the term "punctum" to refer to that moment when a photograph has simply grabbed attention as a whole. There are no observations to be read; simple parts of the content may allude to this act of piercing one's 'studium', but it is no longer of an average "general interest", a case of simple subjective perception: "I like it, I do not like it", etcetera.

So through our perceptions, personally conditioned, we can read images, we can see our learnt responses to certain content. As Wittgenstein wrote, quoted in Sontag's 'On Photography':

...we regard the photograph, the picture on our wall, as the object itself (the man, landscape, and so on) depicted there. This need not have been so. We could easily imagine people who did not have this relation to such pictures. Who, for example, would be repelled by photographs, because a face without colour and even perhaps a face in reduced proportions struck them as inhuman.³⁹

There are images which move beyond the simple signifiers we have collated through memory, and these images resonate with us. The studium seems to refer to casual thoughts which photography does not necessarily alter, but more precisely confirms or gives strength to, makes evidence of. The punctum however seemingly establishes a new order itself, a new thought, a new perception. It is not simply an affirmation of past memories, but a disturbance, which is new, fresh and ultimately personal.

Thought is experienced as personal; we all have thoughts, and we may even share a "collective unconscious"⁴⁰. Perhaps what occurs when an image really 'pierces' us is that it peels away layers of

³⁹ Susan Sontag, *On Photography* (London: Penguin, 1979) p.198

³⁷ Heidegger, Martin, Being and Time, Translated by Macquarrie, J, and Robinson, E [online] (Oxford: Blackwell, 1962) p.72

³⁸ Roland Barthes p.27

⁴⁰ Robert Anton Wilson, *Prometheus Rising* (Nevada: New Falcon, 1988) p.197

conditioning. In a sense it pierces that duality of observer and observation, fusing the two so that they are no longer divided or as separate from one another.

The punctum, just like thought, is universal to humans, but it takes its form in the unique nature of the spectator: the piercing photograph does not pierce everyone.

The observer (the subjective witness) sees his or her observations (the interpretation of the photo). So in viewing the event of looking as an interaction between two, the object and the observer, we have divided the whole process into a duality of interaction.

"It should be emphasized in this connection that intellect, emotion, and will cannot actually be separate, except for the purpose of analysis in thought."41

This is where the punctum lies, when judgement falls away, and we are 'pierced' by the photograph.

A Personal Punctum



⁴¹ David Bohm, and David F. Peat, *Science, Order and Creativity*. In: PICKERING, J., and SKINNER, M., eds., *From Sentience To Symbols: Readings on Consciousness*. (Toronto: University Press, 1990) pp.67 ⁴² Paul Graham, *Baby DHSS office Birmingham 1984, Arts Council Collection [online]*

This photograph by Paul Graham - *Baby, DHSS office, Birmingham* - is an example of one that pierced me. It struck me hard, and I will use it to explore what can arise from a particularly poignant single photograph. I first observed it in the Whitechapel Gallery in London, in print, which in itself is radically different from seeing a reproduction.

People wait in a Benefits Office. The baby girl of the title inquisitively looks at adults passively awaiting their fate. Few acknowledge her. Perhaps the barely visible clock is an indication of waiting - that form of time where we 'wait' for another time. The forlorn scene echoes a prison visiting room.

Only the little girl seems relaxed. Perhaps the isolation in this picture comes from her solitary prominence in centre frame. Is this any place for a child? Is this the future?

The camera's perspective is low, at child height, perhaps explaining why she is the focal point. Using a hidden camera the genuine event can be felt through 'just looking.' Or is my observation tainted by my own memories and experience - seeing a symbol of my own nieces? Here it is self-evident that thought and my perception of the photograph are inseparable. Were it not for my memory perhaps I would not have even been immediately struck so poignantly by this photograph. Again, this 1984 photograph, like others in the hard-hitting Beyond Caring series, makes one wonder whether there is an echo, a thought – for Graham - for the observer – of Orwell's 1984.

Made when political tensions were polarised, the pictures' functions went far beyond the gallery. They were used to lobby MPs for better conditions in Benefit Offices. This is evidence of the immense potential of the photograph – the signifier of events – to facilitate structural change. Still striking to me today is how images of such degradation lie in a comfortable, essentially middle-class gallery in one of the poorest areas of London.

Confrontations

This is the unique aspect of what photographs do. Photographs can often confront us with our own conditioned use of thought, and occasionally we come across images in which we can see the very movement of our perception. We are unable to judge, or to quantify, what we see – we cannot simply categorise the photograph into the database of memories we have accumulated.

In looking at a photograph, the viewer sees his or her own interpretations arise. This tends to be easier to notice with photography, than with film, because a photograph by its nature is static. By contrast, whatever else we look at we change even by the slightest movement.

A photograph remains still, and so it seems easier to become aware of our own perceptions of it. "Photographs are a way of imprisoning reality, understood as recalcitrant, inaccessible; of making it stand still."⁴³ It is quite possible to see how photographs – at least once they are looked at, even the actual act of photographing – can alter the way we think.

To be able to read an image is the ability of the brain to interpret what it sees according to its own conditioning. "The camera sees geometrically but we see psychologically."⁴⁴ And so we can see how looking at a single photograph – because it offers a new perspective to what was possible in the actual event – can change the thinking process.

The object can change the observer. The photograph gives rise to the importance of what is in the frame, so that thought may explain itself through the photograph with the image being a trigger. The way in which photographs can hold personal resonance can reveal the way in which our realities are touched by looking. However interested we are in looking at a photograph, perception is always involved – for, as soon as the photograph is made, it belongs to the past, visible in the present through its reproduction.

⁴³ Susan Sontag, p.163

⁴⁴ David Hockney, *Hockney's painted message for the politicos*, The Times, 24th January 2019. P.19

Thinking thoughts

In the video experiment "Selective Attention Test"⁴⁵ viewers are asked to watch and count the number of times the people in white shirts pass a basketball. During the video a person dressed in a gorilla suit walks through the scene. Come the end of the study a remarkable result was revealed that "about half of them [the viewers] do not notice [the gorilla] anything unusual."⁴⁶ Quite astoundingly: "The gorilla study illustrates two important facts about our minds: we can be blind to the obvious, and we are also blind to our blindness."⁴⁷

Thought by its nature cannot contain the whole, only concepts. The gorilla study succinctly revealed how easy it is to miss what is happening when thought has another task in action. This holds true for the way we look at everything in our day to day lives. And evident through looking at photographs. The photograph is a way of reflecting back the way one is thinking at the time of observation.

"I could turn all of it, or any of it, on or off by shifting the state of my consciousness. Years later, I would only need to shift my intent." Thought isn't simply bound by words; it moves as diversely as personal experience. Consciously, or unconsciously, we direct its movement. From visual to verbal to audio to more, internally this process manifests in many different ways for everyone.

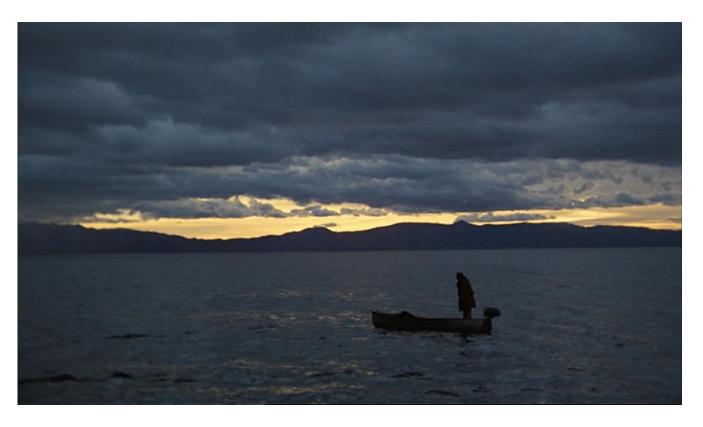
⁴⁵ Daniel Simons, *selective attention test*, [online]

⁴⁶ Daniel Kahneman, *Thinking, Fast and Slow* (USA: Penguin, 2011) p.23

⁴⁷ Daniel Kahneman, p.24

⁴⁸ Thomas Campbell, My Big Toe (USA: Lightning Strike Books, 2003) p92

Contexts influence



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In the above the sun is setting with dark clouds, mountains in the backgrounds with no signs of other human life, along with the lone silhouette standing in the motor boat, in a space of open water we presume, from memory, stretches well beyond the frame the image is showing.

Context transforms the way we think of what we are seeing. This is a still from the end of Coppola's - The Godfather 2. The intensity of this still is the pinnacle of having reached a climax masterfully through visually influencing the way we think - the art of using the camera to create film. As mentioned earlier cinematic time is an extension of photography originating with the work of Ed Muybridge. Here using the camera to create a narrative, by guiding the viewers imagination using images, usually with sound, to influence the very way they think in the instance of viewing.

Seeing this image I am reminded of the hours of viewing beforehand; a raw feeling of cold justice. The power of a single image being able to take myself, the viewer, on an introspective journey as I contextualise what I am seeing.

⁴⁹ Film-Grab, *The Godfather part ii*, [online]

A film still is still a photograph. Much like the way in which we perceive, a film still may be influenced through the context of having seen the full film. This extends to viewing any photograph; the way in which we, individually, look at any photograph, is contextualised by the life experiences of the viewer.

Thinking through photographs

When we look at a photograph we use thought to attribute meaning. Very often this is in the form of a "then till now" narrative – from past to present. In any case we use thought to try to interpret what we are seeing. A classic example is the family album which alludes to what was and what is now present. The album is a means of ensuring through photographs that future generations will still be able to look into the past, to see evidence of their heritage. "In most societies, family photographs have considerable cultural significance, both as repositories of memory and as occasions for performances of memory."50

A photograph though is never the thing itself. To see the 'thing itself' in the photograph requires the projection of thought to create the illusion of reality within the photograph.

"The words with which I express my memory are my memory-reaction." 51

The 'contents' of a photograph are projections of the observer. The photograph is simply a light-graph. We register that light based on our memory, and from that form a model of 'what' we are seeing. "Thought is so cunning, so clever, that it distorts everything for its own convenience." ⁵²

The experience of thought itself is inherently personal. "False memory syndrome is the term employed by the psychology profession and adopted and adapted by the media to describe a complex of memories."⁵³ 'False memory syndrome' could be applied to all memories for memory, thought, is personal in perspective.

⁵⁰ Annette Kuhn, *Photography and cultural memory* [eBook]. (Routledge, 2007)

⁵¹ Ludwig Wittgenstein, 1990. Philosophical Investigations. In: PICKERING, J., and SKINNER, M., eds., From Sentience To Symbols: Readings on Consciousness. (Toronto: University Press, 1990) p.259

⁵² Jiddu Krishnamurti, Freedom from the known, 1968, [online]

⁵³ Celia Lury, *Prosthetic culture: photography, memory and identity* [online] (Routledge, 1998) p.113

Memory is already a story, and when there are gaps in memory, new stories must be confabulated to fill in the holes. But who is the author of these stories? The answer is that there is not so much an author as a confabulatory process without any 'one' behind it.⁵⁴

No matter how vivid thought is always experienced as from a human point of view, and can be falsified by the camera. The limits of our perspective can continue to extend by inventing new methods of seeing and exploring – the photograph being a key example.

Looking back to the different sets of concepts that have formed in the past or may possibly be formed in the future in the attempt to find our way through the world by means of science, we see that they appear to be ordered by the increasing part played by the subjective element in the set.⁵⁵

The paradox seems to be that, while thought always affects our looking at a photograph, the photograph itself presents us with something which we know, despite that subjective evaluation, will always remain the same – unchanged. Only the perception, the perspective, changes.

The environment within which the viewer looks at a photograph can completely change the way it feels. Different places, sounds and senses stimulated by external sources can evoke different memories when looking at the picture.

In photography, process reproduction can bring out those aspects of the original that are unattainable to the naked eye yet accessible to the lens, which is adjustable and chooses its angle at will. And photographic reproduction, with the aid of certain processes, such as enlargement or slow motion, can capture images which escape natural vision.⁵⁶

The integrity of perception

⁵⁴ Mark Fisher, The Weird And The Eerie (London: Repeater, 2016) p. 72

⁵⁵ Werner Heisenberg, p.63

⁵⁶ Benjamin, Walter, *The Work of Art in the Age of Mechanical Reproduction, 1936*.

"I get confused about real memories and memories from photographs." 57

As the photographic negative became digital, and with the transformation of analogue to digital, questions continue to arise about the credibility of the photograph today. In its origins, the photograph was often perceived to be the thing itself, a collection of data to construct or reveal the truth. Francis Galton's work on eugenics and criminal profiling was an early example of attempts to use the photograph to reveal what is objectively true.

Historically however these questions of integrity are not new: claims of ghosts or fairies being caught on camera was one way in which earlier photographers promoted a false truth.

What truth meant in photography was not yet settled—retouching was almost a universal practice, and some of the most respected photographers made composite images. No one minded clouds that had been added later.⁵⁸

Dreaming

⁵⁷ Brian Cox, *Interview* [radio] BBC Radio 4, 30th December 2011

⁵⁸ Rebecca Solnit, p.11



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Much of the work by Duane Michals reminds us that the camera sees what we cannot - what we can only question, speculate, imagine. While evidently we may be aware of how he made the above photograph, we are presented with the question of why. When we look at the photograph, we understand that what we see would not have been possible to the human eye; that we are witnessing the effects of time.

Michals often uses words to construct a narrative. With this sequence 'the spirit leaves the body' they are numbered from 1 to 9, this being image 2. We then, as result of the conditioning within us, read and create a narrative relation between adjacent objects. Those brought up in western countries learn to read from left to right; in other parts of the world the reverse is true. Nonetheless the numbering by Michals triggers an unconscious narrative flow of time from 1 to 9.

⁵⁹ Duane Michals, *The Spirit Leaves the Body[online]*

His photographic series 'The Spirit Leaves the Body' reminds me of dreaming lucidly. For me the dream world has a strong presence in the works of Michals and the links we make with that world is another subtle response to thought, which arises from looking at photographs.

Michals work was the first time I felt a form of connection evoked through looking at photographs. As though the more metaphysically nuanced thoughts I had were understood by someone I would never meet.

The experiences of lucid dreams are challenging to convey in conversation - particularly if the experiences are not communal. However through Michals photography we have a visual exploration of these metaphysical realms of human experience. With his photography we are presented with a vision impossible to the naked eye - as holds true for the dreams we experience as we sleep. Michals beautifully used the pragmatic nature of the photograph to challenge preconceptions rather than certify them. Here he uses the power of photography to a positive end - his images are no less factual than that seen anywhere else - for a photograph is, and always will be, a record of an interaction between light with time. The variant is the decision by the photographer. His work, like Sugimoto's, presents us with questions of what we are unable, through our sensory limitations, to see.

Self-illusions

"How the pervasiveness of the photograph in contemporary society may have contributed – indirectly but none the less powerfully – to transformations in self-identity." 60

Today that same process of using photographs to show what is not possible to the naked eye may take the form of images on social media being 'filtered' to perfection.

To further open up the nuanced relationship between photography and thought let's take, for example, the selection of the online profile image to represent a person's identity virtually. The photograph is often meticulously chosen to present the person as he or she would choose to be seen. Although he lived before the age of the Internet Barthes summed this up well. "I instantaneously make another body for myself; I transform myself into an image."⁶¹

More subtly this principle often holds true for thought itself - in that we meticulously chose the thoughts with which we operate in the same way.

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⁶⁰ Celia Lury, p. 106

⁶¹ Roland Barthes, p. 10

Man's identification with his idea of himself gives him a specious and precarious sense of permanence. For this idea is relatively fixed, being based upon carefully selected memories of his past, memories which have a preserved and fixed character.⁶²

The very way in which photographs are now used gives the social networking site its tremendous appeal - the chilling possibility that now these virtual identities, these transformations of self into image, have taken precedence over the real. "A capitalist society requires a culture based on images."

The photograph's *function* now is often to conjure portrayals of the world, to portray humanity, or even ourselves, from a certain selective perspective.

Any society, in order to survive, must mould the character of its members in such a way that they want to do what they have to do; their social function must become internalized and transformed into something they feel driven to do, rather than something they are obliged to do.⁶⁴

Our concept of our identity takes the form of a collection of thoughts, carefully selected to create a particular self-image. Commenting on this same ideal, Lury wrote:

[Ruth] Leys offers a powerful interpretation of how mediation has been, as she sees it, fixed (and I use this term deliberately to draw an analogy between the fixing of identity and the fixing of the image in the photograph). She believes that there is a radical notion of the psyche linked to the notion of suggestion or imitation.⁶⁵

Taking this in relation to the perspective we hold of our own existence, and referring to the previous notion of promoting self-identity through the use of the photograph, thus alters our very perception, the way we think, of who we are (at least the concept).

⁶² Watts, Alan, *Empty and Marvellous and Sitting Quietly, Doing Nothing*. In: Pickering, J., and Skinner, M., eds., *From Sentience To Symbols: Readings on Consciousness* (Toronto: University Press, 1990) pp.317

⁶³ Susan Sontag, p.178

⁶⁴ Fromm, Erich, *The Nature of Consciousness, Repression and De-Repression*. In: Pickering, J., and Skinner, M., eds., *From Sentience To Symbols: Readings on Consciousness* (Toronto: University Press, 1990) p. 261

⁶⁵ Celia Lury, p.109

The mutual influence of the photograph and thought, and the immense dopamine seduction of using social media, can be seen together to be compromising the identity of the individual. Seen this way, the interplay of thinking with photographs is potentially of huge social significance. We use photographs to create stereotypes, and stereotypes are just rigid structures conditioned within our psyches. "Through being photographed, something becomes part of a system of information, fitted into schemes of classification and storage." 66

It is important to see that the different opinions that you have are the result of past thought: all your experiences, what other people have said, and what not. That is all programmed into your memory. You may then identify with those opinions and react to defend them.⁶⁷

Media images are often simply used to promote the ideal image rather than the actual. They use our perception of what is real and project the advertised photograph to be real also. "Images render us spectator-consumers of events lived in first person or virtually."⁶⁸ Viewers though for the most part know this.

Over 40 years ago Sontag wrote:

Needing to have reality confirmed and experience enhanced by photographs is an aesthetic consumerism to which everyone is now addicted. Industrial societies turn their citizens into image-junkies; it is the most irresistible form of mental pollution. ⁶⁹

When the photographic content is familiar, we relate it to our own reality, and thus it seems to offer a perspective which we have, or possibly could have, witnessed. But this is the subtle illusion projected into photography – the work of the camera is always from a point of view which can never be seen by the human eye.

What we as humans see can never be the same as the photograph. The camera does not experience, it is not sentient (as far as we know). It is the way we culturally think which seduces us to the perspective of the photograph as being total and whole.

Without thought there would be no recognition. If you show a photograph of the mother to a newborn child there seems to be no reaction. In part this is due to yet undeveloped eyesight and cognition, but with experience and thus the passing of time, the very same photograph will produce

⁶⁷ David Bohm, On Dialogue (New York: Routledge, 1996) pp. 9-10

⁶⁸ Spinosa, Domenico, Commentary The Image-World Susan Sontag [eBook] 2011.

69 Susan Sontag, p.24

⁶⁶ Susan Sotag, p.156

a reaction from the child – it now recognises the face within the image. But that is not to say that it identifies the photo to be the mother, just that it looks *like* its mother.

Before the first imprint, the consciousness of the infant is "formless and void" – like the universe at the beginning of Genesis, or the description of unconditioned consciousness in the mystic traditions. As soon as the first imprint is made, structure emerges out of the creative void.⁷⁰

Therefore the photograph is never the actual thought, but a visual record of the event which happened and now exists only in memory – the past. Thought and photograph are always independent of one another - the bonds they form are within us.

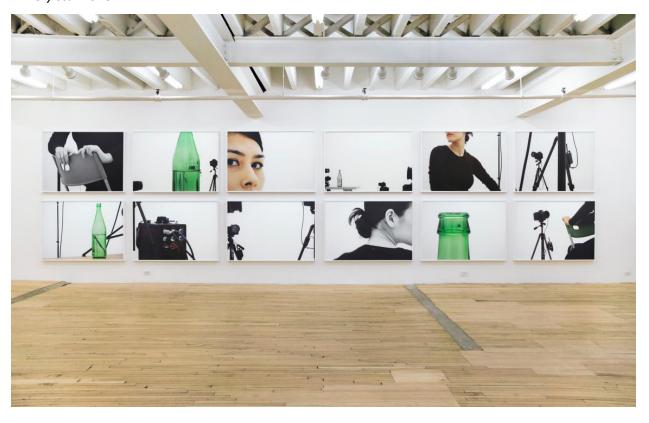
Possessing something tangible like the photograph can change the way thinking comes to fruition and how its appearance and experience is lived.

With a photograph, then, instead of just being a movement of the flow of time – which thought is – we are offered a perspective, which doesn't alter with time. This perspective – the photograph – while it always remains of the same time - can merge with our genuine thinking to form, or perhaps transform, to a new thought, a new version.

A multiple narrative

⁷⁰ Robert Anton Wilson, *Prometheus Rising*, p.39

"The contrast between publicity's interpretation of the world and the world's actual condition is a very stark one."



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Barbara Probst's photographic installation 'Exposure' series of works explores this process of multiple perspectives, interpretations, wonderfully. In having multiple cameras set up we see what our thought may interpret as the 'same place from many angles.'

Having only seen her work online myself I find the above photograph a metaphysical wonder. The above is a photograph. And when I analyse what I am looking at I see a photograph, taken in what seems a gallery, of many other photographs of what appears to be the same scene - a meta photograph scaled down. The entire experience I have of the original version of this is entirely imagined through text and the version above. An apt way to expose how the photograph, or what we see, is never the thing itself- we see our own versions. In her own words:

⁷¹ John Berger, Ways of Seeing (London: Penguin, 1972) p.151

⁷² Barbara Probst, *Exposure #114* [online]

I think the fact that we face multiple photographs, which provide different narratives about the same event at exactly the same moment, has an unsettling consequence for the narrative of each image. Since the narratives are all bound to the same moment they start to question one another and consequently they question the medium which generated them. They no longer come across as definitive as they do in an individual photograph. The relationship or the interaction between the different narratives reveals them as mere possibilities.⁷³

Here it's clear to see that the photograph never captures the thing itself as it is impossible for the medium, it only, at best, reveals possibilities. The things we see, the narrative we build, 'in' the photograph is all conjured within ourselves.

The wonder is that with photographs, by revealing a view of reality that is impossible to our natural eye, we have been innately challenged to expand our understanding of what we perceive. As put by the physicist Thomas Campbell:

"We cannot be aware of what is beyond our awareness. However we can be open to learning new things, and in the process, expand the scope of our awareness - and therefore our reality to its outer limits."

⁷³ Barbara Probst, *The Camera Makes The Human, Interview*, 2015

⁷⁴ Thomas Campbell, p.119

Power

The photograph, now more than ever, has become widely used as a means of portraying reality, perhaps subjectively, in a skewed way. This has not only transformed the way news is shared, it has also transformed the way we look at ourselves. This method is not necessarily new, the transformation is that the ability to do so is in the hands of everyone; the cameras on our phones allow each and every one of us to see ourselves in idealised ways. Here the photograph has become used to create an almost faux-reality. It has conjured a communal artificial reality within which we subscribe to the illusion that what we are seeing is as if it in itself is genuine. This underlies the potency of the photograph as an extraordinarily powerful tool, significant in the modern world. Decisive for the direction we as a species take.

Control of thought is more important for governments that are free and popular than for despotic and military states. The logic is straightforward. A despotic state can control its domestic enemy by force, but as the state loses this weapon, other devices are required to prevent the ignorant masses from interfering with public affairs, which are none of their business.75

As with optical illusions, the photograph has become used to morph what our perception of reality is into something we wish it could be. Needless to say, this creates a perceptive conflict, not only within individuals, but collectively as the truth becomes superseded by the manufactured versions we create through photographs.

We know that people can maintain an unshakable faith in any proposition, however absurd, when they are sustained by a community of like-minded believers.⁷⁶

The pragmatic nature of the photograph though, when coupled with sensitive self-awareness, offers a uniquely, safe, unparalleled methodical insight into the way each of us thinks. Hopefully revealing the reasons we do what we do individually and perhaps with greater understanding collectively - in turn founding the initiative to improve the process itself. A form of self-empowerment.

⁷⁵ Noam Chomsky, *Force and Opinion*, Z Magazine [online] 1991

⁷⁶ Daniel Kahneman, p.217

Closure

The role of photography is so culturally prevalent we often seem to look past its pivotal influence. Photographs offer us a way to better understand the psychological habits of old giving us a tool to truly learn from the past and hopefully never repeat.

We live in an era, one never known to humanity before, where photographs are used everywhere. The vast influence of these images is enough to alter the course of human life in an instance. Photographs are burned into our collective psyche; imagine the Tiananmen Square image - I need not show it. The power of the photograph traverses the boundaries of any language. We identify with photographs of ourselves and of others. We absorb these images as if they are part of who we are. And naturally we have no memories without thought.

The camera is used in every walk of life. In medicine in aid of saving lives; in the military in aid of protecting/taking lives; in media in ways of shaping of minds; and in education for the clarity of thinking why. This continues to infinity as we discover new ways of understanding the world around us, using the tools we have, including the camera, to further develop our quality of life. The photograph has become one of the most significant tools for our own understanding of the way we think.

As the saying goes 'the menu is not the meal.' Thought is not the experience. A photograph is not the light it re-presents. The words are not the thing they convey. Through highlighting the layered processes of perception, from the modelling of time itself to the everyday interpretation of photographs I hope to have elucidated the significance of our personal relationship with thought. Both individually and collectively the way we think underpins our evolution. By learning from our past, as is inherent with photographs, we have the potential to design a different future. And for each of us to recognise our personal responsibility in the way we use thought.

Is it possible for thought similarly to observe itself, to see what it is doing, perhaps by awakening some other sense of what thought is, possibly through attention? In that way, thought may become proprioceptive. It will know what it is doing and it will not create a mess. If I didn't know what I was doing when I made an outward physical action, everything would go wrong. And clearly, when thought doesn't know what it is doing, then such a mess arises. 77

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⁷⁷ David Bohm, *On Dialogue*, p.86

Naturally we grow from moving beyond our current versions of reality - this includes developing the ways we think. Using a camera we are personally able to witness the cohesion between intention and what materialises as a photograph. With practice, as we understand better the way, and why, we use, and perceive, photographs will this help us to do the same with thought itself?

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