



Article

The Postnormal Condition

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Abstract

This paper introduces the postnormal condition and, in doing so, adds to the evolving symposium of postnormal times theory. It argues that today's epistemological crisis is a cultural crisis owed to humanities inability to imagine alternative ways of knowing and understanding. It makes the case that the current transformational epoch, our postnormal times, is intrinsically linked to digital culture. In particular, the discussion centres on the unique epistemological impacts digital culture has on authority, knowledge, selfhood, reality and time. Here, postnormal times theory is posited as a theory of change, that provides utility both as a diagnostic tool at the surface level and a conceptual framework to interrogate the fracturing worldviews experienced during significant change.

Keywords

Postnormal Condition, Postnormal Times Theory, Epistemology, Rupture, Knowledge, Digital Culture

Introduction

As the feminist and critical theorist Nancy Fraser writes “Whoever speaks of crisis today is to risk being dismissed as a bloviator, given the term’s banalization through endless loose talk” (Fraser, 2019, p. 1). But the perception today that humanity faces crisis after crisis is a very real one - there is a sense that change of a grand scale is upon us. And whilst globalisation, urbanisation, genomics and climate change foreground this transformation, it is the fledgling nature of digital culture that is incendiary to the change of our epoch. Today, thanks to digital culture, our fundamental understandings of reality are being challenged and expanded (Rosenfeld, 2015). In the era of ‘fake news’ the erosion of trust in traditional forms of knowledge making is normalised; exacerbated as both fake and legitimate news stories are shared through social media networks (Torres, Gerhart, & Negahban, 2018). These platforms, whose business models hinge on driving high volumes of traffic and social engagement, propagate and promote content that is likely to go viral over content that is factually accurate (Silverman, 2015). While the value proposition of the internet continues to be a convenient site for collaboration and the dispersion of ideas, its accessibility and coordination abilities has forever altered the terms by which authority, knowledge, selfhood, reality and time are conceived (Kirby, 2006; Torres et al., 2018). Put another way, digital culture has advanced an attrition of long held worldviews.

This paper introduces the postnormal condition and, in doing so, adds to the evolving symposium of postnormal times theory. Here, it is proposed that the current epistemological crisis -symptomatic of the postnormal condition - is a cultural crisis owed to humanities inability to move beyond a manufactured normalcy that perpetuates a familiar sense of present. It will be argued that our desire to de-emphasise change, and make all things normal, fundamentally expedites a sense of crisis. Moreover, downplaying change in spite of change nurtures ignorance and fosters uncertainty; the distinguishing characteristics of the postnormal condition. Here, postnormal times theory is posited as a theory of change, that provides utility both as a diagnostic tool at the surface level and a conceptual framework to interrogate the fracturing worldviews experienced during significant change.

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Postnormal Epistemes

Thanks to Foucault, we may now read human history through the different ways cultures have developed knowledge about themselves: economics, biology, psychiatry, medicine, and penology (Rabinow & Rose, 1954). This work, built on Gaston Bachelard's notion of epistemological rupture, served to designate the discontinuity of history. Certainly, this approach exposes the very nature of power and the role of the historian, as the purveyor of their field of knowledge, in suppressing social mutations, displacements and transformations, preferring to emphasize the continuity of long-range historical concatenations. The prototypical example of the want for continuity is the manner Western knowledge is constructed - the neat dotted line from Plato to Descartes to modernity (Vervaeke, Mastropietro, & Miscovic, 2017). Conversely, Galileo, Newton, Lavoisier, Einstein and Mendeleev, are used to exemplify the discontinuity between epistemic configuration from one epoch and the next (Rabinow & Rose, 1954). As such, with each epistemic structure, a rereading of reality is required; a shift in understanding from that which has been considered normal, to the discovery and familiarization of the new normal.

Postnormal times, as articulated by Sardar (2010), is a period of epistemological rupturing. It is not a single event, or a single moment in history, rather it is a period of transformation: where old ways of knowing are eroding and new are yet to emerge. This transformation means that change is not simply happening on the surface, but at the level of the basic tenets of our age's worldview (Montuori & Donnelly, 2018). Within postnormal times, we witness vast shifts from that which we have understood to be normal, toward an understanding of a new normal. This is postnormal change. How we experience postnormal change is the postnormal condition. Thus, whilst our postnormal times are unique to our context, they are not an anomaly. Postnormal times have occurred before and will occur again. Consequently, I posit, postnormal times theory (Sardar & Sweeney, 2016) with its foundations in complex systems theory and post-normal science, as a theory of change.

Our postnormal times are concomitant to digital culture; the omnipresent technologies, hyper-connectivity and vast societal structures that maintain, progress and celebrate its place in our lives. With the emergence of digital culture, the reification of dominant forms of knowledge has become inadequate. Big Data, the saturation of information and heterogeneous claims to knowledge present a divergence from tradition. In our postnormal times we do not reject all truth claims rather all truths have a claim; facts and values are equal elements in the process of constructing knowledge. In our context, digital culture is a paradox of normality because of its epistemological intrusiveness; we cannot disconfirm that which is online, it is truth to someone somewhere and spreading.

Indeed, our flexible relationship with the truth (and insatiable appetite for titillation) both recognizes and undermines the authority of the traditional truth-teller - the scientist, the scholar, the expert (Wakeham, 2017). Online, campaigns against established knowledge can be led by anyone, anywhere - all that is required are the readily available tools to transmit an agenda. At times these campaigns represent a wry wink at truth conventions. At other times they are erroneous and malice manifestations with a view to diverge communities and foster mistrust. For Nichols, this is the 'death of the expert' - "a Google-fuelled, Wikipedia-based, blog-sodden collapse of any division between professionals and laypeople, teachers and students, knowers and wonderers - in other words, between those with achievement in their area and those with none at all" (Nichols, 2017, p. 124). Long held worldviews, our normal bastions of wisdom, are now regarded with pessimism and contempt. As such, we no longer share a uniform worldview that guarantees divinity or prescribed standards of behaviour (Vervaeke et al., 2017).

This has empirical and cognitive implications. We see the shift of power from nation states and regional groupings to non-state commercial actors like Google, Amazon and Facebook. The hyper connectivity and ubiquity of internet technologies more than streamlining and expanding our access to realities, has shifted the dominion of the cultural agent to the user. With this, we move through the virtual realm in a manner that cannot be duplicated, inventing a pathway through cultural products which have never existed before and never will again. This is a far more intense engagement with the cultural process than anything offered before in history and gives the undeniable sense (or illusion) that we are controlling, managing, running and making up our involvement with the cultural product (Kirby, 2006).

For the user, this means that instead of a newspaper feeding us daily doses of shared knowledge "we get a nauseating mix of news from forgotten classmates, slogan-placards about issues trivial and grave, revisionist histories coming at us via a million political voices, the future as a patchwork quilt of incoherent glimpses, all mixed in with the pictures of cats doing improbable things" (Rao, 2012). This experience is compounded, as one incidence folds into another, then another; each intersecting with one another, each incrementally affecting the other, seeming

to accelerate and expatiate with every moment. This barrage weakens our aptitude for discernment (Vervaeke et al., 2017). As such, we are yet to develop the wherewithal to effectively solve the perennial problems of life - largely because we are plagued by ignorance and uncertainty.

Ignorance is a manifestation of the realisation that the current dominant ways of thinking and knowing are insufficient to navigate the complexities of today. We are not equipped to think the unthinkable. We are ignorant to how the solutions to the problems of today will affect us tomorrow. We are ignorant to decipher the validity of information that is factual against the flood of data delivered to us daily (Sardar, 2010, 2015). This level of ignorance is unnerving to a society whose principle organising confidence has been bound to risk-mitigation and certainty (Beck, Lash, & Wynne, 1992; Healy, 1999). Our worldviews are shifting to be more akin to Donald Rumsfeld's notion of unknown unknowns - where there are an apparently increasing number of things, we don't know we don't know (Rumsfeld, 2002). Indeed, ignorance nurtures uncertainty. Uncertainty speaks to the problem of 'objectivity' our experts (scientists, academics, economists, journalists, corporate executives) now find themselves experiencing. These, I argue, are the embodiment of the postnormal condition.

Our Postnormal Condition

Let us exhibit our postnormal condition and its relationship to digital culture. We may begin by acknowledging that there is a vast complexity of physical infrastructure designed, built and maintained to enable the transmission of the internet across the globe. Satellites, submarine cables, antennas, poles, cables, nodes, routers and modems are deployed by a convoy of commercial and service providers, government agencies and marketeers who operate within complex thatched economic, industrial and regulatory systems. The consumer – the user - with their computer and mobile device may enter and explore an ever-increasing array of digital networks. Through these networks we both expand our sense of self, expand our sense of reality and simultaneously expand our avenues to access new knowledge. Within these digital networks exist spaces for commerce, leisure, socialising, education and politics. With little to no learning curve, users accept that they are stepping from a physical world, rooted in well-defined and predictable boundaries, into a realm of pure communication, devoid of clear boundaries, where rules are continuing to evolve (Rosenfeld, 2015). So, firstly, our postnormal condition is the texture between this myriad of sophisticated objects, with their unique affordances that connect us to the complex networks of the virtual realm.

Through these connections, users themselves have evolved into multitasking and cognitively enhanced sifters of universal information. Space is no longer binary: where I am and where I am not; physical and virtual; adjunct and parallel. Rather, space is an infinity of data abstractions from the banks of every computer in the human system (Gibson, 2004). The further we are detached from references to real life, the more undefined things become and the more we function in the psychological state of the virtual (Gibson, 2004). This is at odds with traditional constructs of subjectivity; normal governmental and regulatory structures work to increase definitive whereness of the subject (Stone, 1994). The complexity of the networks that link these spaces is unfathomable and the movement between and within these spaces is outside the constructs of lineal time. Now, the inadequacy of Newtonian absolute time is not just that the hyper connectivity of networked spaces has accelerated traditional temporalities, rather the abstraction of self across each of these spaces is so severe that time as an experiential part of the human condition has altered. Thus, secondly, as digital culture sets the pace and space for life, our postnormal condition cultivates an abstraction of self across a multiplicity of spaces.

Because of this, adeptness at perpetual and rapid multitasking has now become necessity for navigating the imbroglia of modern life. Decisions are made on the fly with five-star reviews and online opinions garner the richest influence over our choices. So too the need to record and share (as widely as possible) experiences and ideas is customary practise. This fractures the tie between what society has normally defined as a single physical body and a single awareness of self, moving us into a new realm of disembodied subjectivity (Stone, 1994). Indeed, whilst social networking may be a reason for participation in contemporary society, self-representation is the condition of participation (Thumim, 2012). Through the creation of the virtual subject, we compose something tangible yet still simulated, and through this construction we build who we are and create who we want to be (Rosenfeld, 2015). The ubiquity of digital technologies and the ensuing hyper-connectivity are normalised as such that our identities, individually and collectively, are intimately linked to our online accounts. We present images of who we are, or want to be, to online communities that in turn either confirm or deny these identities. In this realm, we can be

whoever we want to be, abstracted from physical reality. Existence can for the first time in history imagine itself immaterially socialised in virtual reality. This is life in pastiche, where new identities are explored and tried on (Bauman, 2004; Maruyama, 1979; Montuori & Donnelly, 2018). As such, digital culture creates the subject who is partly possessed by and yet distinct from the technologies that facilitate entry into the virtual realm. With this third distinguishing feature we see that in our postnormal condition is the self-assertion of the individual now reigns supreme.

Finally, software algorithmic systems implemented by the corporate owners of websites, search engines and networking platforms perpetually monitor online behaviour. Algorithmic rankings determine who and what gains visibility online (Cotter, 2019). They seek to understand what we do online so they can give us more of what we want – quicker - and sell that information to other corporates who are also eager to do the same (Wheeler, 2017). In this regard the user is consistently delivered information that not only reaffirms their already held beliefs and speaks to their biases but is often information that is not curated or verified. Our access to new information and new realities narrows in the virtual realm rather than widens. So instead of an infinite savannah ripe for exploration, the virtual realm has become an increasingly narrow system of feedback loops that pander to our preconceived ideas and appetite for instant gratification (Silverman, 2015). As such, our postnormal condition should be understood by one final decisive nuance: that we are the victims of our own entrapment.

Manufacturing Worldviews

Of course, none of this is entirely new. Cultural and societal structures that emphasise self-assertion and perpetuate closed feedback loops for the reaffirmation of formerly held beliefs have long been established. And as new ways of knowing and understanding present themselves, these structures shift and move to reify disruption into normalisation. This is further convoluted, as significant and disruptive shifts occur alongside and amongst normal change; postnormal change and normal change overlap and exist alongside one another. As such, it is often difficult to see the forest for the trees; to sift through the processes of change and establish that which is postnormal, especially when our ways of knowing are so heavily prejudiced by the very change we are trying to understand.

This process of normalisation becomes problematic in postnormal times; normalization camouflages the epistemological rupturing of established epistemic constructions making it difficult to map change. We create stories and metaphors that relate new experiences to something we already comprehend and know, adjusting our behaviours in an attempt to overlook or ignore the changes happening before our eyes (Sardar & Sweeney, 2016). This is decidedly cultural phenomenon that favours a ‘business as usual’ approach over the drive to address the uncertainties cast over the core assumptions that have governed our way of knowing. This approach preferences the attribution of fundamental changes to the fore-gone conclusions of existing orthodoxies rather than pointing out the unnerving shifts away from traditionally held notions of ‘normal’. The public discussion on global warming is exemplary of this. Those who deny the science that implicates humans as the dominate force driving global warming point to the millennia of climate change before human existence. This argument rationalises change and normalises empirical consequences, absolving accountability and eradicating agency. Similar arguments are made across doctrines and ideologies to explain away the array of uncertainties pestilence of our existence; economic instability and social and cultural divisions.

Culturally then, the future – where the real change exists - remains a fixed point on the horizon, far from the present and yet to be attained. There is an unexplained cognitive dissonance between changing reality as experienced and change as imagined; the future always seems like something that is going to happen rather than something that is happening (Rao, 2012). Rao argues that this is the manufactured normalcy field at play: the incorporation and normalisation of change into larger conceptual metaphors built out of familiar experiences (Rao, 2012). ‘Manufactured’, in this sense, is as articulated by Herman and Chomsky: norms that have been developed by powerful global institutions, including media and technology companies, that operate by relying on market forces, internal, unquestioned assumptions, and subtle manipulation to generate ideological and consumer desires and dreams (Herman & Chomsky, 2010; Sardar & Sweeney, 2016). By using the manufactured normalcy field individual or communal consciousness perpetuates a continuous present through a familiar sense of a static.

Consider, the mobile phone, which is far closer to a high-powered piece of computing technology than a telephone, as example of this. The smart phone is the metaphor for a device that is our personalised computer, access

to our bank accounts, our social networks, our information hub, camera, photo album, entertainment system and so much more. With each iteration, as new technologies emerge, our manufactured normalcy field stretches incrementally to incorporate it as part of our culture. Thus, the mobile phone, with more power than we ever conceived possible, has become normalised as such; it is now a necessity of modern life.

Indeed, modern life, or what Habermas called the project of modernity, is very much what our sense of normal is predicated upon. Anchored with the period of industrialisation, modernity may be defined through a broad set of characteristics and values; the prioritization of individualism, freedom and formal equality; faith in inevitable social, scientific and technological progress, rationalization and professionalization, a movement toward capitalism and the market economy, industrialization, urbanization and secularization, the development of the nation-state, representative democracy and growth in public education (Berman, 1988; Foucault, 1995). In this regard, modernity became the secular theory of salvation (Nandy, 1987). As such, in presenting the postnormal condition it is important to distinguish between postmodernism and postnormal times theory. This is not only because postmodernism presented itself as the most radical challenge to the epistemological foundations of reason, objectivity and knowledge since the Enlightenment (Potter & López, 2005), but because the consequences of its doctrine have led us toward, and remain with us, in our postnormal times.

Postnormal, Not Postmodern

To begin with postmodernism is an *ism*, which, a quick google search (as a google search is now a source of knowledge) reveals, is defined as ‘a distinctive practice, system, or philosophy, typically a political ideology or an artistic movement’. Postmodernism was a philosophical project championed by French philosophers like Jacques Derrida and Jean Baudrillard and American philosophers such as Richard Rorty and Fredric Jameson, who argued that there was no ‘truth’ out there waiting to be discovered. It was a political ideology with liberal secularism as its foundation. In contrast, postnormal times, as a concept, is concerned with change and aims to understand and describe the changing nature of change, and develop ways and means to navigate our contradictory, complex and chaotic times.

The overriding concern of postmodernism was with the demolition of the ‘Grand Narratives’ - Enlightenment Reason, Science, Religion, Marxism, Modernity, Tradition - anything that gives meaning and direction to our lives (Myerson, 2001; Potter & López, 2005; Sardar, 1998). Postnormal times suggests that grand narratives cannot be ignored: far from disappearing they are deeply entrenched and the countless contradictions we see around us are products of the clashes, conflicts and differences that grand narratives through up. Once you have deconstructed the postmodern onion, as Umberto Eco demonstrates in *Foucault's Pendulum*, there is nothing at the core: all is meaningless (Eco, 2007). Yet, in postnormal times, meaning is sought by everyone, everywhere – even at the extreme fringes of political left and right.

Postmodernism argued that the distinction between image and reality, reality and image, had evaporated – as demonstrated by Baudrillard in ‘The Gulf War Did Not Take Place’ (Baudrillard, 1995). All was *simulacrum*. Postnormal times, on the other hand, takes the approach of critical realism, making specific distinction between the self, the manufactured normalcy field and reality, between perceptive and real change. Postmodernism aimed at dislocation and erasure of history; postnormal times recognizes the value of history and tradition both as a source of injustice and grievance and as a source of meaning essential for transcending contradictions. Postmodernism sought to give voice and representations to the ‘Other’ in history, anthropology and politics but this access was conditional: it was granted on postmodernism’s own terms; the history, tradition, religions and worldviews of the Other already dismissed as meaningless (Sardar, 1998).

Postmodernism was infatuated with irony, ridicule and cynicism, exemplified by the ‘magical realism’ school of fiction of which Salman Rushdie’s *The Satanic Verses* is a prime example; and promoted perpetual, all-around doubt (Rushdie, 2011). Cynicism and unbridled doubt become corrosive when they saturate a society or a worldview. So, postmodernism became a nihilist philosophy as confirmed by Gianni Vattimo in his *The End of Modernity: Nihilism and Hermeneutics in Post-modern Culture* (Vattimo, 1988). In the final analysis, postmodernism became a hegemonic discourse. Or as Sardar (Sardar, 1998) suggests, ‘the new imperialism of western culture’ that sought to subsume and consume all non-western people.

Thus, postmodernism and postnormal times theory must be distinguished from one another. Modernity and

postmodernity were two distinct epochs posited in a quite common, although by no means universal, philosophies of history. Unlike modernity and postmodernism which were seen as the final goals of humanity, postnormal times is consciously perceived as a transitional period: between the ‘no longer’ and the ‘not yet’.

While postmodernism and postnormal times are distinct periods, many contemporary problems and issues are a direct or indirect result of postmodernism. Through our transition postmodernism perpetuates certain outlooks, desires and trends. Postmodernism has preserved - or enhanced - all the classical and modern structures of oppression and domination (Sardar, 1998); when ‘anything goes’, everything stays, and expediency guides thought and action. All postmodern traits worked towards depriving individuals of their conscience, trapping them in a system where neither the ends nor the means need moral justification. Ethics and morality are replaced with a perpetual and insatiable quest for consumption, an ever-present internal anxiety about choosing an identity wrapped in manufactured illusion, the inescapable bombardment of images and representations, and constant manipulation of/by all. Postnormal times theory has to address this legacy as this continues to consume us in postnormal times. New practices emerge as we creep toward postnormality:

Table 1: Postmodern / Postnormal

Postmodern	Postnormal
The practice of taking and sharing <i>selfies</i> with the use of one’s mobile phone.	<i>Deep fakes</i> are manufactured images or videos that make it appear that someone was somewhere, doing something that they were not.
The practice of <i>liking</i> posts on Facebook and re-tweeting tweets on Twitter.	<i>Clicktivism</i> expresses describe gestures online intended to convey socially approved attitudes for the. <i>Slacktivism</i> and <i>virtue signalling</i> are the common criticism of this action.
The success of television shows where viewers at home use their phone to vote for their favourite participant and help in determining the winners of the competition.	Disney is researching the use of facial expression recognition technology and machine learning to assess audience reactions to films as a means to gather rich moment to moment data (Saha, Navarathna, Helminger, & Weber, 2018).
The success of <i>online dating</i> services like Tinder through which individuals make contact with physically nearby potential lovers, again with the use of their mobile phones.	<i>Catfish</i> are to be wary of when we are trawling online dating sites for new matches as cyber-sex has become the normalized.
The tracking option for services like the ones offered by Amazon or Uber Eats so that a costumer can know where their order is exactly and when it will reach destination.	Whilst we proportion our services via <i>five-star rating system</i> embedded within mobile applications, in return we can also be rated as customers by vendors. More than this, our purchasing behaviour is tracked and monitored so intuitive software can recommend and promote products/services to us.
The diffusion of video recordings from personal mobile phones shown on television news (as evidence in cases of “police brutality” for instance).	GPS systems within devices can track and locate people at all times and alert them to an incidence occurring within their close proximity in real time.

So, the manufactured normalcy field is distinct from reality, expanding and contracting, permeating and repelling as we re-orientate our perceptions of what is normal and is not normal; it is the cultural practises we employ to ensure minimal change, despite change. When we ask the question, is there a sustainable future, we are not really asking about fossil fuels or feeding 9 billion people, we are asking can the manufactured normalcy field absorb such and such changes (Rao, 2012).

Postnormal Lags, Creeps and Bursts

The goal here is not to replace postmodernism with postnormal; rather to compare and contrast as a means to build the argument that postnormal times is, conceptually, a theory of change. As a theory of change, postnormal times

provides a framework to begin to navigate change by articulating a unique set of characteristics that define postnormal change and underscores their impacts. Further, as a distinct period of change across a discrete cycle of time, it may also be transferred and translated across temporalities, cultures and contexts. For the British, colonising Australia in the 1700's was an entirely normal process. For the First Nations people of Australia, this invasion was entirely postnormal. There were some in the colony, missionaries usually, who sought to extend compassion to First Nations people through the teachings of Christianity. This was normal for the missionaries and postnormal for both the colonisers and the First Nations people. These normal and postnormal systems exist side by side, in one form or another, for centuries. We can see similar examples in the Suffragettes movement, the animal rights and the climate movements.

Moreover, postnormal times theory provides a framework to make sense of the litany of surface level changes and a conceptual model to interrogate the fracturing worldviews experienced during significant change. This is not to say that everyone, everywhere, is affected by postnormal times in the same way, at the same time, or even to the same extent. As aforementioned, postnormalcy and normalcy overlap and exist side by side. We see this with global warming; scientists insist that large scale industry contributes profoundly to intensifying the effects of climate change, whilst industry – grounded on capitalist interests – continue to pursue profits as primacy. Equally as groups like Extinction Rebellion orchestrate large scale protests to raise awareness of what they call the climate crisis, politicians favour jobs growth and an agenda for economic progress to curry favour with constituents. Interests and values intersection and conflict as established ways of knowing and understanding increase in their potentiality to go postnormal. Thus, the future does not arrive in a temporal sense, rather it arrives chiefly through social fragmentation (Rao, 2012).

This is evident in the apparent rise in popularity of the digital influencer, a type of micro-celebrity who are paid by companies to use their large online profiles to promote brands and products (Abidin, 2015; Cotter, 2019). Digital influencers, presenting themselves as ordinary individuals, can penetrate deep into social networks and are able to sell their message directly to the user through their shared connection. Through an impression of “realness,” influencers foster a sense of intimacy, accessibility, and relatability, which forms the basis of affective relationships with their followers (Cotter, 2019; Marwick & Lewis, 2017). In selling their identities they become proxy defenders of the manufactured normalcy field.

Far removed from traditional forms of advertising and marketing, the digital influencer goes to the heart of the concerns that many observers and commentators share regarding the now seemingly fluid relationship between lived and virtual realities. Retail companies, interest groups and ideologues alike are able to acquire data to target vulnerable people, infiltrate social networks and use algorithmic software to create close looped cycles of information to spread their messages (Marwick & Lewis, 2017). With digital culture, digital influencers are normalised; part of our culture having shifted our perception of truth, knowledge and expertise.

This is known as a postnormal creep; a process whereby positive feedback loops of highly interconnected and complex systems facilitate weird phenomena to penetrate the manufactured normalcy field. A great deal of research and development, design and marketing go into ensuring users seamlessly transition into new practises. Design choices are aimed to de-emphasize the strangeness of new technologies and reaffirm essentiality for modern life. What designers design actually are futures, not simply things that point at a certain future (Morton, 2019). Undeniably, the implicit power of technological change is that it arrives in ways that leave human behaviour minimally altered (Rao, 2012). The future is happening now, we have just become so accustomed to de-emphasising it that we cannot see it. Instead weird phenomena cause us to creep toward our future. But just as normalcy and postnormalcy exist and overlap simultaneously, not everyone and everything is affected by postnormal creep in the same way at the same time.

Postnormal lag is the perceptual condition of denial; abnegation despite overwhelming evidence to contrary (Sardar & Sweeney, 2016). The obvious example in the context of digital culture are the elements of the finance and banking sector who refuse to acknowledge and/or take seriously the emerging significance of crypto-currency. So, as the postnormal lag disavows change, despite change, and postnormal creep drives change, while the manufactured normalcy field de-emphasises change, occasionally these two processes converge, or indeed diverge, in different ways a postnormal burst is experienced and systems go totally postnormal. What ensues is a perpetual bombardment of rapidly shifting agendas, legislations, messages and norms; chaos, perceptual and actual.

We saw this play out at the end of October 2017. The *New York Times* published allegations of sexual harassment, assault and rape about Hollywood producer Harvey Weinstein. No one could have predicted the chaotic, and often

weird, chain of events that followed. Weinstein was fired from the production company he co-founded. Criminal cases in New York and London began to build against him. More allegations from multiple women over several decades continued to surface in the media. Stories of inappropriate conduct by others across the United States film and television industry began to surface in the media. Amazon Studios director Roy Price resigned after it was revealed that, not only had he ignored claims by actor Rose McGowan that Weinstein had raped her but had himself inappropriately propositioned a female colleague. American television presenter Matt Lauer gave an on-air statement where he apologised and resigned from his role as presenter of *The Today Show* after allegations of sexual harassment mounted against him. Accusations against Kevin Spacey led to director Ridley Scott halting the production and the recasting and refilming of all the scenes Spacey was originally in, effectively removing him from the film altogether. A postnormal creep that had been building for some time had gained momentum.

Within a month the list of powerful and high-profile men accused of sexual misconduct swelled to encase the broader United States community. Actress Heather Lind published a social media post accusing former US President George H.W Bush of groping her from behind and telling her a joke of an overtly sexual nature. Olympic gold medalist McMayla Maroney accused the former USA Gymnastics team doctor Larry Nassar of molesting her. The writer, activist and Nobel Peace Prize Laureate Elie Wiesel was accused posthumously of groping Professor Jennifer Listman. Chefs, executives, union bosses, photographers and choreographers are amongst those named by capricious media outlets. As the postnormal creep accelerates, the postnormal lag – the misogynies of patriarchy – is revealed and challenged. As the complexity of systems - and the contradictions that lay within them - were exposed a sense of chaos began to grip the movement; notions of consent, coercion and institutional complacency came to the fore.

By November Theresa May's conservative government in Britain was embroiled in several allegations of the sexual misconduct spanning decades and different political parties. This led to the resignations of Defence Secretary Michael Fallon and Welsh Minister Carl Sergeant - who took his own life four days after his dismissal. French President Emmanuel Macron expressed his horror over the allegations against Weinstein and announced that Weinstein would be stripped of the Légion d'honneur, the country's highest civilian honour, which he had received in 2012. In India, law student Raya Sarkar set up a Google Docs, accepting anonymous testimonials to sexual abuse taking place within universities in India. Up to 59 academics from 29 colleges were named, some of whom were prominent figures. Raya Sarkar's list sparked a debate on whether anonymous name-and-shame campaigns were just, and on whether due process could be subverted. Several prominent academics, including Ayesha Kidwai and Nivedita Menon, issued a letter of response to Raya's list - and were criticized for defending due process. Another lag: Australian television presenter Don Burke, when, accused of sexual misconduct by several women, denied these claiming, "The Harvey Weinstein saga in Hollywood started a witch hunt." Indeed, the image of a red-faced bloated Weinstein, the white rich man, became the archetype for the system that had suppressed victims and protected the powerful who perpetrated the abuse.

Amongst the chaos, actor Alyssa Milano tweets the message: "If all the women who have been sexually harassed or assaulted wrote 'me too' as a status, we might give people a sense of the magnitude of the problem." The #MeToo was tweeted nearly one million times in the 48 hours that followed Milano's Tweet, and in the months that followed several millions more. Many of the tweets detailed individuals' experiences of assault and harassment. The term, "the Weinstein Effect" has now etched itself into the zeitgeist of popular culture in manner so dramatic it is befitting only to the exponent with which it shares its name. Litany that closes the loop and reinforces the new normalcy. The #MeToo movement demonstrates the speed, scope, scale and simultaneity by which phenomena in postnormal times travel and impact systems.

It also demonstrates the complexity of mapping and navigating postnormal change. Creeps, lags and bursts exist and occur simultaneously at a diversity of levels. Within the #MeToo movement alone a diversity of creeps and lags impacted within and outside the phenomena. The justice system lagged against the creep of social media. Clicktivism crept against formal grievance processes. Heteronormative language was called into question as the creep of dissenting voices was amplified. Data, information and knowledge lag against Big Data, the saturation of information and the plurality of claims to knowledge. The burst is a result of a number of influences acting against a number of systemic layers - creeping toward chaos - until the system is altered beyond return. The burst shifts the system at every level. In postnormal times, the nauseating rapidity with which these occur bombard our manufactured normalcy field; the experience that ultimately underlines the postnormal condition.

Postnormal Tilts and Vincible Ignorance

But was the #MeToo movement really a burst? Did the movement illicit change at every level? Has the creep overcome the lag? Has the system gone postnormal? From where we stand, the answer to this is unclear – and in fact may not be clear for some time. Postnormal times theory calls this vincible ignorance; when the answers can only be found sometime in the future after a generation at least has experienced the impacts and effects of these development (Sardar & Sweeney, 2016). Sardar contends that vincible ignorance “cannot be overcome in the present by learning as there is nothing to learn, but it creates an awareness of what we do not know and must seek to know in the future” (Sardar & Sweeney, 2016, p. 123).

This is juxtaposed against invincible ignorance (Sardar, 2015), the unthought that lies beyond our imagination that is ultimately limited to our language, frameworks and worldviews. This is the ignorance of our ignorance – an inherent ignorance of the potential risks of recent developments that requires radically new ways of anticipating and thinking (Sardar, 2010, 2015). One thing we do know from our current purview is that the #Me Too movement did not start with a tweet from Alyssa Milano. It was originally coined in 2006 by civil rights activist Tarana Burke who began using the phrase ‘me too’ to raise awareness of sexual abuse and assault. It was only after a Hollywood celebrity used the term in her tweet that the movement gained widespread attention. This illustrates the influence of a creep over a long period of time, slowly gaining the speed, scope, scale and simultaneity. It may also be illustrative of the strength of a lag, the long-held traditions, norms and orthodoxies, characterised by contradiction that exist in postnormal times and continue to influence systems significantly. In this sense, perhaps we can conclude that a burst is quite hard to come by.

What may be helpful is to be able to articulate the experiential shift in knowing and understanding that occurs at the torsion caused between a creep and a lag - before the burst. If the #MeToo movement gives birth to something different then it was a burst. But if it resurfaces within the same parameters then it was a postnormal tilt. The tilt is a perceptual jolt - a wake-up call – a realisation that, despite our desire to maintain a business as usual that change is happening right now. The tilt disrupts our cultural propensities and forces us to reassess the fixed-point horizon thinking that has influenced our approach to futures thinking. The tilt leads us to assess the multidimensionality of change and comprehend our place and role as part of that change. In this regard, our epistemological crisis may simply be the tilt before the burst. Certainly, fake news, deep fakes and catfish, normalised with digital culture, are certainly illustrative of a postnormal creep. The maintenance of traditional truth telling institutions and lamenting for bygone eras of facts and certainty – illustrative of a postnormal lag. As we stand, in vincible ignorance, it is impossible to say. Only with time and greater perspective may we draw greater conclusions. What we do know, however, is that we cannot control postnormal times; we can only equip ourselves better to navigate them.

So What?

So, what makes our postnormal times any different to postnormal times that have come before? Further, what makes postnormal change more or less significant than normal modes of change? Certainly, these are the questions that go to the heart of the utility of postnormal times theory. The answer to both questions may very well be the same: nothing at all, and everything. Our postnormal times may very well be comparable to those that have come before; the uncertainty and ignorance characterising the postnormal condition may surely attest to the experience of those living through the very early stages commencing the end of World War II. I would even argue uncertainty and ignorance plague us at micro-moments throughout our lives; the death of a loved one, the start of a new job, moving to a new country – moments of postnormality through the experience of life.

However, and quite contrary, everything is different in our postnormal times. Never before in human history has one person been able to communicate with billions with readily available apparatus, like we do today. Never before in human history has the impact of human life been so detrimental to the life of the rest of the ecosystem, as it is today. Never before in human history have, we acquired the wealth, know-how and connectivity to solve illness, poverty and inequality, like we do today. Yet in the face of significant change, dogged by uncertainty and ignorance, the postnormal condition is stifled to action. This conditioning, intimately entwined with digital culture, instigates a shift in the way we conceive of selfhood, authority, knowledge, reality and power. Yet the current epistemological crisis -symptomatic of the postnormal condition - is a cultural crisis owed to our inability to move beyond a manufactured normalcy that perpetuates a familiar sense of present. Our postnormal times, Foucault’s

epistemological rupturing, is a transitional period where old paradigms are dying, and new ones are not born. In postnormal times, the very nature of change is changing. Thus, we stand with no certainty of any return to a past we once knew and no true sense of a way forward. The challenge then is to make weird those things considered normal, make problematic the normalization process and commence a mapping of postnormal change. In doing so, postnormal times theory provides of a framework to conceptualise, comprehend, make sense of and complex change process as a means to empower ourselves to navigate postnormal times.

References

- Abidin, C. (2015). Communicative intimacies: Influencers and perceived interconnectedness. *Ada*, 8, 1-16.
- Baudrillard, J. (1995). *The Gulf War did not take place*. Bloomington: Indiana University Press.
- Bauman, Z. (2004). *Identity : conversations with Benedetto Vecchi*. Cambridge, UK : Malden, MA: Cambridge, UK : Polity PressMalden, MA : Blackwell Pub.
- Beck, U., Lash, S., & Wynne, B. (1992). *Risk society: Towards a new modernity* (Vol. 17). London: Sage.
- Berman, M. (1988). *All that is solid melts into the air: the experience of modernity*. New York: New York: Penguin Books.
- Cotter, K. (2019). Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society*, 21(4), 895-913. doi:10.1177/1461444818815684
- Eco, U. (2007). *Foucault's pendulum*: Houghton Mifflin Harcourt.
- Foucault, M. (1995). *Discipline and punish: the birth of the prison* (2nd Vintage Books ed.. ed.). New York: New York: Vintage Books.
- Fraser, N. (2019). *The Old Is Dying and the New Cannot Be Born: From Progressive Neoliberalism to Trump and Beyond*: Verso Books.
- Gibson, W. (2004). *Neuromancer* (20th anniversary ed.. ed.). New York: New York : Ace Books.
- Healy, S. (1999). Extended peer communities and the ascendance of post-normal politics. *Futures*, 31(7), 655-669. doi:https://doi.org/10.1016/S0016-3287(99)00025-7
- Herman, E. S., & Chomsky, N. (2010). *Manufacturing consent: The political economy of the mass media*: Random House.
- Kirby, A. (2006). The death of postmodernism and beyond. *Philosophy now*, 58, 34-37.
- Maruyama, M. (1979). Goal moratorium syndrome: a new vicious circle and how to break it. *Technological Forecasting and Social Change*, 15(1), 1-9.
- Marwick, A., & Lewis, R. (2017). Media manipulation and disinformation online. *New York: Data & Society Research Institute*.
- Montuori, A., & Donnelly, G. (2018). Transformative leadership. *Handbook of personal and organizational transformation*, 319-350.
- Morton, T. (2019). You Never Know How the Past Will Turn Out. *Journal of Futures Studies*, 23(4), 97-100.
- Myerson, G. (2001). Ecology and the End of Postmodernity.
- Nandy, A. (1987). Traditions, tyranny, and utopias: Essays in the politics of awareness.
- Nichols, T. (2017). How America Lost Faith in Expertise: And Why That's a Giant Problem. *Foreign Aff.*, 96, 60.
- Potter, G., & López, J. (2005). *After postmodernism: An introduction to critical realism*: A&C Black.
- Rabinow, P., & Rose, N. (1954). Foucault today. *The essential Foucault: Selections from the essential works of Foucault, 1984*, 1-30.
- Rao, V. (2012). Welcome to the future nauseous. *Ribbonfarm: Experiments in Refactored Perception*.
- Rosenfeld, K. N. (2015). *Digital online culture, identity, and schooling in the twenty-first century* (First edition.. ed.): New York, NY: Palgrave Macmillan.
- Rumsfeld, D. (2002). US Department of Defense News Transcript. *August Notes*, 255.
- Rushdie, S. (2011). *The satanic verses*: Random House.
- Saha, S., Navarathna, R., Helming, L., & Weber, R. M. (2018). *Unsupervised deep representations for learning audience facial behaviors*. Paper presented at the Proceedings of the IEEE Conference on Computer Vision

and Pattern Recognition Workshops.

- Sardar, Z. (1998). *Postmodernism and the other: New imperialism of western culture*: Pluto Press.
- Sardar, Z. (2010). Welcome to postnormal times. *Futures*, 42(5), 435-444.
- Sardar, Z. (2015). Postnormal times revisited. *Futures*, 67, 26-39.
- Sardar, Z., & Sweeney, J. (2016). The three tomorrows of postnormal times. *Futures*, 75, 1-13.
- Silverman, C. (2015). Lies, damn lies, and viral content: How news websites spread (and Debunk) online rumors, unverified claims and misinformation. *Tow Center for Digital Journalism*, 168(4), 134-140.
- Stone, R. A. (1994). Split subjects, not atoms; or, how I fell in love with my prosthesis. *Configurations*, 2(1), 173-190.
- Thumim, N. (2012). *Self-representation and digital culture*: Springer.
- Torres, R., Gerhart, N., & Negahban, A. (2018). *Combating fake news: An investigation of information verification behaviors on social networking sites*. Paper presented at the Proceedings of the 51st Hawaii International Conference on System Sciences.
- Vattimo, G. (1988). The end of modernity: Nihilism and hermeneutics in post-modern culture.
- Vervaeke, J., Mastropietro, C., & Miscevic, F. (2017). *Zombies in Western Culture: A Twenty-First Century Crisis*: Open Book Publishers.
- Wakeham, J. (2017). Bullshit as a problem of social epistemology. *Sociological theory*, 35(1), 15-38.
- Wheeler, T. (2017). Did technology kill the truth. *The Brookings Institute*. Retrieved from <https://www.brookings.edu/research/did-technology-kill-the-truth/>

