Has the 'digital revolution' created more problems than opportunities for today's professional photographers? Discuss this using relevant case studies and/or specific aspects of modern professional photography.

(...and, what lies behind the question?)

"....there is to be a new order. The old system is overturned. The old centuries are done. Just as Jesus told the people of Israel that God's desires had changed, the time of the Gospels is over and there must be a new doctrine."

Allie's voice to herself in The Power, Naomi Alderman, 2016

A short answer...

One might have answered the essay question by comparing the costs and benefits of digital and analogue photographic technologies. One could refer to the economy, speed and ease of delivery (seen either as a blessing or a curse, depending on one's personal and professional needs and view) versus slower, alternative processes; or explored varying levels of sophistication, for instance 360° dimension or holographic technology, along with the different learning requirements for using them. It would have been useful to note how mastering the basics of photography on an analogue camera is not the same as learning on a digital device, despite assumptions it ought to be. Aside from issues related to what sort of equipment and editing software photographers might use, a critical challenge facing photographers is the fact most people nowadays have access to photographic smart technology. This has had a significant impact on expectations, as edits and filters (known more correctly as lenses) can enhance a subject's features with a simple finger swipe or two on their phones, delivering a highly polished, sculpted, often quite unrealistic, not to mention commoditised look; this, in addition to the simplicity of camera-phone use. Consequently in order to remain separate from a consumer and offer a premium service, which potential clients cannot do themselves, photographers are having to learn new skills which cannot be achieved without training and experience as well as economic outlay. Such skills include drone photography, shooting and editing moving image, creating CGI or else combining real and cyber technology together to create virtual or augmented realties (VR and AR).

However, since photography does not exist in a vacuum and is an integral element within a wider landscape, being informed by and informing the paradigm it is a part of, a look at the practical details might not be the most productive way of exploring related issues, even though they are important. These practicalities may also be an expression of underlying shifts, which have prompted certain aspects of digital

development. As such, we cannot ignore them, but they should be situated within a wider narrative.

.... A longer answer

Perhaps we might discover more by starting with an interrogation of the question itself. Immediately, it prompts us to conceive of problems, which it privileges over opportunities in the word order, and therefore suggests opportunities are less prevalent, if they exist at all. We are asked to consider if *more* rather than *fewer* of these problems have arisen. We might also wonder if the question would have been conceived at all if photographers were more secure about the opportunities available. Although the question doesn't overtly state digital technology may have destroyed photography entirely, the implication nervously hovers, ready to pounce in the gaps between the words. The question therefore conveys a sense of unease, and considerable anxiety about what the digital revolution has done to photography. We might argue, therefore, since photography is not a discrete practice, it also conveys anxiety about what the digital revolution has done and is continuing to do to life in general.

A definition of 'professional photographer' and 'photograph'

We may also benefit from identifying exactly what 'professional photographer' means in this instance. For the sake of this essay, we should assume throughout that 'professional photographer' applies to anyone who is using technology which ultimately produces a photograph (moving or still) which can be looked at or experienced. This could mean someone working on a film camera documenting poverty in their hometown, or else using 160 cameras and strobes in a pupose built studio to record a moving image, which results in a hybrid of genuine person/some form of animation. It may be accurate to say the job of a commercial photographer is very different to an artist's who might rely on lens-based technology to tell a story, be it fiction or non, and she is also different to an artist who interrogates the medium leading to conceptual work which may not look anything like a photograph at all - this of course relates to the actuality of professions where a person or even a programme may be helping to form what looks like photographs, but never holds a camera. Mario Klingemann, for instance, uses neural networks to generate images, which he subsequently curates. In this essay no sector across an extremely broad discipline shall be thought of as privileged over another, provided a human being is involved in the final product. Therefore the term 'professional photographer' applies to anyone whose career (part-time or full time, in addition to other work or not) is centred on making photographs.

As discussed, Klingemann makes work using deep learning technology by training neural networks to create images based on data sets. This is not some alienated and abstract art project, but instead pre-empts applications which will be, and are being, used already. Artificial Intelligence (AI) designed to make or edit imagery is constantly being developed. Regularly, we can read about how AI realistically

creates alternative backgrounds (2018), or builds mug shots based on nothing more than DNA (2017), and conjures up fake new worlds (2017). Photographers might mourn the loss of 'authentic' imagery, and one can appreciate their position as it potentially threatens their careers. Some photographers adapt and learn newer technology/ However, if we step back and take a wider view, we might see the invention of photography and all its subsequent developments as stepping-stones along humanity's path, as it strives to recreate itself as effectively as possible. While the medium may continue to be utilised in any format by practitioners for artistic or commercial purposes, the underlying and ultimate purpose of photography has little time for nostalgia. Given the way we humans are learning to simulate nature, it seems bizarre a greater number of photographers aren't more eager to explore, pick-up, and interrogate the newer technology, its possibilities, and what it means for society, as Klingemann himself does.

Digital technology is an expression of today's world

The original question is perhaps asking for an impossible answer, since the paradigm in which the digital tools predominantly used today is no longer the same paradigm in which the older tools were invented. Today's equipment was invented for today and is an expression of it, and as such serves to fulfil functions within that reality. In the same way, photochemical processes were a culmination of what was happening across society in the 1800s, and are also a statement about how far humans had come at that juncture in their quest to recreate an internal reality outside of themselves, i.e. to exteriorise. We might attempt to imagine the direction we are traveling towards in terms of technology, and in all likelihood, should probably understand that we are at the dawn of a completely new world, and society has a long way to go before it plateaus. Such a plateau may well be when we have finally understood how to recreate nature so that it mixes seamlessly with our inventions and no one can tell one from another.

We probably can't begin to explore modern photography without taking the overall landscape in which it exists into account. This makes it a difficult and momentous task, however, not to do so could risk rendering any conclusions or outcomes irrelevant.

Archives for all

The digital revolution, which began at least in the 1950s, rather than when digital cameras arrived on the market, has led to (in addition to a wealth of phenomena), the manifestation of a global archive¹, which stores an unimaginable amount of data, much of it related to photographs. Websites and social media sites, in fact every facet of the Internet including email and messaging services are digital databases, which collate and store data neatly in digital files. They are archives, some of which

continue to exist in the backrooms of our phones and computers and online indefinitely.

Archives and power

In 1994 Jacques Derrida gave a talk titled Archive Fever, which was subsequently published as a book (1995). In it, he describes the etymology of the word archive. "This name apparently coordinates two principles in one: the principle according to nature of history, there where things commence - physical, historical or ontological principle – but also the principle according to the law, there were men and gods command, there where authority, social order are exercised, in this place from which order if given – nomological principle." (pg. 1) Shortly afterwards he writes about the documents which are stored in an archive, "They inhabit this uncommon place, this place of election where law and singularity intersect privilege." (pg. 3) And he refers to "the, in truth, patriarchic, function, without which no archive would come into play or appear as such" (pg. 3). There is, course, mention of the public and private nature of archives, which John Tagg discusses at length in his talk titled, The Camera and the Filing Cabinet. (2011) However, this element, although critical can only be touched upon here, and is perhaps beyond the scope of the essay. What we should be cognisant of, is how documents, which we think of as important, are stored - and how the mere act of storing them gives them gravitas, even if not looked at again. Derrida quotes Freud who discusses at length the act of storing data, attempting to make it stick in the world, overcoming the loss of memory and therefore the fallibility of being human; one who will ultimately die. If a public body stores a collection or archive, then the value of it seems to increase by association. Information pertaining the owner/archivist is bestowed upon it. What is perhaps crucial to this discussion, is comprehending the archive as a source of power. If the public ordering and categorising in this way, even when the archive subsequently becomes private (inaccessible), and is a function which was once managed mainly by the people in charge, what happens when individuals (members of the proletariat rather than the governing bodies) start to become archivists of their own lives? And, crucially, when those archives are public, rather than stored in private homes. Do they too become a nexus of power? Anyone who uses the Internet to communicate is using a database, or in another sense, a public archive. People nowadays regularly storing data and documents about their lives in digital archives online regardless of whether they intend to or not. At this point, we might ask, who owns these archives? And if power stems from the practice of storing and archiving, who benefits?

Like the Victorian invention of the cabinet, which Tagg equates to the modern digital storage systems behind our screens, digital databases store our data in invisible folders and drawers. It has become almost impossible to function and be a part of the modern world without access to these online storage systems. But unlike those older fixed, metal objects, digital databases do not operate within the laws of absence and presence. Metal cabinets are either empty or not. Instead, like all digital language material, data, and the storage units which help to order it, are built according to the principles of pattern and randomness. This change in the quality of

language material has led to several fundamental shifts in the way we relate to our archives. The most obvious of which may be its malleability. Katherine Hayles says in her 1996 book, *How We Became Post Human, Virtual Bodies in Cybernetics,* "The computer restores and heightens the sense of the word as an image – an image drawn in a medium as fluid and changeable as water." (pg. 26)

Before moving on to the effect malleability has on our relationship with language it is useful to consider media theorist, Friedrich Kittler's (1943-2011) comments about the negation of difference between language forms, as digitisation usurps analogue. "Sound and image, voice and text have become mere effects on the surface, or, to put it better, the interface for the consumer [...] In computers everything becomes number: imageless, soundless, and wordless quantity" (1987; pg. 102) Like Kittler, Vilém Flusser (1920-1991) also argued one could not privilege text over imagery and disagreed with a more established view that text and images were received differently. As Hayles points out, it is pattern and randomness, probably along with the way we interact with screens which diminishes any differences, which once seemed so important.

If indeed, archiving equates to power, how does this manifest itself? Looking around, it looks at if power outputs as 'voice'. Previously newspapers published text and images, and along with their ordered output came a certain level of authority. Today anyone publishes data and so anyone potentially can convey some kind of authority. And it may even seem, as we struggle to exist beneath the resulting cacophony, that enabling a world where everyone potentially has a voice, has led to chaos as well as a reaction in the form of authoritarism. What's more, universal access to voice alongside the malleability of a digital language material seems to have also resulted in unstable narratives, which none of us can trust. Reality, for the moment, seems entirely destabilised, in a similar way to how the victims of a gaslighter might be. Who can we trust? Ourselves or the other? Do we trust what we see, or what we think we see? How do we know we see it when technology makes it so easy to fake and to change? It may be salient to point out that individuals and groups who might be seen as representative of an old world order do seem to have benefited significantly from the new world materials.

However, the malleability of digital language material may, in part, have contributed to the progressive reframing of historical narrative, as well as the possibility for such reconstructions to be considered remotely viable. Ariella Azoulay, for instance, questions photographic history and deconstructs received narrative surrounding photography's beginnings. In a post, titled *Unlearning the Origins of Photography*, she begins, "Imagine that the origins of photography go back to 1492." She then asks, "How do those who wrote different histories and theories of photography know that it was invented sometime in the early nineteenth century?" Azoulay does this in order to deconstruct the wider landscape in which photography, which we all have come to understand, was invented. "They—we—received this knowledge from those invested in its promotion. Accounting for photography based on its promoters' narratives is like accounting for imperial violence on the terms of those

who exercised it, claiming that they had discovered a "new world."" (2018) The question and subsequent post, which foreshadow her forthcoming book, highlight and explore how photography continues to be inherently linked to imperialism and the sense of an Hegelian right to 'take' photographs (of the Other).

Azoullay challenges long-held power structures, which threatens to destabilise old world orders pertaining to photography and beyond. And she asks her readers to some considerable mental acrobatics as they reposition themselves to see differently: "To take this excursion to 1492 as the origin of photography—exploring this with and through photography—requires one to abandon the imperial linear temporality and the way it separates tenses: past, present, and future. One has to engage with the imperial world from a non-imperial perspective and be committed to the idea of revoking rather than ignoring or denying imperial rights manufactured and distributed as part of the destruction of diverse worlds." Had society not spent the previous two decades internalising pattern and randomness, Azoulay's efforts to help us see differently might have been significantly more difficult.

The perceived threat to film (and the old world order)

This essay has explored how the tools of digital technology and its associated language are transforming history as well as long-held power structures. Yet, despite such patterns usually being hailed as positive amongst artists and the intelligentsia, there seems to be a great deal of antipathy towards the digital.

Despite or because of the ubiquity of digital technology, film and analogue has had a mini resurgence amongst some photographers including millennial. This trend is summed up by analogue enthusiast Kevin Unger, a client of a lab in Toronto, and interviewed for an article titled, As millennials take up film photography, darkrooms see a bright future again, as 'cool'. (2018) The author of the article explains film cameras are like vinyl records amongst millennials, which suggests analogue and film are a curiosity from a foreign land, the past, amongst people who were 'born digital'; perhaps in a similar way to how the aesthetics of Victoriana are adopted by a popular sub-genre, Steampunk. Steampunk references Victorian technology and mixes it with futuristic, (which might be seen as a reversal of Derrida's Hauntology where the past acts as a spectre within the present.) Within the Steampunk astheatic, the future haunts the past, as narratives are often set in alternative histories, where our future fantasies become embedded. Such fantasies might be interpreted as fascination in its truest sense, as our fear of transforming from human to post-human, and then on to non-human expresses itself.

On Instagram, photography's busiest social media platform at the time of writing, there are many groups dedicated to the medium of film, privileging the older technology over digital process, such as Film's Not Dead, Film Shooter Collective or Film Camera's International. Artists from various industries are often outspoken about their commitment to film. Tacita Dean is well known for speaking in defence of what she terms 'photochemical processes' and just one of a number of high profile artists, joined, we are told in an article in the New York Times, by Stephen

Sarah-Jane Field 28/10/2018 20:39 Comment [1]: cite Spielberg, Neil Young, Keaanu Reeves, Wim Wenders who publicly mourn the loss of film or defiantly speak out against its replacement. Wenders in fact wondered if photography had been transformed into something else entirely, something separate to photography, something that isn't photography, now that everyone is doing it. Emily Eakin reports as she writes about Dean's 2011 Film, which aims to celebrate the medium, "Dean, on occasion, has gone even further, suggesting that digital formats represent an irremediable loss for art. "I should not eschew the digital world because it is, of course, a great enabler of immediacy, reproduction and convenience," she wrote in an aside in 2007 (a magnanimous admission). "But for me, it just does not have the means to create poetry; it neither breathes nor wobbles, but tidies up our society, correcting it, and then leaves no trace." [tell this to ...insert artist who has made successful work with digital tech] The same article reports, "After the opening, Adrian Searle, the Guardian critic, praised it as a "cool and passionate" rejoinder "to the digital noise of the modern world." (2011).

Even so, digital technology is bringing about changes, which are far more profound and consequently more important, than the transformation of photography's dominant language material. As Joan Fontcuberta tells us in his book, *Pandora's Camera*, "It can be argued that, in essence, a pictorial image and a digital image are identical. There are differences in the technical *modus operandi*, the tools and the apparatus, but - let me say again – there structural nature is the same" (2014; pg. 60). We might also refer back to Hayles's comment about the way in which pattern and randomness negate the difference between text and image, never mind between an image taken on a film camera and one taken on a digital camera.

As Marx famously wrote about when he coined the terms value- and use-commodity, humans tend to instil value and importance to objects, but this invariably exists within the imaginary. We might argue the real exists not at all without the imaginary as far as human consciousness goes. And the real is material only, but doesn't exist without the imaginary, despite the fact one might think this should be the other way around. The imaginary can appear to us as solid and believable, because in the end it is all we have. There is inherent, in Deans' comments and others', who agree with her, a fetishisation of photochemical language material, and a refusal to give value to digital. Perhaps they do not trust the *reality* of digital material. Perhaps digital material may be a bit like consciousness itself, or as we used to coin it, the soul (and so it seems ironic that digital, in their minds, lacks soul.) We know they are both, souls and digital, formed by some sort of process, although how is beyond most of our understanding.

Summary

- The essay question might be answered in terms of practicalities very simply and quickly
- It may be more useful to investigate what lies behind the question why does it need to be asked at all?
- Digital technology is an expression of today's paradigm

- Archive = power, who has the power? Potentially, we all do (despite
- appearances for now)Conclusion: Different problems, different opportunities, potential for a significant shift in power dynamics = anxiety for today's power holders.