Postnormal Artefacts

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Abstract

We are entering a new period of history—postnormal times, where increasingly what we have taken for granted and normal does not work. How can we distinguish this emerging period of history from previous ones? What are its distinctive features? By comparing the main characteristics of classic, modern, and postmodern periods, this article attempts to identify the unique artefacts of postnormal times.

Keywords

postnormal times, periodization of history, classic, modern, postmodern

We like to divide history into neat periods. It helps us see how history moves, what progress has been made, and take account of paradigm shifts, if any. The tendency to categorize history has its own history and can be traced back to the Greek poet Hesiod who divided prehistory into the Golden Age, the Silver Age, the Bronze Age, the Heroic Age, and, finally, the Iron Age. Ovid, the Roman poet, concurred; and produced similar myths in his Metamorphoses. Except, he saw only four ages; there were no heroes who improved the sad state of humanity in his categorization. However, justice and peace reigned during the Golden Age; perhaps because, as Ovid tells us, man could not navigate, was confined to where he was born, and did not encounter the Other. In contrast, astrologers shunned metals and opted for the signs of the Zodiac. So we have the Age of Taurus, Aries, Pisces, and so on, including "The Age of Aquarius," which was much in vogue during the 1960s and 1970s when I, too, was a flower child and joined the crowd to be astonished by "Hair," "the American love-rock musical." Christianity has Six Ages of the World, while Hinduism has Four Yugas (Satya, Treta, Dvapara, and Kali), during which we successively become more and more immoral and brutish!

In general, the divisions of history are viewed from three main perspectives: cosmological, geological, and historical. The cosmological perspective, as one would expect, goes back to the Big Bang, 13.8 billion years ago. Initially, it proceeds in attoseconds: Planck Epoch (10-43 seconds after the Big Bang), Grand Unification Epoch (between 10-43 to 10-36 seconds after the Big Bang), Electroweak Epoch (between 10-36 seconds to 10-12 seconds after the Big Bang, as the universe cools down), Inflationary Epoch (between 10-36 seconds to 10-32 seconds after the Big Bang, as the universe flattens). After these periods, we move all the way through elementary particles (quarks, hadrons, leptons, photons). When we reach minutes, we have Nucleosynthesis Epoch (3–20 minutes after the Big Bang) and then we have to wait for 377,000 years before the arrival of Recombination Epoch, and 150 million to one billion years when the first stars begin to form in the Reionization Epoch. Geological perspectives have Cenozoic, Mesozoic, Paleozoic, Neoproterozoic,

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Mesoproterozoic, and Paleoproterozoic Eras, each subdivided into Periods, Epochs, and Age, with layer upon layer of evolutionary events. When it comes to historical perspective, periodization becomes simple or problematic, depending on your viewpoint. The dominant scheme begins with Ancient History (3600–500 BCE), then humanity disappears for centuries and nothing really happens (from a Western perspective) until we come to the Postclassical Era (500–1500) and move rapidly to Modern History (1500 onward), which is divided into Early Modern, Mid-Modern, and Contemporary. Essentially, history is largely seen as the History of Western Civilization, assumed to be the apex of human achievement, and its periodization reflects this Eurocentrism. We normally begin with Greece and jump to the Middle Ages—as though nothing happened in between. Islam and China are marginalized, if not forgotten; history and ideology are seldom apart. Of course, different cultures, civilizations, and nations would have their own periodization, and different authors have produced their own divisions.

The fourteenth century Muslim historian ibn Khaldun divided history into only two parts: manifest and gist. For ibn Khaldun, the periodization of history was not important, nor the actual events of history, but looking at how history shaped social life and the local and world environment. In The Decline of the West (1981), German historian Oswald Spengler rejected the notion of linear history, divided into immaculate epochs with "ancient-medieval-modern" headings.2 Spengler suggested that history should be seen in terms of cultures that grow organically into a civilization, and recognized eight "high cultures": Babylonian, Egyptian, Chinese, Indian, Mexican (Mayan/ Aztec), Classical (Greek/Roman), Arabian, and Western. The American historian of science, George Sarton, separated historic periods by assigning each half century to a dominant intellectual personality.3 So we begin with "The Age of Homer" and systematically move forward from the Greeks to "The Time of Hsuan Tsang," "The Time of I-Ching," and "The Time of Bede," the first half of the eighth century. From now on, it is the time of Muslim

thinkers: "The Time of Jabir ibn Hayan," the father of chemistry; "The Time of al-Khwarizmi," the inventor of algebra; "The Time of al-Razi," and so on all the way to Copernicus and the Western luminaries. The British historian Arnold Toynbee saw history in terms of rise and fall of civilizations, and described twenty-three civilizations.4 Of course, you could also divide history by empires, monarchs, wars, and conquests, including imperialism and colonialism, which many historians have done. More recently, the British Marxist historian Eric Hobsbawm divided post-Enlightenment history into The Age of Revolution 1789–1848, The Age of Capital 1848–1875, The Age of Empire 1975– 1914, and Age of Extremes 1914–1919⁵⁻⁸—the titles of his four-volume monumental work. In his new book, Henry Kissinger⁹ divides history into four "world orders": Islamic, Chinese, European, and American.

But it is not just historians and political scientists who have been busy dividing the past into digestible chunks. Futurists, too, have been playing the game. Alvin Toffler saw history move in three waves. The first began with agricultural society and replaced hunter-gatherers with cultivators and farmers. The second began with the Industrial Revolution in Europe, which introduced mass production and mass consumptions, and Toffler romantically believed mass education. The Third Wave¹⁰ was going to be the postindustrial society, or if you like, the information society. Less optimistic futurists saw recent history lurching from crisis to crisis. Ronald Higgins suggested that we have moved from six threats—population explosion, food scarcity, resource depletion, environment degradation, nuclear threat, and abuse of science and technology-to The Seventh Enemy¹¹: political inertia and industrial blindness. Both Toffler and Higgins were partly correct. Perhaps recent developments in synthetic biology, 3D printing, and the "Internet of Home" are pushing us beyond the third to fourth wave. And even if we have not successfully tackled the six threats of Higgins, political inertia and all-round blindness to global chaos is all too evident.

However, there have been some interesting interventions in the periodization of history that suggest that we are moving toward a paradigm shift. For example, it has been suggested that human behavior is now so deeply implicated in climate change and changes in Earth's atmosphere that it signals the arrival of a geological age: the Anthropocene, a new geological epoch measured from the time when human activities began to have a global impact on the Earth's ecosystem. Science writer Elizabeth Kolbert argues that the rate of extinction of species is increasing so rapidly that we are now heading for *The Sixth Extinction*. The previous five resulted in profound loss of diversity:

the first took place during the late Ordovician period, some 450 million years ago, when living things were still mainly confined to water. The most devastating took place at the end of the Permian period, some 250 million years ago, and it came perilously close to emptying the earth out altogether. (This event is sometimes referred to as "the mother of mass extinctions" or "the great dying.") The most recent—and famous—mass extinction came at the close of Cretaceous period; it wiped out, in addition to dinosaurs, the plesiosaurs, the mosasaurs, the ammonites, and the pterosaurs. ¹²

A quick look at the current rate of extinction among amphibians indicates, notes Kolbert, an event of similar catastrophic nature is on its way.

But no matter how you divide history, you should be able to associate your divisions with some sort of artefacts—a record of ideas, outlooks, achievements, documents, sites, objects that highlight the specific character of each division. Archaeology, for example, is essentially based on the study of artefacts—objects that our ancestors produced in glass, ceramics, wood, metal, and stone—that say something about the past. So, for example, large monumental displays are associated with the Neolithic period. The artefacts of the Bronze Age include weapons such as daggers, utensils, ornaments such as rings and necklaces, pots and vases, miniatures of horses, tigers, and humans as well as machinery made of bronze. Similarly, we can identify specific artefacts and particular characteristics—objects as well as ideas and changes in political and social institutions—with other periods.

From the perspective of postnormal times, ¹³⁻¹⁵ a natural question arises: if postnormal times is a distinct epoch of history, and marks a departure from other recent periods of history, what artefacts and unique features has it produced or is likely to produce? "Stuff," as the jargon has it, that identifies it as a distinct period?

The first thing to note here is that the time scale we are talking about is quite different from large-scale measures of history. Accelerating change continues to shrink and collapse historical periods. For example, history of technology divides the modern period into Machine Age (1880–1945), Age of Oil (after 1901), Atomic Age (after 1945), Space Age (after 1957), and Information Age (1970–present). Notice how the periods shrink as well as overlap. The Information Age has led us into The Internet Age (1985 onward), the Multimedia Age (1987-2007), and the Age of Big Data (2007–present). 16 The Information Age gave rise to Postmodernism, the dominant outlook from the 1970s to 2000s, which itself was a reaction against the excesses of modernity, the period identified as "modern." Of course, these are not neat and clean divisions; they overlap considerably. Postnormal times emerge after the postmodern decades, during what we may call the Contemporary Period.

The Contemporary Period generally covers history still in living memory. Traditionally, we believed that living memory goes back about eighty years—most people in their eighties and alive today will remember their childhood (if they are not suffering from the modern plague of dementia and Alzheimer's disease). So it is roughly the period spanning from the Second World War, which marks the emergence of the Atomic Age, separates the past eras, and is considered the newest stage of world history, and the present time.

If postnormal times have produced their own artefacts, we should be able to distinguish them from the artefacts of other Contemporary Periods such as the Modern or Postmodern Age. Let us, for the purpose of this exercise, divide Contemporary Period into four divisions:

Classic: 1920–1950 Modern: 1950–1975 Postmodern: 1975–2005 Postnormal: 2005–

This division is just as arbitrary as other periodizations, other attempts to categorize history into named blocks. But the point is that we can identify artefacts associated with Classic, Modern, and Postmodern periods and see if postnormal times have produced something that is distinctively different. But, first, let us define our three predecessor periods to postnormal times a bit more carefully.

Classic should not be confused with *classics*, which refers specifically to the cultural products of Ancient Greece and Ancient Rome. When we study classics, we study the language and literature of Classical Antiquity (600 BCE–600). Clearly, we are not talking about Plato or Philo of Alexandria. But we are using the term in the sense of something having an enduring appeal and a lasting and timeless quality, both as an adjective (a classic car) or a noun (a classic of literature). A classic can be something old but it is not an antique; it is still prized and seen as of intrinsic value. It can be an idea, such as progress, or a social institution, such as marriage.

But we are referring specifically to classic products of the Contemporary Period. Cadillac V16 and a pre-1940 Rolls Royce, for example, are regarded as classic cars. When we think of classic Hollywood cinema, a term used in Film Studies, *Gone With the Wind* (1939) and *Citizen Kane* (1941) come to mind. This is roughly the period between the 1920s and 1950.

Modern era is a little tricky to define. Early modern period goes back to Columbus and moves on to the Renaissance and the Enlightenment and leads into the Victorian Era. Late modern period starts with the Industrial Revolution and comes down to the Cold War. Clearly, this is not what we mean by modern. We are using modern as it is used in art history, where "late modernism" is the period that begins after the Second World War. (It should be noted that modernism, which is a movement in art, and modernity, which is a conceptual outlook, are not the same and

cannot be interchanged.) For our purpose, the Modern era begins in 1955, when television, nuclear submarines, music synthesizers, and televised presidential press conferences first make their appearance.

Ironically, postmodern era is easier to pin down. It is heralded with the publication of The Postmodern Condition by Jean-François Lyotard.¹⁷ Although there is some confusion here, too, with British sociologist Zygmunt Bauman talking about Liquid Modernity, 18 what others have called Late Modernity, but which verges into and is indistinguishable from postmodernism. American literary critic, Fredric Jameson, described postmodernism, in the subtitle of his famous book, as "the Cultural Logic of Late Capitalism."19 Of course, there had to be something there in the first place for Lyotard to give us a "State of the Art Report." So we can mark the beginning of the Postmodern era from 1975.

By 2005, postmodernism was largely discredited, although it is still energetically defended in certain academic quarters. So we can mark the beginning of postnormal times from 2005, when the verb "to google" gained wide currency.

We can associate certain characteristics with each of these periods. For example, change was slow, if not quasi static in the classic era; it increased during the modern era, becoming increasingly rapid during the postmodern period, and is accelerating and becoming chaotic during the postnormal times. Politically, the world was organized into empires in the classic era, and became fragmented into nation states during the modern period. Although nation states still persist, regional groupings and alliances—such as the European Union (EU) and Association of Southeast Asian Nations (ASEAN)—become important during the postmodern period. In postnormal times, power is shifting to nonstate actors such as Google and Facebook, Al-Qaeda, and other terrorist groups. The world order was dominated by competing colonial powers (Britain, France, Holland, and the United States) during the classic decades. The modern era ushered the Cold War and a bipolar world with the United States and the Soviet Union as two competing

Superpowers. We entered a unipolar world with the collapse of the Soviet Union, with the United States as the only superpower, in the postmodern age. Now, in postnormal times, we are heading toward a multipower world as power shifts toward China, Russia, India, and Brazil. The key concepts of the classic era were conquest, supremacy, and progress. The modern period continued to emphasize progress but shifted its attention to efficiency and modernization. Postmodernism announced the dissolution of all "Grand Narratives" including progress, ideology, and religion, and highlighted multiple truths and pluralistic voices. Postnormal times put the accent on complexity and chaos and underline uncertainty and ignorance. Memory plays an important part both in classic and modern eras. But postmodernism is characterized by amnesia. Writing in 2003, Timothy Melley noted that "Mnemonic aids have come back into fashion. A new literary culture has shaped itself around the memoire. Innumerable critics have asserted that we live in 'an age of forgetting' and that United States suffers from 'historical amnesia.'"20 But it was not just the United States that postmodernism affected; as a global culture, postmodernism tended to erase memory from all cultures. In postnormal times, erasing unwanted memories from the Internet has become a big issue.

We can go on with other examples. But perhaps it would be better to present the differences between classic, modern, postmodern, and postnormal times in a more concise form. Given that we are at the very initial stage of postnormal times, we can only be tentative. Moreover, we ought to point out that these are not "predictions" about the future. Rather, they are the products of the trends already deeply embedded within an "extended present," and as such, descriptions of what is actually happening.

So, here then, is my cautious list of emerging postnormal artefacts.

Meaning

Classic: "I think, therefore I am" Modern: "I progress, therefore I am" Postmodern: "I shop, therefore I am" Postnormal: "I share, therefore I am"

Truth

Classic: Monolithic Modern: Monolithic

Postmodern: Relative and Pluralistic

Postnormal: Contradictory

Identity

Classic: "I am tradition and culture" Modern: "I am science and technology" Postmodern: "I am what I buy"

Postnormal: "I am my Facebook page"

Change

Classic: Quasi Static, Slow

Modern: Fast

Postmodern: Increasingly Rapid Postnormal: Accelerating, Chaotic

Systems

Classic: Simple, Closed Modern: Complicated, Closed Postmodern: Complex, Open Postnormal: Open, Interconnected,

Complex, Chaotic

Key Concepts

Classic: Conquest, Supremacy, Progress

Modern: Progress, Efficiency,

Modernization

Postmodern: Dissolution of Grand Narratives (meaning), Multiple Truths,

Plural Voices

Postnormal: Complexity, Chaos, Contradictions, Uncertainty, Ignorance

World Order

Classic: Competing Colonial Powers (Britain, France, Holland, the United

States)

Modern: Bipolar World; "Cold War" (the

United States, Soviet Union)

Postmodern: Unipolar World (the United

States)

Postnormal: Multipolar World (the United States, China, Russia, EU, India, Brazil)

Knowledge

Classic: Pursuit of Reasoned Inquiry . . . Modern: . . . Acquired through Scientific

Progress and Development

Postmodern: Socially Constructed and

Relative, Wikipedia

Postnormal: "Extended Facts," Embedded

in Uncertainty and Ignorance

Science

Classic: Pursuit of Truth, funded largely by

the State

Modern: Scientific Method as Neutral, Objective Truth; funded by the State and Corporations (Military-Industrial

Complex); Peer Reviewed Publication

Postmodern: Socially Constructed; funded largely by Military-Industrial-Corporations

Complex; Peer Reviewed Publication Postnormal: "Facts are Uncertain, Values in

Dispute, Stakes High and Decisions Urgent"; Driven by Mega Corporations

(Google, Microsoft) and Billionaire Philanthropists; "Extended Peer

Communities" but still largely funded by Military-Industrial-Corporations Complex

Technology

Classic: Slow Application of Science to

Make Work Easier

Modern: Ideologically Driven to "Improve Society," Antibiotics but also Nuclear

Weapons

Postmodern: Embedded in Politics; Genome Sequencing, Biotechnology, Information and Communication

Technologies

Postnormal: Human-Machine Synthesis,

DNA editing, Drones, Cyborgs

Medicine

Classic: No Antibiotics, or appropriate

Anesthetics

Modern: "Modern Surgery," Antibiotics, Electrocardiogram (EKG) Monitoring,

Open Heart Surgery, Kidney

Transplantation

Postmodern: Electronic Monitoring of Patients, Microsurgery, Face Transplant Postnormal: Remote Surgery, Stem Cell

Therapy, Synthetic Organs

Communication

Classic: Telephone, Telegraph, Morse

Code, Radio

Modern: Microwave, Television Postmodern: Mobiles, e-mail, Internet,

World Wide Web

Postnormal: Instant, Perpetually Connected, 24-hour Global News

Channels, Facebook, Twitter, "Internet of

Things"

Political Organization

Classic: Empires

Modern: Nation States

Postmodern: Regional Groupings and

Alliances (EC, ASEAN, OIC)

Postnormal: Power shifts to Nonstate Actors

Governance

Classic: Representative Democracy

Modern: Interest-Based Democracy (neo-

liberal, hypermodern)

Postmodern: Deliberative Democracy

(diversity, plurality, "politics of difference")

Postnormal: Complex, Chaotic,

Unmanageable

Economy

Classic: Classical Macroeconomics (Adam

Smith)

Modern: Capitalist (free market), Communist (centrally controlled)

Postmodern: Neoliberal Economic

Globalization (large-scale, corporate commerce and the privatization of resources) Postnormal: Digital, Runway Monetarism

Religion

Classic: Monotheism Modern: Monotheism

Postmodern: New Age, Fundamentalism Postnormal: Eclectic, Fundamentalist,

Polytheistic

Equality

Classic: Legislated discrimination, Poor

Law

Modern: Welfare State, Equality before the Law (assumed), Trickle Down Effect will

improve the lot of the poor

Postmodern: Multiculturalism, Integration,

Assimilation

Postnormal: Acceleration of Inequality, Rich Grow Richer at Lightning Speed Boundaries
Classic: Fixed
Modern: Flexible
Postmodern: Porous
Postnormal: Dissolving

Nature

Classic: To be Tamed, and Exploited Modern: Tamed, Under Control, but

"Limits to Growth"

Postmodern: Social Construction of

Nature, Eco-Politics

Postnormal: Feral, Climate Change,

Disappearing Species

Environment

Classic: Relatively Healthy

Modern: Polluting Postmodern: Toxic

Postnormal: Catastrophic, Climate Change

God

Classical: God is Everywhere and

Everywhen

Modern: God is Truth (big T; early Modern); God is Dead (Late Modern) Postmodern: God is the machine or God is

me

Postnormal: God is Ignorance

Religion

Classical: Religion Explains the World Modern: Religion Helps Us Understand

the World

Postmodern: Religion was a Lie; Liberal Secularism is the new Theory of Salvation Postnormal: Religion is Uncertain, there-

fore, must be Open to Multiple Interpretations and made Complex

War

Classic: "The First World War"

Modern: "Holocaust"

Postmodern: "The Gulf War" (as seen on

television)

Postnormal: Drone Attacks, Cyber War,

Militarized Robots

Protests

Classic: Civil Disobedience (African American Civil Rights Movement), Nonviolent Resistance (Gandhi) Modern: Anarchist Subversion, Violent Demos (Black Panthers), Peaceful Marches (Campaign for Nuclear Disarmament

[CND])

Postmodern: Mass Mobilization ("Gay

Pride," Gulf War Protests)

Postnormal: Propelled by Digital Media, Interconnected, Complex, and Chaotic ("Arab Spring," Truckers Protests in Britain, the United States, and elsewhere, Argentinian Public Transport Protests)

Terrorism

Classic: Urban Gorillas, Terrorism for Independence ("Battle for Algiers")
Modern: Local, with Specific Goals (Irish

Republican Army [IRA], Basque

Separatist)

Postmodern: Global, Suicide Bombers,

Nonstate Actors (al-Qaeda)

Postnormal: Global, Interconnected, Social Media Savvy, Seeking Territory ("Islamic State of Iraq and Syria," Taliban, Boko

Haram)

Body

Classic: Muscular Modern: Athletic Postmodern: Androgenic

Postnormal: Enhanced

Cities

Classic: Mississippi, Cape Town (under

Apartheid)

Modern: New York, London, Paris Postmodern: Tokyo, Dubai, Putra Jaya

(Malaysia)

Postnormal: Baghdad (after the Allied withdrawal), Cairo (after two Uprisings)

Films

Classic: Mr. Smith Goes to Washington Modern: Invasion of the Body Snatchers Postmodern: Sex, Lies, and Videotape

Postnormal: Her

Television

Classic: I Love Lucy

Modern: *Mission: Impossible* Postmodern: *Star Track: The Next*

Generation

Postnormal: Silicon Valley

Music

Classic: Jazz, Big Band Swing

Modern: Pop, Rock 'n' Roll, Disco, Heavy

Metal

Postmodern: New Age, Psychedelic, East-West Fusion, Punk, Grunge, House Postnormal: Yet to make an appearance (but Canadian experimental band "Post

Normal" are making an effort)

Hollywood Heroes

Classic: Clark Gable—"Frankly, my dear, I

don't give a damn"

Modern: James Dean—"The bad boy from

a good family"

Postmodern: Arnold Schwarzenegger—

"Hasta la vista, baby"

Postnormal: Johnny Depp—"Honestly it's the honest ones you have to watch out for, you never can predict if they're going to do something incredibly stupid."

Sex Symbol

Classic: Mae West—"Is that a gun, or are

you just pleased to see me?"

Modern: Marilyn Monroe—"Gentlemen

Prefer Blondes"

Postmodern: Madonna—"I am a material

girl"

Postnormal: Laverne Cox—"Faking It"

Sev

Classic: The Hayes Code (no double beds, no kisses lasting more than ten seconds, no

nudity)

Modern: "Wham, Bam, Thank You Mam" Postmodern: Cybersex—Log on, Log up,

Log off

Postnormal: Pornography is Normal

Marriage

Classic: Monogamy

Modern: Serial Monogamy

Postmodern: Serial, Multiple Monogamy Postnormal: Hetero, Homo, Trans, Serial,

Plural

Buildings

Classic: The Empire State Building, New

York

Modern: The Guggenheim Museum, New

York

Postmodern: The Portman's Bonaventure

Hotel, Los Angles

Postnormal: The Clock Tower, Mecca

Painters

Classic: Picasso

Modern: Jackson Pollack Postmodern: Andy Warhol Postnormal: Banksy

Novels

Classic: Fitzgerald, The Great Gatsby

Modern: Camus, The Stranger

Postmodern: Rushdie, *Midnight's Children* Postnormal: Wilson, *Alif the Unseen*

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