The Death of the Mechanical Photograph - a grounded theory approach -

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Abstract

Common people (with some exceptions) are nurtured and conditioned from birth, through mainstream education and on into adult life to accept the dogma that we exist in a material universe, where our experiences are considered 'real' and that all of our stimuli, visual or otherwise are received via our sensory receptors and processed by our brain, thus allowing us to experience this reality.

Although not a new theory, with advances in the understanding of the very nature of our reality (quantum theory) some contemporary scientists and philosophers are beginning to, not only question, but conclude that our reality must indeed be a highly sophisticated simulation and that our experience is simply one of collective consciousness. Further, substantive advances in the apparent 'physical realism' of virtual reality technologies are leading some humans to wantonly interact and exist within these manufactured simulated realities.

Consider, that our reality is not one of solidity, but one of energy simulation, created and maintained by some other more sophisticated intelligence?

As an educator and visual communicator, I have been forced to discover what implications these ideas on 'reality' may have upon visual communication, with specific relevance to how humans create and interact with photographs and their perceived memories which are attached to those artefacts.

Through research, analysis and personal experience, this paper investigates and interrogates these themes and ultimately leads me to conclude that through either acceptance of new ideas on reality or via new technologically created realities, future human beings will have no requirement for, or association with emotion, and the separation between emotion, memory and visual communication will induce the death of the mechanically produced still photograph.

Keywords: Reality, Consciousness, Photography, Visual Communication, Memory, Quantum Physics, Energy, Computer Post-human Simulation.

Perceptions of reality

To believe it is not enough, you have to know it! As human beings, in the developed world at least, we are nurtured from birth, through the beginning of our education and on into adult life to accept that all of our stimuli, visual or otherwise are received via our sensory receptors and processed by our brain. It is taught as an absolute fact that humans exist in a five-sense reality and how we assimilate these sensations is governed by our nurturing and by the perception of the reality in which we live. We have been conditioned to accept that we live in a 'material' universe, that we and everything in this universe are 'material' and our experiences are 'real'. (Butzer, 2018)

Although not a new theory, indeed many scholars and philosophers (Rene Descartes, 15th

Century for example) have suggested that perhaps our existence is devised, imposed and governed by some superior entities:

I shall then suppose, not that God who is supremely good and the fountain of truth, but some evil genius not less powerful than deceitful, has employed his whole energies in deceiving me.

(Descartes, 1641)

According to more recent advances and ideas in our understanding of the very nature of our reality, contemporary scientists, scholars and philosophers are beginning to question whether our reality is, in fact, a highly sophisticated virtual reality, an energy-based simulation. Project forward 370 plus years from Descartes and we find contemporary engineers at the forefront of the latest technologies are of the same mind. NASA's Jet Propulsion Laboratory scientist Dr Rich Terille suggests that we must exist in a simulated reality:

Quite frankly if we are not living in a simulation it is an extraordinary unlikely circumstance.

(Terille, 2015)

The quantum realm

The acceptance in mainstream science of the Planck Length (smallest measurable length) of $1.616229(38) \times 10^{-35}$ metres theorised by theoretical physicist Max Planck (1899) (Kangro et al, 1972) suggests that, at the quantum level, we are indeed observing physical units.

The quantum world is indeed one of extravagant wonder and much mystique.

If quantum mechanics hasn't profoundly shocked you, you haven't understood it yet. Everything we call real is made of things that cannot be regarded as real.

(Bohr, 1987)

Our reality has been proven through Quantum Physics to be one comprised of energy and vibration (Becker 2018). For me, it is inescapable to realise that mechanisms which appear impossible to understand and comprehend when viewed from a material based reality perspective, become logical when viewed from a position of simulation (energy).

Bio Electrics

Humans may find it to be difficult, even impossible, to comprehend how a one could be directly connected to a computer, although it is a real fact. In your mind, the physical attributes of a human (organic) cannot be connected to an electronic metal (inorganic) cable or device. Yes, one understands that a computer can detect an electric impulse from the human body via a sensor, but the idea of physically connecting a human to a computer of any kind in our perceived material world, I believe is a concept which is commonly impossible to accept, as these elements appear to be completely incompatible. Yes, it is accepted that one could be electrocuted, or be harmed by inanimate objects, but in terms of interaction, there cannot exist communication at a sentient level.

Yet if we conceive these two apparently incompatible 'materials' at the quantum,

energetic level, the biological flesh and bones of a human and the metal circuitry of the computer are simply differing variants of energy; science will discover the code for allowing these two forms of energy to connect remotely. For example, the transport medium for sound is commonly accepted to be gas, yet solids and liquids can also transport sound. (Giancoli, 2009)

Since the accidental discovery of the X-ray in 1895 by German physicist Wilhelm Röntgen (Water, 2011) it has been possible through imaging techniques to view and record the energy data from a human body. Using X- Rays, electronic cables (ECG) and wave energy applications such as CT and MRI scans, we can see through the 'material' human body using a directed energy wave.

Humans are devised of energy, and this energy radiates, and the issue is how we can observe it? In the 1960's physiologist Jose M Delgado was working on applications to connect humans to electronics:

It is, however, already possible to induce a large variety of responses, from motor effects to emotional reactions and intellectual manifestations, by direct electrical stimulation of the brain.

(Delgado, 1969, p 81)

Delgado achieved this by establishing communication via physical connection to specific areas of the brain by 'Stimociever' [a radio device combining a stimulator of brain waves with а receiver which monitored EEG waves and returned the signals on separate radio channel]. Professor of neuroscience Apostolos Georgopoulos has (BCI) conducted brain-computer interface experiments since the early 1980's. His results have revealed it is possible to predict motor functions in both humans and primates (Georgopoulos, 1988).

Contemporary researchers such as those at MindDesktop in Israel are investing in research using a pre-existing Emotiv EPOC+ "neuro headset". The headset is а 14-channel electroencephalogram (EEG) system that measures electrical activity in the users' brain. It then transmits this data to the computer via a Bluetooth link. So far, they have communicated information to the computer which allows users to access most aspects of a Windows(c) PC, and type at around one character every 20 seconds (Oberhaus, 2017). Science is moving ever closer to enabling humans to directly interact with electrical devices through thought. Marcus et al (2018) state:

Brain Computer Interface (BCI) is a kind of direct and fast communication between the human and computer, and can greatly extend human capacity to control external devices.

(Marcus et al, 2018)

Professor Dina Katabi is leading the research into using radio wave technologies to monitor patient's health through walls at MIT (Metz 2018). How long before humans discover how to not only receive, but utilise this information energy from the human body to control applications? I argue that as a species we need to learn how to see past what appears to be the physical, and to fully accept the virtual before we can even remotely begin to understand our true reality.

Consciousness

Biocentrism advocate Robert Lanza proposes that biology is the key to the theory of everything, and that our consciousness creates the universe, and not the other way around (Lanza, 2007).

In researching the work of others, and through my own observations, I argue a reality which is similar to that proposed by Lanza, except I do not believe in the biological element of his theory. My current position is one whereby I believe consciousness is a manifestation of energy, and each human being experiences their own localised version of that manifestation.

Biology, I would argue, is part of the illusive nature of the reality which is created by energy. When the new theory is proven, society will dispel the perception of a material reality, in favour of the proven simulated one.

Reasoning

As an educator and visual communicator, I have been forced to investigate what implications these ideas on 'reality' may have upon visual communication, with specific relevance to how humans create and interact with photographs and their memories gained by perception. In the accepted 'material' universe, when you observe a photograph, whether it be digital or traditional paper-based, you believe that you are observing a single representation of a moment in perceived time, that you are viewing a physical representation of an actual physical moment that happened in the perceived past.

If however, humans exist in a simulated (non-material) universe, a universe where everything exists in a collective consciousness (Consciousness being the energy/simulation) (Campbell, 2007), then the image you are viewing, is actually a new virtual interpretation (yours) of a past virtual moment (someone else's) manifested in the wider collective consciousness, and neither the 'photograph' nor the event which it depicts were ever 'material'.

The only circumstance in which the original moment actually ever existed is in the consciousness of whoever (virtually) took the image, and the only place this virtual representation exists now is in your own point of consciousness! Like in a multi-player computer game, we are all participating in the game, but we only experience it from our point of view.

If indeed we do exist in a highly sophisticated simulation, created and operated by some unknown origin, how does this relate to our memories and to how we emote? In a material reality our experiences feel real, our memories of those experiences feel real in the sense that we believe that they physically (materially) happened. Yet if we ascribe to this new simulation theory, these memories only appear real because of our nurtured acceptance of the reality in which we are educated that we exist (material).

If we are not 'real' or 'material', then neither can physical experiences have ever been real or 'material'. In a solid - material reality, when a photograph is viewed, the viewer automatically imagines a version of the photograph in their mind, projecting their own beliefs, feelings, interpretations (reality) upon it. The image they hold mentally, the image which they project in their own minds is never a true representation of the actual photograph or moment. Memory fades (almost immediately), it can be skewed and manipulated by time, opinion, chemicals and a multitude of intervenes.

This leads to a direct effect on the Aura of an image. Just as Walter Benjamin proposed in his 1936 essay 'The Work of Art in the Age of Mechanical Reproduction'

Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be.

(Benjamin, 1936)

I do agree with Benjamin in his postulation that the original moment can never be reproduced when considered from a material reality perspective. Assuming that the two realties operate in different ways, at least I would argue that the majority of people cannot access the past.

However, in my proposed simulated reality environment (our current reality made and operated by an unknown origin, or the manmade realities to come), the exact moment could perhaps be replayed and revisited to infinity (Greenhalgh et al, 2000) which in my opinion would invalidate the use or necessity of an aura.

When discussing memory, writer Barbara Stafford suggests:

The neural basis of object recognition – typically investigated by looking at the characteristic activity of single neurons – is grounded in the complex mechanisms for the retrieval and re-viewing of memories.

(Stafford, 2008)

Mainstream science's theory is that Synaptic Plasticity is responsible for memory. Neurons store information and we can restore it to our consciousness upon recall (Heinbockel, 2017)

I ask, where do our memories (visual or otherwise) go when we are not actively thinking about them? Mainstream science explains that the information is stored, we are simply opting to ignore it, until we decide to consider it, when a mental image (Object) in our mind is then reformed (Baddeley, 1983).

To my mind, this sounds exactly how we store, and recall 'Virtual/Digital information' on a modern computer. If we accept that it is possible that we exist in a simulation, then both the perceived physical and perceived mental objects are as real as each other. If we accept that we live in a material reality, then the 'memory' produced by and held within a photograph can never be real (material) again (it is simply a simulated vision/ imagined), only the printed physical photographic representation of the event can be material, not the memory. Observing the photograph triggers memory and emotion, but only because we perceive the contents of the photograph as having been 'material' and showing a representation of our perceived material past.

In a simulated existence, if everything is virtual (non-material), how do we then perceive our photographs and memories? Photography is inextricably linked to memory. In his short book 'Camera Lucida, Reflections on Photography' Roland Barthes postulated that a Photograph is a representation, or a reminder of death (Barthes, 1980).

In a material reality, death is seen as having happened in the past, and so is inseparable to memory. Memory is linked to time, a perceived time gone by. Some esteemed academics would argue that time does not exist, and is simply as man-made social measuring construct (Keating 2013) and I myself would tend to agree with this idea of social time.

Physicist and author Carlo Rovelli writes:

Clock times are simply the readings of certain physical variables, which can be locally employed as the independent variable for convenience. Once again, they have nothing to tell us about the ontology of time.

(Rovelli, 2006)

I believe that we can only exist in the now (the now from our existent perspective), because from the observations of common people, it is the only 'time' which we have open access to.

But what is the now? The now, I would argue, is the (Origin) simulation.

Rovelli postulates that the idea of the 'now' is one of locality, not universality:

If I ask whether two events—one on Earth and the other on Proxima b—are happening "at the same moment," the correct answer would be: "It's a question that doesn't make sense, because there is no such thing as 'the same moment' definable in the universe." The "present of the universe" is meaningless.

(Rovelli, 2017)

Rovelli further states:

At the most fundamental level that we currently know of, there is no 'time' variable, there is no difference between past and future, there is no space – time.

(Rovelli, 2017)

The simulation

Mainstream science asserts that our reality allows for free will, with the popular school of thought claiming that we reside in an entropic system universe (energy). Entropy claims that we exist in a random, unpredictable reality. Our future, as we experience it, can be changed by our actions and interactions within the existence. The second law of Thermodynamics, if correct, claims that our reality forces change (Drake, 2018)

However, through simple observation it is obvious to me that our reality is not infinite and is governed by obvious laws, limits and barriers which we cannot go beyond. To my rational thinking, this does not constitute true free will, nor the randomness of entropy. I believe we are simply able to make some minor choices within the boundaries of the set laws of the reality.

In a proven simulated reality (one of unknown origin) I would argue that we would also have no free will, because the reality would require laws and limits, which without clearly programmed parameters (mathematical model) it cannot function, the game can only exist within the game (Frigg et al, 2018).

This is exactly how our reality appears to me. Without free will, without having real freedom of choice to go beyond the boundaries of any enforced limits, how can we reflect on anything we have experienced with genuine emotion? If indeed we are existing within a fixed reality, a reality which may be programmed to have a start and an end (or even changes made throughout the existence outside of our control), then how can we truly emote to experience? People live and die, so what? If it is all programmed to happen, and we have no real free will to adapt it, how can we reflect on anything with any semblance of genuine emotion? If we are to accept this simulated existence, how would we reflect on these programmed experiences through viewing our memories via Photographs?

In whatever version of reality we exist, as I have suggested previously, I believe that we can only ever exist in the now. Whether this is a localised now or a universal now, our existence is not in the past or the in future, they do not exist, and only the now exists (Rovelli, 2017).

If we follow this train of thought, our memories cannot have happened in another (Perceived) time. If we accept this theory of no time, only the (localised) now, then we have to ask how do our memories manifest? I would argue that all information (Energy) is stored in a collective consciousness, an energy field, something akin to cloud storage on our smart devices or computers, which is a timeless experience happening in the now. Humans are generally allowed access to limited information within this experience, however I believe that some humans have access to a much wider remit of the information, through meditation and mind-set (Campbell, 2007).

When humans are dreaming, there is no sense of time, because there is no time, no before or after, no past or future, only the dream, only the now. It is my postulation that our waking existence, our woken reality, operates much in the same way. Consider a vivid or lucid dream you had many years ago, you can still visualise the details, in image form in your mind just as clearly as any other 'real' waking memory. The difference between the two events is how you perceive (through nurture) both sets of events, one as 'real - material' and one as dream, yet they are both perhaps real in a simulation sense. Generally speaking, human consciousness is simply able to focus more clearly on one (the waking) over the other (the dreaming), although some humans are able to readily access lucid dreams (Campbell, 2007).

As part of my enquiry into our reality being a simulate one, I have inevitably had to ask the further questions 'Why would our existence be a simulation, and who would create such a thing?' Researcher Nick Bostrom has an excellent answer to this question:

If there were a substantial chance that our civilization will ever get to the post human stage and run many ancestor-simulations, then how come you are not living in such a simulation?

(Bostrom, 2001)

In considering Nick Bostrom's 'Ancestor Simulation theory' (Bostrom, 2001) would it not be logical to deduce that since as a society in the early 21st century, we have reached a point of not being able to distinguish between the 'material' and our 'human-made 'virtual' worlds, then it is entirely reasonable to suggest that we may exist in some other society's virtual simulation. My belief is that this suggestion is indeed entirely possible.

New Realities

From my observations and from reading social media engagement statistics (Smith, 2018), humans appear to be preoccupied with escaping into any reality other than the one which they currently reside, the one they view as being 'real or material'. Humans now have easier than ever access to new realities through virtual and augmented hardware and software. If you consider how far these technologies have evolved in the last decade, then being able to distinguish between what is 'real - material' and what is 'virtual' will soon become impossible (Bushey, 2017).

My brother recently sent me a video message to my smart phone. This was a short video clip featuring the football (soccer) team Liverpool FC, whom I support, scoring a goal during what I perceived as a video replay of an actual 'material' football game. My brother did not send the video with any written text for context. Upon first viewing I accepted it was a 'real' video of a 'real' event and began to attach emotion to it (Yes! We had scored a goal!). Immediately following that impulse. I wondered what I had seen, as I knew there was not a game that day and it was not a familiar video. Upon a second viewing. I realised that the video clip was actually a recording from the computer football game my brother had been playing, pro Evolution Soccer 2018 (c). It was so realistic (in the material sense) that at first glance my eyes/ brain could not distinguish it from a video of a 'real' game of soccer.

Just this week I observed for myself a hologram performance on a stage less than 6 feet from me (Fig. 3, Appendix 1). I was not informed this was to be a hologram performance and I had not observed the hologram manifest as I was looking the other way. The human hologram at first appeared to me to be 'material', only when I observed intently and after some time did it begin to appear odd to me and I began to question its appearance. At the end of the performance the hologram faded away from feet to head.

Virtual reality technology has advanced so much in the last three decades that medical doctors are now using virtual reality techniques as a form of anaesthesia whilst both performing operations and during post operation procedures (Mosso-Vázquez et al, 2014): Using a subjective pain scale (5 faces denoting levels of pain), the patient's overall pain ratings while in the VR (experimental) condition were 41.2% less than those in the no-VR (control) condition.

(Mosso-Vázquez et al, 2014)

My question here is: how can this work in a 'material' world, a world where pain is considered real, physical, material?

New ways of seeing

Art critic and writer John Berger was a master of seeing. His 1972 book and TV series 'Ways of seeing' encapsulated how important it is to not just to observe visual communications, but to see them (Berger et al, 1972). Berger's work was however approached from a version of reality that appears to be real (material) where memories, time and a material existence is accepted.

If we take Berger's approach, and apply it to a simulated reality existence, how do we interpret our visual communication based on the shift in our understanding of our reality, one where our lives are mapped out, free will, time and memory do not exist and nothing is material? How can we critique, emote and remember non-existent events and virtual representations of them? If the photograph and its contents never did and still do not exist, does it change how we feel about them?

In an attempt to understand further how a belief, or point of view on what existence is, and how it may affect emotion and memory. I observed twice a photograph of my late mother, taken in 2003 (Fig 1, Appendix 1) over an intervening period of four months. I initially viewed the image from a material reality viewpoint I could remember how it made me feel over the intervening years. The image makes me smile and at first joyful sparks of memory fill my mind. When I stare, observe and see the photograph, it forces me to drown in cascade of differing emotions. This is the last photograph my mother would have taken on her birthday, unbeknownst to anyone, cancer was already killing her. It is a difficult photograph for me to view. I put the photograph away and take a break from considering it.

Some months later, after considering at some length the subject of a simulated existence, and in becoming more accepting to this possibility, I observe the image of my mother again, immersed in the belief of a simulated existence, one in which my mother never existed, save for in a wider collective conscious existence. This did of course alter my feelings towards the image. I immediately find myself searching for those same emotions which enveloped me before. The emotions indeed exist in my memory, but are more difficult to access or accept.

These conflicted feelings are difficult to process. Do I accept my mother was real and in fact died, or do I accept this has all happened in a non-physical consciousness experience? If it is proven beyond doubt that our existence is in fact a simulation, how do we humans attach our previous experiences and feelings to the reality in the same way which we would in a material existence?

If we accept that our reality is 'material' then we have to accept that our memories are only virtual, re-imagined reconstructed mental images, or constructs of perceived past events, and can never be made real again. The photograph in your hand is real, the event which it depicts really happened, but it is now only a construct in your own consciousness, with information captured through your visual receptors and projected in your mind.

If however we conclude that all of our existence is simulated, then this must follow that everything within the existence is as real, or as un-real as everything else within it. We have to ask the question, which version of reality can be considered as more 'real', the perceived material or the concluded virtual? My current belief is the latter.

The death of the mechanically produced still Photograph

You may be wondering how this paper is linked with the ultimate death of the photograph. Please allow me to elaborate. I would argue that understanding or accepting what our reality actually is, provides the key to understanding and interpreting photography or any visual stimuli. When viewing a photograph, you have to see it from whichever viewpoint on reality you hold.

Eventually we will come to understand that whether a reality appears to be physical or nonphysical is relative to the observer.

(Campbell, 2007)

I postulate that within as little as forty years, the perceived 'material' mechanically produced photograph will become completely obsolete. I arrive at this estimate by way of Wright and Moore's Hypotheses 'Statistical Basis for Predicting Technological Progress' (Nagi et al, 2013) and through my own research and observations.

I conclude that the generally accepted perception of reality will change colossally over the next four decades and will culminate with humans no longer attaching themselves emotionally to memories in the same way as we This will occur either through a do currently. more general acceptance in society that our reality is indeed a simulation, and with a larger number of humans remembering how to interact more readily with the simulation (Through meditation, music, use of hallucinogens or other means of awakening) (Campbell, 2007) or more probably in my opinion, via the human desire for escaping their currently perceived material reality via man-made realistic (Materialistic) virtual realities.

Technological advances in how we store and access our memories, will radically change how we view and attach ourselves to perceived material memory. We are already invested heavily in this type of memory. Since the advent of the internet and software and hardware enabling humans to have instant access to 'known' and new information (Sparrow et al, 2011). It is my belief that humans will arrive at a post-human stage without even recognising the metamorphosis (some would say we already have. (Hayles, 1999)

Many cultures have for millennia utilised means of meditation to access the wider and existence round them consciousness (Sharma, 2015). I have spoken at length with people who are turning to alternate methods for both physical and mental healing to alleviate stress in their lives. Remote viewers (the ability to perform out of body actions and view far distances) believe in transcending to other planes by utilising mantra and chakra, and they believe we all have access to these realms (Campbell, 2007). Professor Tom Campbell, proponent of telekinesis believes, through personal controlled and recorded experiences and via controlled and recorded experiments with others, that these out of body experiences are actually human consciousness accessing wider realities, and further suggests that all humans have access to this wider reality, yet it is nurtured out of us as we age. Campbell writes in his 2007 book My Big Toe (The Theory of Everything):

Most children, particularly those younger than seven, have spontaneous, fully conscious out of body experiences.

(Campbell, 2007, p 98)

Words attributed to the great Hindu Sage Ramana Maharshi:

There is no greater mystery than this, that we keep seeking reality though in fact we are reality.

(Lane, 2015)

You may ask, if I am so confident of our existence within a simulated reality, why do I then suppose that the human search for new realities will win in the race to destroy the concept of the mechanical Photograph, in the case of an acceptance of our existing reality being one of simulation?

In my experience, humans are notoriously sceptical of change and are slow to accept new ideas, especially when being forced to change their views and opinions on dogmas which they have been heavily nurtured to wholly believe from birth (Hume, 1738-40). However, the fickle human ego insists on being the involved, being a part of the crowd, and longs to be accepted and to be noticed. The human ego/psyche desires to be led, and to not be responsible for its choices and actions (Freud, 1930).

We have seen this with the human addiction to social media. Billions of people living none 'material' existent virtual (human devised simulation) lives alongside people they haven't seen for years or who they will never meet, whilst ignoring the people who are literally seated beside them (Smith, 2018). From my observations as a human, an educator and a parent, humans are so tightly bonded to their smart devices, gleefully awaiting the next moment of virtual excitement to stimulate them, they have already almost forgotten 'material' emotion.

Human use of emotion linked to memory is already subsiding. Our memories and emotions are now being stored in smart devices (Sparrow et al, 2011). I believe that we humans will continue to become so fully immersed in these new virtual reality matrices, in realities which offer the option for total and immediate recall, with exact and precise clarity of any moment we desire. Re-living moments without any attachment to emotion which will negate the desire for any mechanical 'still' photographic reproduction of our perceived existence. Within 250 years of the oldest surviving photograph by Nicéphore Niépce 'The view from the window at Le Gras' (Fig. 2, Appendix 1), being created, as the last remaining photons of that image disappear. so will the need and desire for still Photographic images. As a society we have already surpassed Walter Benjamin's concerns (Benjamin, 1936) regarding the Mechanical Reproduction of art tenfold.

Light field (energy) photography such as that developed by now closed Lycro, enables all light data in the field of view to be collected by the camera allowing the focus to be decided upon and changed after the image is taken (Grigonis, 2018). Researchers at The National Basic Research Centre in China have produced a single pixel camera which can record ghost images that are 'around the corner' and out of direct line of sight of the camera, by capturing traces of light radiation (energy) (Bai et al, 2018). Film makers can today extrapolate ultra-high definition still images directly from 360 degree moving images, negating the necessity for still photography (Pesce, 2016).

The development of STAMP (Sequentially Timed All-Optical Mapping Photography) by researchers at the University of Tokyo and Keio University which can create moving images at 4.4 trillion frames per second (Nakagawa et al. 2014) allows for ultra-minute selections of still frames. Photorealistic images created by AI such as those created by Alphabet Incorporated's deep learning division, algorithms creating images from nothing which are indistinguishable from actual photographs (Johnson, 2017). Imagine all of these technologies enveloped into 3 dimensional. holographic. virtual and augmented applications.

These AI generated seamless visuals will be indistinguishable from how the human eye sees and will render humans incapable of detecting one visual reality from the next. Some photographers, Wim Wenders for example, believes mobile phone technology already invalidates the necessity for still photography:

It's not just the meaning of the image that has changed – the act of looking does not have the same meaning.

(O'Hagan, 2017)

People will suggest that photography will survive because humans will be able to retrieve still images, which is correct, but let us consider the difference between a still frame extrapolated from a moving image and an actual still photograph. Extrapolated frozen frames are simply one of 25, or 50 or 4.4 trillion frames which are been captured by said device in that second, and although they can literally be considered as a 'still' image, a moment in perceived time, the photographer in me however would argue that these single frames which are extrapolated from a much longer timeline (perceived), a timeline in which the film maker was not solely invested in the individual frames and these frames are not and can never be considered as genuine individual moments, they form part of a greater timeline which can never exist as single moments alone.

Stills photographers are invested in the single moment in time (perceived), that 125th of a second, that half a second, waiting for it, observing it, capturing it, the shutter is pressed at that moment through investment. In my opinion, film makers simply happened to be there when the moment passed them by along with the thousands of other moments, rendering them as collective, not singular. To return to retrieve a single moment from that passage of time, is inventing a new moment to be a part of, having not invested or participated in its origin.

It is my belief however, with the rapidly developing ease of access to recall visual memories (points in a perceived time, perceived past events within a virtual world) married with the innate laziness of human beings, the desire, even within the most ardent of photographers for the process of mechanically creating still photographs will be eradicate. Photographers and film-makers alike will simply retrieve moments as they desire, from any angle, exposure and form they chose with the power of thought alone (Oberhaus, 2017).

Instant replays in sports are already available within partial immersion apps and allow this instant recall access to its participants (BT Sport App to show 360° highlights and instant replays, 2017). Smart devices can already be controlled via voice and movement, a simple instruction to your smart phone can make the device perform as if it was linked to your consciousness (Van der Velde, 2018).

Considering the work of Georgopoulos, Delgado and others, replace the smart device with the consciousness of the human state, and every experience we have will be able to be recorded stored and accessed and humans will be able to gain total recall with a simple thought. In his 2005 book 'The Singularity is near: when humans transcend biology' Google's director of engineering and inventor Ray Kurzweil states:

Humans will transcend the "limitations of our biological bodies and brain.

(Kurzweil, 2005)

Kurzweil further predicts that humans will become hybrids in the mid-21st century. He believes that our brains will be linked to a 'cloud' connected via nanobots, which are made from (Energy). As DNA strands the human consciousness descends further into the acceptance of its virtual, unreal surroundings, emotionality will begin ebb away and with it the loss of attachment to memory, which will precede the ultimate death of the mechanically produced still photograph.

Conclusion

Get over it, and accept the inarguable conclusion. The universe is immaterial-mental and spiritual.

(Henry, 2005)

Whilst continuing my investigation into these ideas on realities, I have at this time chosen to deem that we are indeed existing in a simulation of unknown origin.

For me to continue existing with the same attachment to memory and emotion as I have in the perceived material reality for forty seven years, I am discovering that I am having to retune my emotive state on a daily basis. As of yet I believe that I have not lost my attachment to emotion. however I continue to have moments of clarity, where I encounter what I consider the ridiculous, material obstructions (money, bills, work) which I believe should be, in the wider remit of existence, inconsequential to our lives, because nothing is 'material' and anything perceived as so should be ignored. However, these moments of clarity are soon pressed aside by my (emotional?) commitment to existing in a 'material' world as a father, husband and teacher.

I believe that common humans will begin to resist this fight and will allow their emotions to be more freely taken from them, in exchange for new realities and for acceptance from the herd. (Taylor, 2017). As human beings, we will be forced to invest much consideration in to our perceived realities. Not least because of the implications to photographs and memory, but also due to the wider remit of comprehending that we exist within the constraints of a sophisticated, but highly regulated and ever more heavily monitored, simulated existence (Ward, 2017)

Ultimately, a wider question could be one of does it actually matter: 'what reality actually is'? We are here, existing within it, so whatever reality is, isn't it best we simply experience it to the fullest? I would argue that it does matter, certainly in respect of our experience and memories. Once science accomplishes its task and masters how to readily link the perceived material computer to the perceived material mind through energy transfer, the reality game will really begin in earnest, and humans (posthumans) will be forced to exist in the next, manmade versions of reality, or retreat into the comfort of our original perceived 'material' but actual simulated reality.

In whichever consequence humans arrive, they will exist, deprived of emotionally linked memories, and the necessity or desire for the mechanically produced still photograph.

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Biographical note

Lance Burkitt is an educator and a photographer based in the UK. He holds a Master of the Arts Degree in Photography and a Certificate in Education teaching qualification. He is currently employed as an associate lecturer at Colleges and Universities across the UK. The areas of research interest are in education and visual communication.

Appendix 1



Fig. 1. My late mother on her Birthday, 10th July 2003. Personal Collection © Luke Burkitt



Fig. 2. Niépce, Joseph Nicéphore. 1826. "View from the Window at Le Gras" National Geographic. October 10th, 2018 https://www.nationalgeographic.com/photography/photos/milestones-photography/



Fig. 3. Hologram Performance at The British Music Experience, Liverpool, UK, 21st October 2018. © Lance Burkitt