Thank You to Minna and Gordon Hewes

Peer Reviewed Articles


Ottomanism: A Transition from Byzantinism to Balkanism

The Developing Global Crisis and Survival of Human Civilizations

Strategy vs. Humanity? American Corporations May Be Facing a Momentous Paradigm Shift in the Age of Diversity, Equity and Inclusion

The Russian Sphinx: Contemplating Danilevsky’s Enigmatic Magnum Opus Russia and Europe

Explorations in Theory

The Architecture of the Universe: A Look into Extraterrestrial Civilizations

An Attempt to Arrive at the Meaning of Civilization as the Third Millennium Dawns

The Blocks of History: A Step-by-Step Model for the Evolution of Civilizations

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By “a comparative civilizational perspective” we mean (1) the use of evidence from more than one civilization (the various national traditions of the modern West being regarded, if so desired, as constituents of a single civilization) and (2) a method likely to throw new light either on the origins, processes, or structures of civilizations or on the problems of interpreting civilizations.

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Thank You to Minna and Gordon Hewes: 
Friends of the International Society for the Comparative Study of Civilizations from the Ecumene

The ISCSC is always extremely appreciative when it receives a special gift from those who support its intellectual and organizational endeavors. This certainly was the case when it recently received a generous bequest from the estate of Mrs. Minna Hewes, the most substantial financial donation in the history of this organization.

This bequest reminds us that through planned gifts donors can leave a legacy behind after they pass. That’s why planned-giving, including bequests, are often called legacy programs. When leaving a bequest as a tribute to an organization, donors benefit from such planned gifts because they can make a lasting impact on a cause that is important to them, enabling the organization to continue to operate in a robust fashion.

The ISCSC is a cause about which Gordon and Minna Hewes felt passionate. Their bequest to the organization has been received over the past few months. As longtime members know, Minna Hewes and her husband Gordon Hewes were active supporters of ISCSC over the years. Gordon Hewes passed away in 1997, at age 80. Minna Hewes died in 2016, at age 97.

Though to the ISCSC membership Gordon was the officially known academic of the couple, Minna was his dynamic, intellectual life partner. Gordon married Minna in 1939. In many ways she mirrored her mother, Belle Winestine, a Montana-born daughter of Romanian Jewish refugees. She was, in the early 1900s, a well-known women suffragette campaigner, leader of the Montana League of Women Voters, political advisor and secretary to Jeannette Rankin (the first woman elected to Congress) and editor of the Montana Progress. For Gordon, Minna mirrored Belle's ability as a facilitator and collaborator and shared fully in his field work.

Gordon's teaching career spanned the years 1939 to 1988. He began as a Teaching Assistant at the University of California; his professional expertise culminated in his becoming a full Professor and Acting Chairman of the Anthropology Department at the University of Colorado in Boulder.

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1 Ecumene (U.S Spelling), Oikumene (U.K. spelling)
2 https://en.wikipedia.org/wiki/Belle_Fligelman_Winestine
At the University of California, Berkeley, Hewes had been a student of the renowned American anthropologists Alfred Louis Kroeber and R. H. Lowe; he earned his PhD. in 1947 with a dissertation on aboriginal fishing in California and the Pacific Northwest. During World War II he served in the Geographic branch of the Office of Strategic Services.

**Life Partners**

Minna and Gordon were true intellectuals and life partners. Together they crisscrossed the globe multiple times. While Gordon was lecturing, teaching and researching, Minna fully participated in his endeavors, including transcribing his lectures, recording his archeological digs, and collaborating in selective efforts, such as their much-cited edition of Pablo Tac's *Indian Life and Customs at Mission San Luis Rey*.

Between 1956 and 1984, Gordon and Minna visited both ports and inland centers on every continent, including Australia and several of the islands of Oceania. In 1978, they circumnavigated the globe aboard the U.S. Universe on behalf of the Institute for Shipboard Education. A year's stay in Japan while on a Fulbright grant led Gordon and Minna to build a Japanese-inspired 3,000-square-foot home with a pagoda-style roof and massive library corner in Boulder. Designed by locally renowned architect Hobart Wagener, today it serves as a minor landmark in Boulder.

Gordon’s life reflected his enduring commitment to anthropological holism—an approach that was championed by Franz Boas and Alfred Kroeber, and it encompassed the fields of ethnology, archeology, primate biology, and linguistics. Gordon himself read and spoke German, French, Spanish, Russian, Japanese, and Mandarin Chinese;

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4 See the wonderful appreciation of the life of Prof. Hewes written by the former ISCSC president Roger Wescott in 1997. Entitled *Gordon Winant Hewes (1917-1997)*, it was published in the *Comparative Civilizations Review*: Vol. 37, Article 7. See, also, the reference to Dr. Hewes’s original contributions in an article by David J. Staley in the preceding issue, Vol. 36. It is entitled *Visualizing the Relationship Between Speech, Image and Writing*, available at: https://scholarsarchive.byu.edu/ccr/vol36. A search of the CCR index online reveals a great many additional intellectual contributions from Dr. Hewes.

5 Prabook.com available at https://prabook.com/web/gordon_winant.hewes/1696868

6 Some of their jointly collected Native American artifacts are now deposited at the Phoebe Hearst Museum of the University of California, Berkeley. The record is available at: https://portal.hearstmuseum.berkeley.edu/cgi-bin/objcollection?objcollector=Minna+Hewes&objtype=archaeol&taxon=Mammalia—refined+identification+pending

7 Tac, Pablo. *Indian Life and Customs at Mission San Luis Rey*. Edited and translated by Minna Hewes and Gordon Hewes. Americas 9, no.1 (July 1953): 87-106


he knew American Sign Language; and he actively incorporated the methods and insights of geography, history, economics, sociology and psychology into his research and writing. His life work included three books and over 200 articles, including *The Anthropology of Posture*, *World Distribution of Certain Postural Habits*, and *World Ethnographies and Culture-Historical Synthesis*.

Among the amazing variety of his professional endeavors was his role as Director of the Colorado Nubian Expedition to recover Egyptian antiquities. The expedition was held during the construction of the mammoth Aswan Dam.

### The Ecumene

Among the topics on which Dr. Hewes was a pioneer were the connection between food-carrying and human bipedalism; the link between bipedalism and the use of hands for pointing; and the sequence of deictic behaviors leading to manual gesture-language. During the last three decades of his life, Gordon was the leading international exponent of “manualism.” This is the theory that human language was gesture-based before being vocal.

A much beloved and familiar presence at the annual conferences of the International Society for the Comparative Study of Civilization (ISCSC), Prof. Hewes served on the executive committee of the organization and was extraordinarily helpful to younger members seeking a pathway for their intellectual explorations.

In retrospect, one can see how the lives together of Gordon and Minna Hewes reflected Gordon's attachment to the concept of the *ecumene*, an ancient Greek term for the known inhabited world (and used by the Romans to connotate “civilization” as they envisioned it) and, thus, to the proposition that the entire breadth of humanity should be conceived in historical and geographical relation to the world around it.

The idea of the *ecumene* was further developed in the 18th century by the German geographer and ethnographer Friedrich Ratzel, under his concept of Lebensraum (“living space”), and it was reflected in Kroeber's own work which sought to portray a discernable cultural phenomenon of continuity and differentiation linking Europe, Central Asia and China.

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10 c.f. Wescott, Roger. 1997 p.2
This premise was later expanded in anthropology to the idea that there are delineable culture areas across the entire globe. This concept strove to demonstrate a shared human "unity in diversity" as part of an overarching panhuman civilization and culture.

It is likely that Dr. Hewes’s most ambitious endeavor, in congruence with the idea of *ecumene*, was an unfinished project to document the global history of the 7th century AD. This was a challenge he chose specifically because he considered the 7th century AD to be the least manageable century for such a world-wide survey.\(^{15}\) (The unfinished survey reportedly is more than 10,000 pages long and rests with the anthropology department of the University of Colorado in Boulder, awaiting someone, with an equally expansive mind as Gordon's, to arise and carry his work forth to conclusion.)

**Our Thanks to the Fabulous Hewes Couple Put Into Practice**

Today, the ISCSC that the Hewes have so generously supported over the years is embarking on a new endeavor. This effort seeks both to inspire widespread interest in the study and application of the concept of civilization on a global level and to engender a corresponding renewed expansion of its organizational membership across multiple disciplines and countries.

As a result, the twin contributions of Gordon and Minna Hewes, both intellectually and financially, to the International Society for the Comparative Study of Civilizations could not be timelier and more germane. The members of the society cannot adequately express their appreciation to this brilliant couple.

John Grayzel
Former Baha’i Chair for World Peace
The University of Maryland, College Park, on behalf of the ISCSC

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Is Music the Barometer of Society?
Exploring How Music Mirrored Society from the Ancient World, China to Central Europe in the 21st Century

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Introduction

“If one should desire to know whether a kingdom is well governed, if its morals are good or bad, the quality of its music will furnish the answer.” — Confucius

“What music do you listen to?” Would this be a valid question to ask a presidential candidate or person looking for a high political office today? If mankind had followed the advice of Confucius, many disastrous episodes in history might have been prevented.

Music is one of the most wonderful achievements of mankind. As far back in history as we know, music has been part of man’s life. Whether it is to summon the villagers and celebrate a local deity, march to battle accompanied by the thunder of drums, or sit in an elegant salon and listen to the latest rising music star, music has played and is playing a vital role in our daily lives.

Referring again to Confucius, “Music produces a kind of pleasure which human nature cannot do without.”

In this paper we will look into another dimension of music, music as a barometer of society and political governance. If we scrape away the surface of looking at music as a pure tool of pleasure and joy, we will discover how music reflects the pulse of the society and in many cases predicts developments the society will go through. Architecture, sculpture, and painting are art forms more commonly used in mirroring society; music, however, with its unique pulse and individual development, gives us a completely new perspective.

Every historical period throughout world civilizations provides us with insightful examples of this mirroring and explains to us the character and soul of the society, its beliefs and values. This realization will help us understand why some societies succeeded while others failed. We will achieve what Dutch-American historian and journalist Hendrick van Loon described as “the importance of ‘feeling’ history (rather) than to master its details…”

The case for music mirroring society in this paper is two-fold. The first argument is the construction of music theory as a reflection of society and political governance. We will look into and compare the music scales system of the Ancient Greeks and the Chinese dynasties, examine the importance they attributed to music and the pursuit to organize music in a scale system that would reflect their respective governance as well as their core values and beliefs.

The second aspect we will analyze is the development of music and its place in society in times of social and political upheaval. We will examine the development of music throughout the period of the Ancient Greeks and Romans to the Middle Ages. This period, spanning over one thousand years, offers us a glimpse into how music reflected the rise and fall of civilizations.

As a comparison this paper also analyzes the upheavals in Central Europe in the aftermath of World Wars I and II, the age of Communism and Fall of the Berlin Wall to our present time. The purpose of Part 3 is to illustrate the validity of points stated in Parts 1 and 2 to our modern era.

The paper is thus organized in the following way:

**Part 1:** Comparing the Scale Systems of the Ancient Greeks and Early Chinese dynasties

**Part 2:** The Rise and Fall of Music from the Ancient Greeks and Romans to the Middle Ages

**Part 3:** Music as a reflection of the conscience, the general will, in Central Europe in the 20th and 21st centuries

Throughout history we can find many examples similar to the ones considered in this paper. To quote again Hendrick van Loon, “For history is like life. The more things change, the more they remain the same.”

**Part 1: Comparing the Scale Systems of the Ancient Greeks and Early Chinese dynasties**

What we know about the ancient world and early Chinese dynasties derives from the tangible: buildings, sculptures, various depicted objects, chronicles written by illustrious men of that time. What we know about music of those civilizations also derives from the same sources.

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Music has, we may ascertain, one major disadvantage: it is not tangible; it takes place in time, not space. We do know not exactly how it sounded. Unlike our modern world where we have the possibility of reproducing music in a variety of forms, the world of the Ancient Greeks and China did not possess this possibility. Hence, our knowledge from both civilizations stems from the various writings of philosophers, court officials, painted vases, murals, sculptures, and objects.

Due to the argument stated above, the general perception persists to this day that music was not as important in the discussed societies. This paper however argues that music actually played a prominent role in Ancient Greek society and the Early Chinese dynasties. For this we will take a deeper look into the foundation of music — the scale system. The basic definition of the scale is “a progression of notes in ascending or descending order, so arranged for theoretical purposes, for vocal or instrumental exercise, or as part of a composition.”

The Scale Systems of the Ancient Greeks

The wonderful vases, cenotaphs, marbles, poems and writings of Homer, Herodotus and others, portray a world where music was present in all aspects of life. Due to the rhythm of the verses, there is a strong belief that the reciting of the *Iliad* and *Odyssey* were accompanied by a musical instrument. We see something similar many centuries later in the Middle Ages with the appearance of the troubadours, bards and minnesingers in mainland Europe.

Music was also a reflection of the development of society, mirroring its rise and eventual decline. With the rise of Athens as the spiritual center of the Ancient world in the 5th century B.C.E., we find key developments in the field of music, similar in importance to what was happening at the time in politics, architecture, and literature. These developments would influence Western music for centuries to come.

The central figure of this music development was the Greek philosopher Pythagoras (c. 570-495 B.C.E.). Known today mostly for his geometry theorem, Pythagoras recognized that music sounds can be explained and organized through numbers. He observed that by plucking strings of different lengths, specific ratios produced harmonious tones, while others did not. The key finding was the ratio 2:1, whereby the frequency of one tone is twice the rate of the other. In other words, the tones sound practically identical, only one is twice as high as the other.

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Pythagoras’ findings led to the creation of scales, or as the ancient Greeks called them, modes, structuring the first and last tone on the basis of the mathematical ratio 2:1. The scale was divided into two parts, called tetrachords, with defined ratios between the tones.

Pythagoras’ disciple Archytas, a contemporary and friend of Plato, carried this further. He devised three types of genus, a term used to describe the distance between two notes within a tetrachord. These genera were named: diatonic, enharmonic and chromatic.

The scale system most relevant to this paper is that devised by Aristoxenus (c. 375, fl. 335 B.C.E.) a philosopher and disciple of Aristotle. His musical treatise, Elements of Harmony, elaborates this system and is our main source of knowledge about music in Ancient Greece.

Taking the initiative from the attempts of Pythagoras and his disciples, Aristoxenus created a new scale system based on Greek geographical regions and ethnicities. They were as follows:

- Dorian
- Phrygian
- Hypophrygian
- Lydian
- Mixolydian
- Hypolydian
- Locrian

The Dorian scale derived from the Dorians, an Ancient Greek ethnic subgroup, the Phrygian and Lydian from non-Greek peoples in Asia Minor, and the Locrian from a region in central Greece. The prefixes myxo and hypo were added to form supporting scales, thus enriching the scope of the existing ones.

The structure of each scale differed, reflecting what was thought of as the character, voice, spirit, and mood of the particular region or people. Military music was composed using the Dorian mode, love songs using the Lydian. The scale system and its use were strictly defined.

Plato, who is also one of our main sources of knowledge on music of the time, describes in his *The Republic* the Lydian as ‘wailing’, the Dorian as ‘militant’. The Phrygian mode reflected the Phrygian culture, described by most scholars as ‘vehement and passionate.’
There are two aspects of this scales system we will now consider:

- The identification of music with regions and peoples
- The importance of the scale system for the Good of the State

1. The identification of music with regions and peoples

Reading *The Histories* by Herodotus, or *The Peloponnesian War* by Thucydides, we encounter constant politicking, warring, conflicts, and appeasements between the Greek city states. The emphasis in contemporary literature on the relationships and diversity of the city states is staggering. This demonstrates the vast importance they had for the Ancient Greeks. The Athenians were portrayed as the spiritual leaders of the Greek world, and the Spartans as militant and austere, while the city states of Asia Minor are presented as a wild and slightly barbaric world, on the frontier with the enemy from the east, the Persians.

Of course, this depended on who the author was and where he came from. Thucydides, as a retired Spartan general, happily sided with Sparta in the Peloponnesian War, praising the character and spirit of the Spartan people.

The scale system devised by Aristoxenus reflected exactly the character of Greek society. It mirrored the diversity of the Greek city states, the different temperaments, characters and spirits of the individual states. Naming the foundation of music, the scales systems, after regions and peoples and labeling the voice and character of the same, is a strong argument for the hypothesis that music in Ancient Greece mirrored the character and soul of Greek society. We may even argue that it does it more powerfully than other legacies left to us. Music, with its powerful emotional element, must have strung hearts throughout all the city states. As Plato in *The Republic* states: “Musical training is a more potent instrument than any other, because rhythm and harmony find their way into the inward places of the soul.”

2. The importance of the scale system for the Good of the State

“I would teach children music, physics, and philosophy; but most importantly music, for the patterns in music and all the arts are the keys to learning” — Plato

Plato, though not a musician himself, placed high value on music. He regarded musical education and the learning of the scales system as necessary for the education of the ruling class. In *The Republic* Plato discusses the mathematical nature of music and the modes, and the feelings associated with the modes.

Plato further states that of all the modes, only selected ones will lead to reaching the good of the State.
Interestingly, Plato chose the Dorian and Phrygian scales whose attributes lead to knowledge and the good. In his dialogue with Glaucon in *The Republic*[^4], Plato describes the Dorian mode as ‘simple’ and ‘pure’. Further, the Dorian mode possessed attributes that the guardian of the State should embody — bravery in warfare and in any enforced business.

On the other hand, Plato regarded the Lydian mode as unacceptable for a guardian of the State, as its attributes weakened the soul of the same. To argue our case for the importance of music in Greek state affairs, Plato expresses in *The Republic* the importance of the following: “Musical innovation is full of danger to the State, for when modes of music change, the fundamental laws of the State always change with them.”

Following in the footsteps of his mentor Plato, Aristotle placed similar virtues on music, albeit more in relation to music’s ability to move the human soul. He highlighted the importance of introducing music to children’s education as that is the time for speech to develop and the point during which political life begins.

Before moving on to the scales system of the early Chinese dynasties, we may conclude that the scales system of the Ancient Greeks mirrored society, its character, values, and beliefs.

### The Scale System of the Early Chinese Dynasties

Archeological findings and ancient writings reveal to us that music enjoyed a high status in Chinese society and culture from earliest times. Music played a prominent role at festivals and ceremonies, like the festivals of the agricultural year, the ceremonial of the imperial court, and rituals of religion. They also reveal that Pythagoras is not the first music theorist we know of and that a scales system existed in China long before the Ancient Greeks developed their own.

Approximately 2500 years before the time of Pythagoras, Chinese legends and writings mention Ling Lun, who produced a scales system, making him the first known musical theorist in world music history. Chinese writings tell us the story of legendary Chinese emperor Huangdi, ‘The Yellow Emperor’, who in 2679 B.C.E. sent Ling Lun to the mountains to find and cut bamboo pipes that would imitate the sound of the fenghuang, an immortal bird from Chinese mythology. According to legend the fenghuang’s rare appearance foretold the harmonious reign of a new emperor. Its importance was further emphasized in the belief that the bird possessed both male and female elements, the harmony of yin and yang.

[^4]: Plato Section III.399a.
Emperor Huangdi believed that by imitating the sound of the fenghuang, he would establish harmony between his rule and the universe. Ling Lun not only discovered and produced the right bamboo pipes, but he also created a whole musical system based on the vibration frequencies he found. Similar to the discoveries of the Ancient Greeks, he found that constructing the pipes in such a manner as to close the bottom, shortening or lengthening the pipes, one could produce different ratios and intervals that led to the creation of an organized scales system.

Ling Lun’s musical system was based on 12 lü (notes).\textsuperscript{5,6} Five notes were taken to create a five-note scale called the pentatonic scale. A pentatonic scale could start from any of the 12 lü. The basic, foundation note was called huang chung or yellow bell, and this was followed by notes calculated in the interval of the fourth and fifth. The vibration frequencies of the lü created by Ling Lun were two and three, deriving from the numerals of heaven and earth, of key significance in Chinese philosophy.

As established by Emperor Huangdi, the huang chung was not only the starting note of the scale but represented the ‘sound’ of a new dynasty. It further represented the eternal principles of the universe and was the basis of the well-being of the state.

Subsequent dynasties placed great emphasis on achieving the correct sound and pitch for the new huang chung, and constantly tuned and retuned the foundation note till a satisfactory result was achieved. There was a strong belief that if the huang chung was not correct, chaos and political disorder would mark the dynasty’s reign. In the first century B.C.E., an Imperial office of music not only established standardization, methodology and pitch, but it also strictly oversaw musical life in general.

Music and this very sophisticated musical system were thus under the direct influence and control of philosophy and government. These influences determined the two ways to look at the pentatonic scale. One was that the five notes corresponded to the five elements: earth, metal, wood, fire and water. The other, directly in relation to Chinese society, mirrored the social hierarchy as following\textsuperscript{7}:

1st note: Kong, the emperor
2nd note: Chang, the minister
3rd note: Kyo, the burgher


4th note: Tchi, the official
5th note: Yu, the peasant

With the establishment of the Imperial office in the 1st century B.C, a seven- note scale was also later used.

This brief overview of the scales system in the early Chinese dynasties brings us to two aspects of this scales system mentioned above which we will now consider:

- The influence of philosophy on the scales system
- The pentatonic scale as a reflection of society

1. The influence of philosophy on the scales system

From earliest times, music was inseparably tied to Chinese philosophy. Emperor Huangdi set the tone by recognizing and legitimizing music as an all-out power, a force on whose basic note the well-being and harmony of his reign lasted. Subsequent dynasties followed this principle. The ability of music to imitate the sounds of nature brought on the belief of a harmony between music and nature, thus harmony among the elements of the earth.

Confucius (551 - 479 B.C.E.) believed music should hold a prominent place in both philosophy and education. Music, according to Confucius, was key in cultivating the individual and bringing good governance to the state. Deeply rooted in Chinese philosophy, music thus assumed the role of a guiding force, inspiring China’s finest philosophers, astronomers, scholars, mathematicians, and musicians to experiment and speculate throughout the centuries to come.

2. The pentatonic scale as a reflection of society

Whilst the Ancient Greeks named their scales after regions and peoples, thus pointing out the importance of the same to their society and culture, the structure of the Chinese pentatonic scale is an exemplary example of the influence and importance of the state in the development of music.

Setting the pitch of the first note of the scale to the ascent of a new emperor and naming the notes of the scale by social ranks may be more telling than anything else as to the society of the Chinese dynasties. We recognize here the godlike figure of the emperor and the strongly differentiated castes in society.
As with the Ancient Greeks and other old civilizations, the Chinese ruling classes recognized the power of music and its possible positive/negative influence for its governance. Together with the philosophical aspect discussed in the point above, the musical system of the Chinese dynasties had a profound impact on the perception, position and strength of culture on society.

Conclusion of the Comparison between the Ancient Greek and Early Chinese dynasties scale systems

Thus, we can see that the Ancient Greek and Chinese dynasties scales systems present a fascinating insight into the prestigious position music occupied in these great civilizations. The parallels are remarkable. Both systems were structured on philosophical and mathematical principles, serving the governing structures of the time. Leading scholars, philosophers, mathematicians, astronomers, and musicians from both civilizations recognized the power of music and its immense influence on society. Music was used for clear objectives, pointing to the beliefs and values of the society, and as a guiding force in establishing the same.

Both scale systems underlined the foundations of their respective societies. For the Ancient Greeks it was the identity and freedom of the city states. For the Chinese, it addressed the untouchable, godlike figure of the Emperor and the strict hierarchal structure that was unchangeable for centuries.

Part 2: The Rise and Fall of Music from the Ancient Greeks and Romans to the Middle Ages

From the pinnacle of the Ancient Greek era around 500 B.C.E. to the resurrection of the Greek ideal in the Italian Renaissance in the 15th century, we witness a tumultuous 2000 years in music that resulted in a disastrous downfall during the Romans and a gradual rise during the Middle Ages.

Music historians are baffled that, after the efforts and achievements of Pythagoras and his followers, as discussed in Part 1 of this paper, music suffered an unprecedented fall in the era of the great Roman Empire. After the fall of the Roman Empire, with Europe in complete disarray, a new era was gradually ushered in.

This phenomenon in music history is argued as an example of changing tides in the history of mankind. In this section of the paper, we will explain this and analyze whether music mirrored societal changes in these momentous historical periods.

To argue this case, we need to look a bit more closely into each period separately.
Ancient Greece

As discussed in Part 1, music in Ancient Greece experienced a meteoric rise, contemporaneous with developments in architecture, literature, poetry and other arts. The findings of Pythagoras and the creation of the scale system elevated the importance of music in the cultural and social life of the Ancient Greeks. We find music in the Greek theater, in religious and city festivities and ceremonies, at the Olympic games. But, as we have argued in Part 1, music played an important role in the education of the ruling class and in achieving, according to Plato, the Good of the State.

It would have been natural for the Romans to carry on the musical culture of the Greeks as they did in architecture, sculpture and literature, but this did not happen.

Rome

From a cultural perspective, the ascent of Rome marked an anomaly. The conqueror adopted the culture of the vanquished. The Romans adopted Greek literature, philosophy, theatre, and architecture. They did not, however, adopt music in the form the Greeks knew. They did not possess their sensitivity.

Instead of the sophisticated music of the ceremonies, rituals and theater performances, music was adapted to a new purpose and need. Fanfares announcing the beginning of the gladiator fights, drums proclaiming the victory of the glorious Roman army: this was the music of the day. Music was degraded to a role of accompanying these events as well as used at religious ceremonies like the Bacchanalia with a similar function. Its purpose was solely for amusement.

The question to ask ourselves here is, did music mirror Roman society? Rome was a vast political and military organization, with strong military and materialistic values, values quite opposite to those of the Greeks. Music, with its values of deeper spirituality and emotions obviously clashed with the values of the Romans. In that sense we may argue that music did reflect Roman society, acting in a minor supporting role in everyday life.

Middle Ages

The decline of the Roman Empire saw the birth of a new religion and civilization: Christianity.

The Early Christians loathed everything Roman, hence also the role of music as pure entertainment. However, Christians who came from the East brought along prayers that they chanted, similar to the Jewish temple chants.
What became more and more obvious was that chanting was more powerful and inspiring for the disciples of the new religion. As St. Augustine declared: "To sing is to pray twice."

Early on, Christian scholars recognized the power of music in religious ceremonies, but also the dangers. St. Augustine in his Confessions writes:

“Thus vacillate I between dangerous pleasure and tried soundness; being inclined rather (though I pronounce no irrevocable opinion upon the subject) to approve of the use of singing in the church, that so by the delights of the ear the weaker minds may be stimulated to a devotional frame. Yet when it happens to me to be more moved by the singing than by what is sung, I confess myself to have sinned criminally, and then I would rather not have heard the singing.”

The decline of the Roman Empire brought chaos, violence and insecurity to the population of the continent. Settlements centered around monasteries that provided a safe haven amidst the turmoil. Monasteries also became centers of education and of music. Monks, most notable Notker Balbulus and Notker Labeo of the St. Gall monastery in today’s Switzerland translated Greek writings and created the first music treatises of the time. The chants we mentioned earlier became known as the Gregorian chant, organized and catalogued during the papacy of Pope Gregory the Great (540-604).

During the early Middle Ages, we encounter perhaps one of the most important figures of western music, Guido d’Arezzo (995-1050). A monk like the two Notkers, history attributes to Guido the musical alphabet we use to this day. He took the syllables Do-re-mi from a hymn to St. John. Originally, in ut-re-mi, ut sounded too harsh as it did not end with a vowel and was substituted with Do. Guido further made significant changes and improvements to writing music.

Music, as in the time of the Ancient Greeks, seemed to be again in the hands of an institution, only this time the church. This was however not so.

A new caste was rising, that of the knight. With Europe unsettled, wars waging and the start of the Crusades, the knights became the leading figures. They guarded settlements, roads and fought battles afar. Many stories were told. The knights and their stories became very popular, so it was often the case that the knight would take a lyre or other instrument and accompany his story with music. These singer-knights were known in the south of France as the Troubadours, in the north as the Trouvers and in German lands as the Minnesänger.

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8 St. Augustine, Confessions Book X, Chapter 33, Paragraph 50.
Initially following church guidelines established by the monks, the knights started improvising more and more, creating a whole new musical genre. Theatrical performances were given in town squares to enhance the atmosphere of the story.

By the end of the 13th century, with the rise of towns and their burghers, the popularity and power of the knights faded. Music moved into the houses of the newly established burgher class.

And it was to change significantly. Both the Gregorian chant and the music of the knights were monosyllabic. There was one melody that everybody sang, expressing a collective ideal of Christianity. The burghers thought differently. Every burgher wanted his voice to be heard and to express himself. This change in society reflected itself directly into music. The burghers gathered at the end of the day, sang and played music together, but with each one of them contributing with their own individual voices. With a new society, new music was born: polyphony.

Polyphonic music suddenly flourished in the new town centers of Europe, such as in Flanders. Composers of polyphonic music were sought after and became the new superstars. Gradually the church recognized these new developments and started adopting the new type of music. The writing of polyphonic music gradually became more and more its own purpose, devoid of what makes music special, emotions. Secular music was finding its way into church music, which displeased a large number of the clergy.

The greatest turning point in western music happened during the Tridentine Council that took place from 1545-1563. The hardliners in the Church sought to ban music completely, as it was ‘corrupting’ the soul. Italian composer Giovanni Pierluigi, known as Palestrina, is said to have saved the day. He composed a polyphonic music piece called Missa Papae Marcelli, in which he wanted to prove that polyphonic music can serve the church in an appropriate way. Music could henceforth continue its unassailable development.

This short overview of the development of music in the Middle Ages shows us how music mirrored the changes in society. With the disintegration of the Roman Empire, music followed the trail to the monasteries which were harbors of education. The monks copied manuscripts, developed musical theory and composed chants that would be sung during religious gatherings. The ongoing violence and warring that took place gave birth to the singer-knights, taking music away from the sole possession of the church. Music reflected the uncertainty and troubles of the time. With the advent of towns and the burghers, music underwent a critical transformation to mirror the new town structures and its new class.
There are two aspects to argue in this analysis of Part 2: The Rise and Fall of Music from the Ancient Greeks and Romans to the Middle Ages:

- The development of music throughout different civilizations
- How music mirrored the transformations in society taking place across the European continent

1. **The development of music throughout different civilizations**

The overview given in this paper illustrates how music, after flourishing in Ancient Greece, underwent a sharp decline in importance, only to bounce back through the turmoil of the Middle Ages.

What we may conclude is that change is inescapable and certain. The highest achievements are followed by debasement of the same, followed by a new period of growth, discovery and successes. There are many examples in history to support this, perhaps all of history is a story of this process. We may argue whether music followed the changes or was instrumental in change itself. Another important point we may argue here is that if there is tangible legacy, collected knowledge is not forgotten. After many centuries, the monks at St. Gall and Guido d’Arezzo dug up the writings of the Greeks and modified it to their purpose. They recognized the value of music through the writings of Aristotle and others.

2. **How music mirrored the transformations in society taking place across the European continent**

The three examples in this paper undeniably argue that music directly mirrored situations and transformations in the discussed societies. In Part 2 we discussed the Ancient Greek scale system as a reflection of Greek society.

Music during the Roman period manifested the values of the society, and despite the Roman attraction to all things Greek, they did not hold music to the same value. The clash in values and beliefs was too big. The early Christians found that the chant from the Jewish temple reflected their inner beliefs and helped them spread the message of the new faith. The troubadours and trouvers mirrored the instability, violence and insecurity of the Middle Ages and the secret desire of people for calm, peace and imagination.

Finally, the rise of the towns and a new class — the burghers — led to the creation of polyphonic music, music that had multiple, equally based voices.
An interesting point to make here is that during the Middle Ages, music found its structured secular voice, and despite the grips of various religious and state institutions that follow to this day, managed to keep a path of independence. Perhaps that was the greatest victory of Palestrina at the Tridentine Council.

Part 3: Music as a reflection of the conscience in Central Europe in the 20th and 21st centuries.

The last part of this paper takes us several centuries ahead into the 20th and 21st centuries in Central Europe. This period marked critical changes in the socio-political landscape, and in this paper we will discuss the role of music in these changes and how music mirrored society.

- Music behind the Iron Curtain
- Music after the fall of the Iron Curtain

1. Music behind the Iron Curtain

In the aftermath of the Second World War, countries of Central Europe found themselves in a completely new socio-political environment. Czechoslovakia, one of the richest and most prosperous European countries between the two world wars, a country with a flourishing cultural scene, wound up in 1948 in the Soviet-controlled part of Europe.

The thriving prewar culture had already been mostly destroyed during the first Nazi occupation in 1938, then the notorious Nazi protectorate until 1945. Leading cultural figures, many of them of Jewish origin, perished in concentration camps, while the lucky ones emigrated to the United Kingdom and the United States. Thus, the cultural scene was devoid of the class that had carried the cultural banner in the preceding centuries.

In the new Communist-run society, music, like all other aspects of life, was under the strict control of the authorities. Taking the cue from Stalin, who would personally forbid a Shostakovich symphony, authorities in Czechoslovakia kept a close watch on composers, performers and their works. Directives were issued as to how the music should sound, what emotions the music would evoke. Music had to sound in such a way as to elevate the working class, eliciting strong proletarian enthusiasm.

Composers were deemed ‘desirable’ and ‘un-desirable’. If the composer found himself ‘un-desirable’, he or she would have no chance of having his or her music performed. Obtaining the red book, membership in the Communist party, was a pretty much guaranteed pathway to success.
Communist authorities also held sway over the type or genre of music that was allowed. Western pop or rock music were mostly banned. From personal experience I know that many in the summer of 1989 did not even know who Elvis Presley was.

Notwithstanding the official policy, the music scene offered a refuge from the gloom of daily life. Concert and theater halls were packed. Tickets were inexpensive as they were fully subsidized by the government. Classical musicians professed world class playing, hoping that this could be their passport to travel abroad. And a whole underground scene was gradually growing and flourishing.

In the 1980s the rock and pop genres of music became a refuge for the young generation and a source, as would eventually prove, of dissent and resistance against the regime. The growing movement was eventually so strong that even the authorities had to back down and accept the new reality.

As argued in Parts 1 and 2, during this period yet again the ruling class puts a firm hold on music and strives to shape it and determine its purpose. It would take a revolution to take it away from its clutches.

On the evening of Friday, November 17, 1989, an unusual occurrence happened at the concert of the Czech Philharmonic. The applause suddenly turned into cries for change. That day in the afternoon, special police forces attacked a small gathering of protesters. Over the following days protests grew and by the end of the weekend massive protests for change were fully underway. As students were the carriers of these protests turned revolution, the Czech Philharmonic gave every morning at Žofín, a concert hall on an island in the Vltava, concerts to support the students. Music by two 19th century Czech national composers, Bedřich Smetana and Antonín Dvořák, were performed. I myself was a witness to these concerts. Music was at the forefront of the revolution. Many called the Velvet Revolution the Revolution of the poets and artists.

In this brief overview of music in Communist Czechoslovakia, and its role in disassembling the regime, perhaps we witness the two-dimensional instrumental aspect of music:

➢ As an instrument for the promotion and preservation of the ruling class
➢ As an instrument strong enough to carry change and transformation

2. Music after the fall of the Iron Curtain

After the revolution I had an interesting discussion with my violin professor, an esteemed violinist and professor at the Prague Music Academy. He was surprised that suddenly culture and music were not anymore at the forefront of society.
I often think of this discussion now that many years have passed, and society has experienced momentous developments. Czechoslovakia disintegrated into two separate states, an economic boom ensued in the late 1990s and both successor states entered the European Union in 2004.

Within a few years after the revolution, the number of theaters was decimated, and concert halls were not anymore packed with the local population but with tourists. An important reason was that whilst music under Communist rule was fully subsidized by the state, now music and culture in general started relying heavily on private sponsorships and expensive tickets. With freedom of speech and movement, culture was not anymore a refuge and its role in society experienced yet another transformation.

Music, finally without any state interference or control could develop on its own accord. Experimental concerts and festivals were established. Freedom of expression led to imaginative and experimental works. Music, however, was not at the center of society anymore. It gave way to the more tangible, materialistic aspects of life. Values and beliefs had changed. The role of music had changed.

In the recent pandemic, more was spoken about the restaurants and cafes that were closed than about the closed concert and theater halls and the dire economic situation of the artists. One may argue that this is a logical consequence of the preceding developments in society of the last thirty years.

From a brief look at life in the Czech lands over the span of 73 years (1948-2021), we see that music had experienced major upheavals as to its role and purpose. The analysis in this paper of this period identifies music as a reflection of societal changes and a tool of governance and transformation. Thus, during Communism, music was positioned under the direct control of the regime with a strong purpose to promote and elevate the state system. Rebelling underground, it burst into a machine of change in 1989. Settling into its newfound freedom, music was transformed and acquired a more supporting role, reflecting the change in values and beliefs that post-Communist society adopted. A deeper crisis, such as the COVID-19 pandemic, did not bring music to the forefront, that would have been the case in the past, but reaffirmed its current status.

**Conclusion**

The main goal of this paper is to argue that music from the ancient world to this day represents a reflection of society and is often one of the tools in societal transformations, no matter the continent or civilization. The Ancient Greeks, Chinese dynasties, the Roman Empire, the Middle Ages, and Central Europe in the 20th and 21st centuries have illustrated similar processes that repeat throughout history.
Throughout most of history music has been a tool for governing classes to establish and promote their ideals, values and beliefs. Cultures, like the Romans, who did not utilize music in the sense of other ancient civilizations, also give us an example of a great civilization that based its values on materialism and the military. The analysis of music in Czechoslovakia under the Iron Curtain, its role in toppling the regime and its subsequent transformation in a democratic society, mirrors within a short period the ideals and values of two contrasting, antipode societies.

Another key point in this paper is to showcase the tides of history, that after a society where culture flourishes (Ancient Greece), a society succeeding it diminishes that same culture. But we also see through the music of the Middle Ages that knowledge is never entirely forgotten or rejected and that it serves as a foundation for a new beginning. We encounter this phenomenon throughout history.

This paper has also looked to lay the foundation for understanding the present and foreseeing the future. To end this paper with a quote from one of Croatia’s most famous figures, Dubrovnik-born poet and statesman Ivan Gundulić (1589-1638) from his epic poem Osman⁹:

The wheel of fortune spins about ceaselessly,  
He who is above is cast down,  
and he who is below rises up again.

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⁹ Ivan Gundulić, Osman, 1651.
Ottomanism: A Transition from Byzantinism to Balkanism

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Abstract

Ottomanism as an ideology and way of life is nothing but a pale copy of Byzantinism. Ottomanism is the direct successor of the Eastern Roman Empire (the Byzantine Empire), which is the legal and sole successor to the only Roman Empire. But Ottomanism itself has not been sufficiently studied because much more attention has been paid to the way the Ottoman Empire was governed than to the identities that it sought to define as its own, which were in fact nothing more than a faint copy of Byzantinism before 1204.

Ottomanism can be defined as the imperial identity of the Ottoman Empire. But what is more interesting is the fact that the same identity is the successor of the Byzantine one — that is, Roman imperial identity, which did not recognize cultures and ethnicities. And Ottomanism is a solid basis for the development of the specific Balkan nationalism today, which is also known as Balkanism. A comparative analysis of the Ottomanism with Byzantinism and with the modern science of nations and nationalism will prove the hypothesis that: Ottomanism is the foundation for the modern Balkan nationalism.

Key words: Ottomanism, Balkanism, nationalism, ethnicity, nation, identity, Byzantinism

Byzantinism as an Introduction to Ottomanism

Byzantinism — the constructed East Roman identity of the Byzantine Empire — is a perennial connection of this empire with the Roman Empire. This connection can only be defined as terminus technicus because the Byzantine Empire is the natural successor to the Roman Empire.¹

What is more interesting is the fact that in order to create that so-called Byzantine identity, a connection was forged between the Latin and the classical Greek and Hellenistic culture. Analyzing Byzantinism, it can be concluded that it is merely an artificial construction of identity imposed on the subjects of the empire in order to unite them under the rule of the emperor in Constantinople.

Constructing this Byzantine identity during the Palaiologan dynasty (1261-1453), the authorities in Constantinople realized that the population of the empire, apart from imperial rule, must unite culturally and ethnically in order to preserve its unity. However, this way of imagined unification in Byzantine Empire actually represents the beginning of its end.

It led to a process of the annihilation of the imperial power itself because if until 1204 the emperor was the unifying element of the entire population in the empire, after 1261 the unifying element began to be embodied through the revival of classical Greek and Hellenistic culture — giving less importance to the heritage of Rome upon which the Byzantine Empire itself was founded.

Considering more structurally the idea of Byzantinism as a basis for Ottomanism, and later as a basic element of modern Balkanism, it can be concluded that the change in the view of the state provides the basis for the biggest problem in the Balkans today — that is, the ethnic intolerance between different groups in the region. If until the Fourth Crusade of 1202-1204, in Byzantine Empire the emperor himself was a unifying factor for the group that defines itself as “rhomaioi”,² and not the language, traditions or culture, it means that the Byzantine state applied modernism as a theory for determining and defining the nation.

In fact, the transition from a perennial to a modern interpretation of the unity of the Byzantine population took place at the same time when it was beginning to sever its historical ties with Rome, when the city fell to the barbarians in 476. Although declaratively and legally, the Byzantine Empire until the end of its days is considered the successor of Rome and the sole bearer of its heritage, the removal of Roman heritage such as culture, Latin language, traditions and customs and the turn to imperialism signify that in the empire is happening a reversal that in itself contributes to changing the self-determination of the population living in that country.

Moving from a perennial to a modern interpretation of the identifying elements of the population means that in the period before the restoration of the empire by the Palaiologos in 1261 for the Byzantine Empire, although the modernist determination that “modern man is neither loyal to the ruler, nor to the state, nor to religion as it is loyal to culture”³ was not valid, however, according to the adherents of this theory, what connects the group is the general legal-economic framework in the country, as well as the language with the help of which the society itself is promoted.

This creation of the so-called Byzantinism means that the Byzantine emperors were successful in not allowing any ethnic group in the empire to have supremacy over the others, i.e., they managed to separate the pre-national (ethnic) self-identification of the population from the state bodies in order not to suppress the multiethnic character of the state.\(^4\) In this way, for several centuries, the creation of protonationalism, which is in fact a mixture of nationalism and populism, was prevented.\(^5\)

The beginning of Byzantinism and the end of Byzantine Empire began when in the year 1261 Michael VIII conquered Constantinople and was proclaimed Emperor. In order to rebuild the empire, the Palaiologos began to transform it as a Greek nation-state while hegemonizing its Hellenic identity over the other cultural identities of the various groups in Byzantine Empire.\(^6\)

That is the start of the so-called revival of Hellenism which would in fact lead to disobedience of other groups to the empire in Constantinople and a reluctance to support it in the struggle against the Ottomans. In fact, it can be concluded that the change in the interpretation of identities in the Byzantine Empire from perennial (i.e., modernist) to ethnosymbolistic (i.e., primordial) leads to its collapse after several centuries.\(^7\)

In the same way that Constantinople is perennially connected with Rome, so the Ottomans after the conquest of Constantinople in 1453 try to be perennially connected with the heritage of the Byzantine Empire. It is the perennial connection that means that in these two empires they do not grow into nation-states in which one ethnicity manages to assimilate the others, as was the case with the Byzantine Empire during the reign of the Palaiologos (1261-1453). However, the connection is made in a way that indicates to the population the historical continuity of the state, which allows it, despite identifying with its own culture and values, to identify itself with the imperial government that comes directly to the sovereign in Constantinople.

This way of perennial connection actually aims to show the permanence of the empire that would contribute to achieve inner peace in it. Consistency, in contrast to cyclicality, also contributes to the connection of the population with each other. Namely, in both empires, the Byzantine Empire before 1204 and the Ottoman Empire after 1453, the populations were allowed to identify with their local identities, but within the limits set by the emperor in Constantinople, in order not to allow strengthening ethnic identity in relation to imperial power.

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To achieve this effect, for the Byzantine Empire before 1204 and for the Ottoman Empire after 1453, the unifying element was religion. For the Byzantine Empire, it was Orthodoxy; for the Ottomans, it was the millet system according to which every single subject who practices one of the recognized Abrahamic religions in the empire can be identified as a subject of the padishah.

The only difference between this type of Byzantinism and the early Ottomanism that originated after 1453 is that in the Byzantine Empire the only accepted and recognized religion is Orthodox Christianity, and in the Ottoman Empire according to the millet system, it is Islam, Orthodox Christianity and later Judaism. In fact, the difference occurs in that segment in the development of the states that Orthodoxy in Byzantine Empire itself generates cultural values that are generally acceptable to all the population, i.e. it also generates identity attributes that although common to different ethnicities, have penetrated deep into the identity of modern Balkan nations.

Unlike the Byzantine Empire, in the Ottoman Empire, the millet system of religious subdivision does not allow the generation of generally accepted values in all three religious groups that would later be transferred to the national identities of the nations that emerged after the collapse of the Ottoman Empire.

When comparing Byzantinism and Ottomanism it can be said that the biggest difference between these two imperial identities, which have never grown into national ones, is that, although the starting point for both is the perennial interpretation of the identity of all the population, the Byzantinism later from perennial-modernist grows into a primordial one which aims to emphasize the common organic-biological, origin of all subjects, i.e. through the hegemony of Hellenism to create the so-called Byzantine-Greek nation.

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Unlike Byzantinism, Ottomanism has no possibility of overcoming the perennial (i.e. modernist) idea of the existence of the empire because there is no possibility for the ethnic groups living in the Balkans to be organically and biologically linked to the Ottoman Turks, Arabs and other non-Orthodox groups in the empire. Precisely for this reason, Ottomanism never gained momentum in the Ottoman Empire, except in the early 20th century during the Young Turk Revolution (1908) when the idea that the Ottoman state was a state of the Turks, that is, the birth of the so-called Turkish-Ottoman nationalism. Yet it is only a brief period of a few years before the collapse of the empire.

The inability to make a primordial connection with the states (i.e., cultures that historically lived on the territory of the Balkans) opens the door for the Ottomans to take advantage of the perennial connection. As pointed out above in this text, the perennial connection allows them to consolidate the imperial power of the padishah in Constantinople, in order to “justify their existence in this part of the world.” In this way, Ottomanism becomes a modified addition to that Byzantinism that was before 1204 — that is, it becomes a systematic continuation of the imperial policy of oppression of the peoples and their cultural degradation as opposed to the connection on religious grounds. Cultural degradation occurs not because of the hegemonizing of a particular culture as in the case of Byzantinism, but because of the hegemonization and favoritism of Islam as a religion, which in itself generates cultural values and traditions in a similar way to Orthodox Christianity.

Skillfully avoiding primordialism, because they would never be able to justify the organic-biological connection between the Turkish and Asian populations with the autochthonous Orthodox Greek and Slavic population in the Balkans, the Ottomans managed to create a specific process of forming collective memory in the Balkan population, which is reflected to this day in the generated worship of the ruler — that is, of the hegemonic religious group.

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21 Ibid.
22 Ibid.
This change in the collective memory also contributed to changes in the collective memory of the Balkan nations, which were recognized as separate in the 19th century and began to fight for secession from the empire, so that in the collective memory of all Balkan nations, the Ottoman period of their history has great pejorative significance. The pejorative for the Ottomans, (i.e., the Turks) contributes to the transformation of the perception of the Balkan nations for all of their neighbors because the the imperial government’s skillful manipulation of certain ethnicities and groups in the Balkans in the past contributed to growing intolerance and tension among Balkan nations today.

Ethno-confessional Identity as a Basis for the Division and Functioning of the Ottoman Empire

The Ottoman “millet system” (i.e., the division of groups in the country according to the religious affiliation) in historiography and political science is known as the most prominent precedent for formulating cultural (i.e., ethno-confessional) autonomy of different groups in a state. In fact, this system of a division of the population is a religious but also ethnic-linguistic autonomy of the different ethnicities (i.e., religious groups) in the Ottoman Empire.

The millet system draws its strength from and is based on the Ottoman multicultural and multireligious aspect of the population in the Ottoman Empire; it is not built as a basic social concept for the functioning of that state. This way of state and social order is based on the concept of dividing the largest religious communities in such way that each of them would have the status of a legal entity in the state bureaucracy and with the recognition of each “millet” it receives certain privileges from the ruler.

However, when it comes to privileges, this applies only to the Muslim population in the country, because it is defined as a basic entity without which the Ottoman Empire could not exist. The millet was actually a kind of inclusive system that brought together people of the same religion no matter what province in which they lived. Constituted as the basic administrative apparatus of the state, the millet system provided non-Muslims with the opportunity to embody a separate identity that is characteristic of their group, and thus to nurture their collective cultural, linguistic, ethnic and religious values. Namely, in that way in the Ottoman state, several different local identities were created which were nurtured by the individual identities of the individuals, but which had to be harmonized with the religious affiliation of both the individual and the group.

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Thus, each group or millet consisted of a population that, in addition to being part of a state pre-national system, created its own identity which, after the collapse of the empire, transformed into a national one. The problem in the Balkans arises from a time when the Orthodox millet, or ethnicities that are part of the Ottoman state, formed nation-states in the 19th century, and they have such an intertwined history and collective memory that it is reflected in a conflict of identities.

Conflict of identities occurs when more nations have the same heroes or myths in their collective memory, and they use them to emphasize their values and to disparage the values of the neighboring nation with which they share identity and historical features. It is the Ottoman heritage of the Balkans (i.e., the millet system in which all modern Balkan countries lived) that contributes to the development of nationalism in this area today, because all nations and ethnicities in the region share a common history — a collective memory and myths from the Ottoman period. The reason, of course, lies only in the Ottoman division of the population into millets. Thus, according to Anthony Smith, ordinary conflicts of (national) interests turn into cultural, moral and political crusades or jihad that occupy the everyday political scene.

Analyzing the millet system in the Ottoman state, it can be concluded that all the subjects of the sultan, although divided according to their religious identity, still had one unifying factor, and that is the so-called “Ottoman identity” — the loyalty to the ruler and to the imperial administrative-bureaucratic apparatus. Although when it comes to “Ottoman” identity it cannot be classified as national, nor as ethnic, it can be said that it is in fact a socio-political identity especially in the Tanzimat period, where it is categorized only as loyalty to the ruler, who in fact, had no authority over religious matters in the country.

The Ottoman system can most easily be explained as an institutional-political framework that contains religious inclusiveness of non-national elements called millets. Namely, the millets themselves are defined as ethno-linguistic and ethnic groups. Regarding this form of government, Kemal Karpat says: “The millet system actually produces both religious universality and local parochialism”. This means that the local units of the millet became an incubator for the development of ethnic-national feelings among the population in the 19th century in the Balkans, resulting in uprisings for liberation from the Ottoman rule of certain Balkan ethnicities.

27 The Turkish historian and sociologist Niyaz Berkes is acknowledging the word “tanzim” or plural “tanzimat” as “getting in order”, which literally means socio-political period in the Ottoman Empire from 1839 until the 60s of the 19th century.
In this context it can be said that the millet system itself over time turns into a generator of ethnic and religious intolerance between the various groups in the Ottoman Empire, and it can be defined as the beginning of Balkan nationalism.

The Ottoman millet system can be defined as a form of social organization in which religious identity takes precedence over other identity features of each of the groups, and especially in relation to ethnicity. This way of defining the millet system opens the possibility for analysis in terms of which religions are accepted in the country, and which religions are generally recognized by the imperial government in Constantinople. If one examines in detail the millet system of the Ottoman state, one can see that all monotheistic religions were recognized by the sultan, and thus they were able to create local identities that have not an ethnic, but a unified religious character.

The very recognition of the religious identity of groups, as well as individuals, provided them with a kind of “imaginary” mechanism for protection for all, except Muslims — a mechanism that allowed different millets to self-determine in accordance with their religious identities, and in the 19th century with the ethnic ones because the religious identity in the empire gradually started becoming the basic identity feature of the different ethnicities in it.

The practice of institutionalizing religious communities in the Ottoman state began immediately after the conquest of Constantinople (1453) in 1454 and was established by Sultan Mehmet II. The first created millet was the Orthodox one, followed by the Armenian millet in 1461 and the Jewish one in the late 15th century. Namely, immediately after the institutionalization of each millet, its leader begins with a process of unification of the features that unite the members of that millet.

What is interesting about the Balkans is that although most of the population in this part of the empire is Orthodox and submissive to the Ecumenical Patriarch, in the late 18th and throughout the 19th century the ethnic character began to dominate over the religious. In fact, the dominance of ethnic over religious identity among the Balkan ethnicities is the result of their centuries-long subordination, as well as the desire of these ethnicities to promote the religious and ethnic identity values that are unique to their group.

This domination of ethnic over religious identity in the 19th century resulted in a struggle for secession and the formation of independent nation-states of the Balkan peoples living within the Ottoman Empire.

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The centuries-old dominance of religious over ethnic identity within the millet system in the Ottoman state created a general state of shared collective memory that for the Balkan peoples opened the door to extreme nationalism that resulted in extremism. The outcome is putting one's own ethnicity on a pedestal and humiliating one’s neighbor with whom you share a common history. It is for this reason that Ottomanism and its millet system can be defined as the basis of today's Balkan nationalism or Balkanism.

The Ottoman millet system of governance illuminates the basic difference between the way the nation states were formed in Europe and in the Balkans. Namely, unlike Europe where ethnic identity has an advantage in the formation of the nation, the Balkan nations later in the 19th century began to enter the era of national awakening and realizing that what actually makes the nation homogeneous and connects it is not the religion but the identity of the group.30

If we need to define identity, the best definition for it is given by Anthony Smith; he emphasizes that there are generally accepted features that identify all members of a group, such as language, traditions, culture, values, common legal and economic framework, and in some exceptional cases, religion.31

Thus, according to Kemal Karpat, this huge difference is due solely to the fact that although the Ottoman Empire as a multiethnic state was able to create a unified identity, the advantage that Muslims had in the existing millet system prevented other groups from being embodied as on religious, as well as on ethnic grounds, to identify themselves with the “Ottoman” imperial identity.32

Although the millet system in the Ottoman state is a result of its multiethnic and multi-religious character, it can still be said that it turns into a generator for its disintegration. What is even more frightening is that the millet system is becoming a generator for the development of Balkan nationalism because the cultural and ethnic identities of the groups in the empire have been neglected for centuries in favor of the religious ones.

The forcing of a religious identity resulted in an attempt to hegemonize the Hellenic identity over the entire Orthodox population, which led to the rejection of the non-Greek Orthodox population in the Ottoman state, and thus the beginning of its disintegration.

The disintegration of the empire itself is due to the ethnic awakening of the various groups that inhabited its territory; different ethnicities began to show intolerance not only towards the central government in Constantinople, but also to the religious authority that secretly tried to impose Hellenism as the only identity solution of the entire Orthodox population in the Ottoman Empire.

It is for these reasons that Ottomanism can be defined as a classic successor to Byzantinism, as the Ottoman rulers unknowingly hegemonized Hellenism over the entire Orthodox population through the Ecumenical Patriarch. Namely, similar as in the Byzantine Empire from the period of the Palaiologos Dynasty (1259-1453), the hegemony of Hellenism contributed to the disintegration of the state, in this case of the Ottoman Empire.

**The Ottoman Identity – Ottomanism**

The Ottoman identity is the most complex form of identity that has ever existed in a country. Namely, when it comes to “Ottoman” identity, it is not meant as a normal national identity, but as a mixture of religions, cultures and languages that are not united naturally but administratively by the sole ruler of the empire.\(^{33}\)

Another interesting phenomenon concerning Ottoman identity is that it began to emerge after the conquest of Constantinople by Sultan Mehmet II in 1453. In fact, when we talk about Ottoman identity, we are not talking about a unified national identity; rather, from the point of view of the liberal\(^{34}\) theory of nations and identities, it is an administrative identity that unites only the legal-political and economic framework in the country.\(^{35}\)

Religious unity for all Muslim subjects of the empire was fostered by the establishment of the Sunni way of practicing Islam as the official state religion by Sultan Selim I in 1517. That is when he conquered the Memelukis in Egypt and with this victory, usurped the title of caliph of Islam. Proclaiming himself as the caliph of Islam, Selim I not only gave legitimacy to the Ottoman dynasty to rule the Muslims in the world,\(^{36}\) but also tried to create a kind of unification between the various Muslim groups in the empire such as the Turks, Persians, Arabs, Azeris and all other groups that had accepted Islam as the official religion until then.

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Ottomanism as a divided identity was inherited from the Seljuk Turks. After conquering a large part of Asia Minor, as well as parts of the Caucasus, Iran, and the Middle East, the Seljuks after the battle of Manzikert in 1071 realized that the population living in this territory would not be so easily identified with the newly imposed Turkish identity. For that purpose, the Seljuks accepted the Byzantine way of imposing imperial power through religion, emphasizing the importance of the Islam in the daily functioning of their state. However, due to the fact that in those territories lived a population that could not fully identify with either Islam or Turkish culture, they began to create the so-called administrative identity that in many ways is similar to the Byzantine imperial one.

This administrative identity was later taken over by the Ottomans, who, like the Seljuks, realized that only through the state apparatus could create a kind of identity through which all subjects in the empire would be identified.37

Two things are characteristic of this Ottoman identity. The first one is that it is constructed on the basis of Sunni Islam as a unifying element of the Muslim population in the empire. This means that no matter how much the other non-Muslim communities in the empire were respected, the imperial bureaucracy never regarded the non-Muslim population as an integral part of the empire.

This kind of interpretation can be supported by the fact that everyone except the Muslim millet were excluded from the construction of the Ottoman identity in the country. This means that as early as the 16th century, the Ottoman government, both imperial and bureaucratic, began with the construction of an artificially structured identity in the empire that would aim to unite the Muslim population, but also to differentiate the same from other non-Muslim groups in the empire.

This way of forming a state-regulated identity provided the basis for later divisions and conflicts between the Balkan ethnicities.38 In fact, by practicing a state-constructed identity as Ottomanism is constructed, it has provided the basis of today’s Balkanism.

The second characteristic that is crucial in the construction of Ottomanism is the language. Language is one of the basic characteristics of each identity.

Wanting to unite the entire Muslim population in the country, the elite in the Ottoman Empire through the imperial apparatus created an Ottoman-Turkish language which was a mixture of Turkish, Farsi and Arabic.39

37 Ibid.
However, after the collapse of the Ottoman Empire, this Ottoman language failed to remain the official language of present-day Turkey.

The Ottomans never took the Western way of determining their identity and nation. This normally could not have happened naturally because the Ottoman Empire was a multi-confessional and multiethnic empire in which no identity could be imposed as a unifier for all the millets in the country.\footnote{Lewis, B. (2002). What Went Wrong: The Clash Between Islam and Modernity in the Middle East. New York: Oxford University Press. pp. 18-20.} What the Ottomans really wanted to achieve was the hegemony of the so-called Ottomanism which is analyzed above in this text. By hegemonizing Ottomanism, as well as its Islamic character, the imperial government wanted to achieve the greatest possible inclusion of the population, or at least of the Muslim one.\footnote{Ibid.}

The modernization of Ottomanism began in the first half of the 19th century, with the coming to power of Sultan Mahmud II and later his son Abdulmajid I. These reforms, known in the Ottoman history as Tanzimat, in terms of identity mean transformation of Ottomanism from a religiously constructed and state-implemented identity that referred only to the Muslim population in the country, into a new Ottomanism that has a civic concept — that is, the creation of an identity with which all the subjects of the Sultan would be identified.

The civic Ottomanism that stems from the Tanzimat is in fact nothing more than the last attempt of the Ottoman emperor to prevent the collapse of the empire. Namely, after the secession of Greece in 1832 from the empire, the extension of a civil Ottomanism was nothing but an attempt to persuade the other ethnicities in the empire to consider themselves as part of the state, and thus to reduce the possibility of uprisings for independence in both the Balkans and the Middle East.

Tanzimat was in fact the last attempt of the Ottoman sultans to save the empire from collapse. Although this was impossible, the desire to survive still made these two progressive and liberal Sultans to concede that the millet system did not build Ottomanism, but only destroyed it. Namely, the millet system worked great in the Middle Ages when, with the help of military force, the ethnicities and religious groups were kept peaceful within the borders of the Ottoman Empire,\footnote{Lewis, B. (1993). Islam and the West. New York City: Oxford University Press.} while imposing a hegemonic religious identity over their ethnicities and a religious one that was constantly underestimated despite the Ottoman identity. The last attempt to restore historical Ottomanism was during the reign of Sultan Abdulhamit II, in order to prevent secession of Bulgaria, Serbia and Romania due to the intensified movements for national freedom.
In any case, Ottomanism as an identity actually originates from the predecessor empires—the Byzantine Empire or the Eastern Roman Empire. As the successor of Byzantinism, Ottomanism contributed to the creation of that pejorative Balkan nationalism, later defined as Balkanism. Thus, Ottomanism with its imperial and hegemonic approach, similar to Byzantinism, contributed to the discord or non-identification of other Balkan identities with the state or the administrative identity. As a result, if it can be said that by hegemonizing the Hellenistic identity as superior to the others, Byzantinism led to the collapse of the empire, it similarly can be said that Ottomanism contributed to the birth of the conflict of identities among all Balkan ethnicities.

**Balkanism: An Ottoman Heritage**

Unlike European nationalism, Balkan nationalism contains some elements that are unique to the region. This kind of nationalism such as today’s Balkanism actually accumulates symbols and myths not only of an ethnic but also of a religious nature. With this in mind, it can be said that Balkan nationalism accumulates the ethnic and religious attributes in order to create a nation of a certain group. This way of accumulating religion in the identity is the result of more than 400 years of Ottoman rule in the region.

If we look at the history, as well as what was written above in this text, we can conclude that the millet system created by the Ottomans, and which functioned until the middle of the 19th century, contributed to the penetration of the religion deeply into the identity features of all Balkan groups. This means that in the Balkans, religion becomes a feature of ethnicity that is later transformed into a national identity, not vice versa as in Europe. Unlike the Balkans, in the rest of Europe, ethnic groups are embodied in religion. In the Balkans, on the other hand, the religion is a part that determines and, to some extent, directs the development and improvement of the identity of ethnicities.

After the collapse of the Ottoman Empire and the formation of independent nation-states in the Balkans, an interesting situation arose in which all states, once formed, began to create a national identity that would be different from that of its neighbors. Thus begins the creation of the state-regulated nationalism which through the unified bureaucratic-educational system in each Balkan country aims to form generations that would boost their identity in relation to other neighboring identities.

This phenomenon of Balkan nationalism or Balkanism can be said to be the result of the Ottoman way of governing.

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44 Ibid.
By not paying attention to the ethnic character that is specific to each group, but rather by emphasizing the common religion of all Orthodox Balkan ethnicities, the Ottomans created a hegemonic status of the Hellenistic identity in relation to the Slavic identities in the Balkans. Through the Greek language and the Ecumenical Patriarchate, the Ottomans managed to rule the Orthodox population in the region.

The problem arises at the moment when the Slavic ethnicities, no longer able to tolerate the rank of a subordinate people in relation to the Greeks in terms of culture and other ethnic features, begin a struggle for independence. The struggle for independence of all Balkan peoples from the Ottomans is justified as a cause. What cannot be justified is the fact that in each of these struggles, nationalism feeds on a certain group which would have the task of distancing its own group from the others by raising on a pedestal its own landmarks.

So, by emphasizing the collective memory of their own group, as well as the myths of the same, the Balkan peoples during their struggle for independence managed to create fertile ground for discord on ethnic grounds with those with whom they were neighbours and good friends until yesterday, living in the same empire. And when the question arises: what has the Ottomans got to do with it? The answer is very simple: by denying the ethnic cultural identity and separation of the ethnicities following the example of Byzantine Empire, the Ottoman Empire hegemonizes the Hellenistic identity through the Orthodox religion.

Although this hegemony is probably unconscious and in order to more successfully hold on the Orthodox population in chains, it can still be said that the Ottomans by modifying the Byzantinism managed to create Ottomanism that makes the foundation for today’s Balkanism.

Hatt-ı Hümayun, or the Reform Act of 1856, is a document passed by the Ottoman ruler that guarantees equality to all the subjects in the empire on the basis of ethnicity, culture and religion. Hatihumayun is actually the end of the millet system in the Ottoman Empire. However, when this reform act was passed, the division between the ethnic groups in the empire was so great that even its entry into force and its respect from the ruling elites would not prolong the life of the Ottoman state or reduce the tensions between the Balkan peoples.

Moreover, Serbia and Greece were already independent states and exerted a great influence to change the identity values of the Orthodox population that still lived within the empire.

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In fact, the cumulativeness of identity and nationalism in the Balkans comes to the fore once again when, through the religious schools, the various Balkan states sought to create new values for the Slavic population in the Ottoman Empire.

Another element of discord is the language and its use in the period when the Balkan peoples lived within the Ottoman state. The use of the Greek language by the Patriarchate of Constantinople, as the only language that recognizes Orthodoxy as a millet in the Ottoman Empire, is a huge blow to the identities of the Balkan ethnicities. This is in fact a direct favoring of Hellenism and degradation of the local identity because through language the identity of a certain group is strengthened. The favoring of the Greek language by the Patriarchate, with the approval of the Sultan, leads to a state of repulsion towards Greek culture by the Slavic population, which by itself generates a conflict of identities which contributes to the development of the specific Balkan nationalism.

It can be concluded that if the Byzantinism is the basis of Balkan nationalism — that is, it is the core of what is called the hegemony of one ethnic identity in relation to others in a multinational state — then it can be said with certainty that Ottomanism is only a prolonged phase of Byzantinism that does not lead to the current situation in the region.

When we say “situation” in the region, we mean the ethnic and religious intolerance that was created in the early Middle Ages and is constantly nourished throughout history, thanks to the specific past of all ethnicities that inhabit the Balkans. In any case, what can be concluded is that Balkanism was not invented in the 20th or the 21st century. In fact, Balkanism runs as a thread throughout the history of the ethnicities that live in this territory and does not leave them the opportunity to reconcile with the fact that they have a common past and the same or similar myths with which they are embodied. Balkanism is the moment of discord between these groups when the same heroes and myths from the collective memory are celebrated in different ways, and they cannot be reconciled that, thanks to the common past, the heroes and myths have entered the collective memory of all the groups in the Balkans.

Ottomanism, on the other hand, is the transition from Byzantinism to modern Balkanism which, by favoring the religious over the cultural and ethnic affiliation, manages to enable the ethnic groups in the region to no longer distinguish themselves from their past and reject nationalism as a future. Although Ottomanism is just fiction, as such it has contributed to today’s divisions and disagreements between the Balkan nations as well as to the ongoing conflict of identities.
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The Developing Global Crisis and Survival of Human Civilizations

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Abstract

For over thirty years, we have used a phrase “the Developing Global Crisis” to identify a cluster of recurring causal factors of chaos that are especially difficult to deal with. These are: population pressure (not simply growth), corruptions of governance (hard to study in democracies much less in police-states), authoritarian political systems, and militant religions. The West has failed to control these recurring causes of chaos, often by imperial patterns of behavior instead of more enlightened governance. Civilizational scholars in Japan might be able to find better solutions to these problems for Asia and the world if they try hard. Please try quickly, because time is limited. So long as we treat mainly “symptoms” of global distress instead of the ultimate causes of wars, the doomsday clocks of WMD\(^1\) will keep on ticking until someone uses them.

Introduction

Significant, recurring causes of wars through history include at least 40 variables, which makes that problem difficult for multivariate, “large ‘n’ analyses.”\(^2\) To simplify that analytic dilemma, we focus here on four of the most difficult drivers of organized, armed violence on earth today. Each is intrinsically difficult to analyze, but some are further complicated by political taboos, especially population pressure and corruptions of governance. Therefore, before describing them in detail and examining some cases like Syria from 2010 to 2020, a few words will be devoted to those “taboos” and how they distort traditional analyses of this hypercomplex problem.

“Population pressure,” for example, is much more complicated than simple numbers of people in any country, or rates of growth, or even migration into or out of countries.

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\(^1\) WMD is the common recognized acronym in the English language for “Weapons of Mass Destruction.” Those include nuclear, biological, chemical, and a few more exotic weapons developed during the last century. The doctrine of “Mutual Assured Destruction” is unstable, however, so if dominant powers do not change their behavior, WMD will be used someday by someone. Simply put, we cannot wait forever.

But even the simplest discussions of human demographic issues are challenged by a deep reluctance among politicians to say anything at all about population issues, and elicit profoundly negative reactions among millions of ordinary people to any discussion of this topic. Why? Because many people defend what they see as inherent rights to have as many children as they desire, regardless of social consequences. They often have religious reasons for that position, rooted in sacred texts or in tribal customs common thousands of years ago when most scriptures were written, and death rates were very high. As deeply powerful factors, evolution and natural selection stipulate, that people will probably defend their rights to reproduction as fiercely as they defend their right to life itself.

Why? Because natural selection requires some people to both survive and to reproduce successfully, while others do not. All three factors are required, survival, reproduction, and “successful” reproduction, which means children born must survive until they too can reproduce successfully. Every one of your ancestors and mine reproduced successfully, while millions of others did not. Thus their (our) drive to both live, and to reproduce successfully, is profound.

Other complications of defining, measuring, and analyzing population pressure will be covered in the section that follows. Study of “corruptions of governance” labors under a different taboo. Very few governments are willing to fund serious study of their own corruptions. Since governments are the ultimate funders of a majority of social science research, this is a significant complication. For example, there are thousands of government sponsored studies of “terrorism” in the USA that ignore the role of corruptions of governance here in generating millions of near hopeless people desperate for political changes so they may have a fair chance at a decent life. Even fewer such studies consider population factors, for reasons mentioned earlier.

“Autoritarian Law” and “Militant Religion” present similar burdens to systemic analysis, not least defining what religions are (as opposed to ‘cults,’) without implying that any ‘religion’ is better than any other, lest fundamentalists of many types get angry. It bears noting that anger, enemies and taking offense easily are diagnostic traits of the “fundamental” vs. the “enlightened” forms of all major religions. A particular complication flows from the probability that these two factors, authoritarian law and militant religions, interact synergistically. That is, authoritarian legal systems resonate with militant religions such that the combination increases probabilities of resulting armed conflict more than simple linear additions would predict.³

Population Pressure

If too many people try to live on too little land, a pressure can result that causes migrations. People often move along opportunity gradients seeking tangible resources, or they may flee violence seeking safety for their families, or both. Either way, one practical result is migration into neighboring lands. Migrations can be gradual and benign, or fast and brutal as manifest in historic conquests and empire building, or “colonization” of weaker countries. The worst cases have resulted in genocides hundreds of times in recorded history, and probably thousands of times in the whole history of human civilizations. That long history of surviving and executing genocides has profound consequences for the evolution of both human behaviors and politics. One example is the “In Group vs. Out Groups” dynamic studied by sociology and psychology.

One of the most dramatic examples of this in recent history is when Syria experienced an ecological crisis in 2010 that interacted with the other factors we consider here (authoritarian law, militant religion and corruptions of governance). Protests turned into complex civil wars, and approximately one-third of Syria’s pre-war population was forced to flee to neighbors Turkey, Jordan, and Lebanon, with over a million making it all the way to Europe. That had big derivative consequences for politics in many European nations. Ten years later millions of Syrians who remained within their territorial boundaries are considered internally displaced refugees. This case is so vivid and well documented that it will be considered in detail later.

It would help to have a brief review of demographic fundamentals. Population size in any area at any particular time is an absolute number. Populations may grow or shrink, and growth rates (GR) are a measure of that, usually measured in percentage per year. Two other variables are often important and are commonly measured, birth rates per year (BR) and death rates per year (DR). Contemporary demographers often prefer another, more complex variable, total fertility rates, but we will ignore those here because they make understanding key results more difficult.

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Life Expectancy (LE) is a function of death rates according to the formula \( LE = \frac{1000}{DR} \), which will become important soon. Another way that populations can change (other than births minus deaths) is by migration into them (immigration) or out of them (emigration). When populations are growing rapidly another measure is helpful called doubling times (dt). At a 1 percent growth rate per year, a population will double in about 70 years. At 2 percent, the dt is about 35 years, and at 3 percent the doubling time is about 23 years.\(^{11}\) Fast growing populations develop ‘momentum’ because of pyramidal age distributions with many young and fewer elders. Few human populations have reached 4 percent growth rates, and those almost always export excess residents to neighbors whether willing to receive them or not.\(^{12}\)

While derived from many of these variables, population pressure is different from all of them. The key distinctions are ecological, technical, and economic. Whether a population on any particular area of land is wealthy, healthy and calm (or impoverished, sickly and violent) is very much a function of the technology that population uses to extract resources from that particular land, and cultural practices that mediate what is considered acceptable use of common resources, and norms like how much wealth is necessary for happiness and social calm. Those things vary enormously. So, for one example, the relatively wealthy, healthy, and calm population of 2020 Japan, if transported magically to the Sahara Desert in Africa, would quickly become not wealthy, not healthy, and not calm. Rather, there would be huge pressures to migrate to more productive environments, each of which would already be full of other people, not eager to share scarce resources with unwanted immigrants. The most critical resource would also suddenly become clean, fresh water, which is relatively abundant in contemporary Japan.

Nazli Choucri and Robert C. North were the first scientists I know who tried to systematically and empirically study connections between population pressure and wars.\(^{13}\) Their work was sound, and few questioned their statistical methods. But they faced withering criticism from some social scientists who compared their conclusions (often unfairly) with statements by Thomas Malthus who wrote about population dynamics in 1798.\(^{14}\) As happens too often in social science, critics objected mainly to implications of their work, rather than to flaws in their data or methods of analysis. The bottom line remains the same.

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\(^{11}\) The exact formula for this is doubling time (dt) = natural log of 2 divided by the absolute growth rate. The rule of thumb for quick estimates is 70 divided by the growth rate in percentages.

\(^{12}\) The current world leader in birth rates is Niger in North Africa, with 7 children per average woman, birth rate = 47.5/1000 population, for a national growth rate of 3.66\%, source is CIA World Factbook, accessed June 15, 2020, at: https://www.cia.gov/library/publications/the-world-factbook/geos/ng.html


If human populations grow rapidly, they will tend to come into conflicts of many kinds with neighbors who do not want to be overrun by desperate migrants from poverty and/or endemic violence. More detail on how that works can be found in *On the Causes of War*, Chapter 12 on population pressure, 2007.\(^\text{15}\)

One serious consequence deserves explication here. One of the most valued measures of a good society or a wise civilization is long life expectancies (LE) for its people. Good societies are also stable in many ways, including some equilibrium between themselves and the living system that supports them. At equilibrium, birth rates equal death rates, so the population neither grows nor shrinks. Equilibrium is a condition seldom achieved in human populations over the short term, but always achieved by living systems over the long term. This is so because nothing grows forever and if a population shrinks forever, it becomes extinct. Nothing grows forever, because ecological limits eventually increase death rates (which can also lead to extinction if the habitat that supports that living system is destroyed). This can occur with runaway population growth. When you combine the equation \(\text{LE} = \frac{1000}{\text{DR}}\) with the observation that \(\text{BR} = \text{DR}\) at equilibrium you get a consequence: At equilibrium, birth rates determine life expectancy.

This is an iron law of biology, but it is also a bitter pill for “exceptional” cultures to swallow. Many cultures consider themselves remarkably exceptional, like the USA, and some theocracies literally believe that their God wants them to populate and rule the entire earth.

To put this in human terms, a birth rate of 12 per thousand per year would yield a life expectancy in an equilibrium population of \(\frac{1000}{12} = 83.3\) years, near the highest achieved so far by any human society. By contrast, a birth rate of 34 babies per thousand per year would yield a life expectancy of only 29.4 years in an equilibrium population. Few societies want to endure life expectancies of only 30 years or so. So, what many do is export excess population to wealthier and often healthier parts of the planet. For real world examples, the birth rate of Japan in 2020 was \(~7.3\) births/1000 population, and the birth rate of Niger was \(~47.5\) births/1000 population.\(^\text{16}\)

Of course, everything is more complicated in real populations with many more variations of culture, land, and economy. But which example above seems healthier and wealthier to you?

We will illustrate the power of population pressure with a few historic examples before moving to corruptions of governance. The most dramatic one I know comes from land I walk on every day, the state of Minnesota in the USA.


Just over 200 years ago, in 1800 CE, this land was almost 100% Native Americans mainly of the Dakota and Ojibwe tribes. Less than 1% French Canadian fur trappers and traders were scattered about. By 1900 CE, just one century later, Native Americans were only .52 % of the official census (half of one percent). Another half percent were blacks, and 99% were whites of European ancestry. By 1980, even the memory of Native American origins and history was almost gone except for Indian place names.

Vast numbers of immigrants from Europe and eastern US states had overwhelmed the Indians. The result: While in 1800, the territory now called Minnesota was 99%+ Indian, in just 100 years two indigenous peoples had been almost totally replaced by immigrants from far away.

This was not the first time an indigenous population was replaced by colonizers. Historic examples go back at least as far as Greek conquests of islands in the Aegean Sea, and Chinese conquests of many neighbors as the Han replaced clans on their periphery.

18 The term “Native American” is relatively recent, while the term “Indian” was predominant during that period, unless a specific tribe was identified. These terms have political connotations now that are irrelevant to this paper. Therefore, we use them interchangeably without any political inference intended.
19 The “Mankato Uprising” of 1862, sometimes called the “US-Dakota War,” was a key moment in this transition. Highly simplified, near starving Native Americans (Dakota and Lakota) who had been confined to reservations and denied promised food decided to fight, killing about 400 largely unarmed white settlers in the first days. That naturally aroused the US Army (and thousands of white citizens) who promptly slaughtered Indians who were fighting and drove thousands of them into Canada and the Dakota territories. About 1600 were confined to an ‘internment’ camp beneath Fort Snelling, where about 300 died during the brutal winter. Survivors were then shipped by steamboat to reservations further west, and Governor Alexander Ramsey put a bounty on the heads of others killed in the new state of Minnesota ($25 for ordinary Indians, up to $500 for the scalp of Chief Little Crow). The largest execution in American history occurred in Mankato, where 38 convicted of fighting were hung on December 26, 1862. This was a large reduction from the 303 originally condemned, ordered by then US President Abraham Lincoln.
21 Ancient Military.com describes the broad span of ancient warfare in readable and reasonably accurate essays. Their entry on Ancient China can be accessed at http://www.ancientmilitary.com/ancient-chinese-military.htm but authorship and date of writing is not recorded there. What is certain is that Chinese warlords were fighting out of a base of the Yellow and Yangtze Rivers for about 5,000 years, during which they defended against, subjugated or even eliminated many neighbors in all directions.
In the West it took only 50 years for the Spanish to wipe out the original peoples of what is now the Dominican Republic and several other Caribbean Islands, as recorded in the classic work of Bartolomé de Las Casas, *Historia de las Indias*, written before his death in 1566, but first published in 1875.  

Hitler blamed his invasions of Europe and especially Russia on a need for “Lebensraum” (living room) for his growing, and implicitly virtuous German people.  

His moral turpitude annihilating millions of people in his way is a separate issue from why he felt a need to expand. Dictators often do, and the authoritarian political systems they create teach entire populations that it is OK for governments to kill to obtain their desires. Thus did millions of “Good Germans” become agents of genocide. It took only twelve years for Hitler’s evil philosophy to destroy his country.

In the West, it has been written that after World War II, the dominant explanation in Japan for its 1931 Manchukuo policy to extract resources from China was the need to feed one million new Japanese people every year. Island nations can more easily see the limits to resources that are never really unlimited in life on earth (or the universe). That led to armed conflicts with China, Southeast Asia, the USA and to other, well-known consequences.

The ancient cases of collapse of the Mayan Empire and the near extinction of a thriving culture on Easter Island in the Pacific can also be examined through this lens. The Mayan population declined about 90% when they grew so quickly that they overran the carrying capacity of their land. Crop failures followed, along with slaughter. Easter Island declined from a high of near 20,000 people to a low of 114 after they cut down the last trees on their formerly lush island and starved during a period of intense violence and interclan warfare. Yes, both of these peoples were also decimated by disease after Europeans found them. But what Europeans found were civilizations in catastrophic decline because of their own, pre-existing population pressures.

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22 De Las Casas, Bartolomé, *Historia de las Indias*, written during the mid-1500’s, first printed in 1875. *Encyclopaedia Britannica* provides a summary: https://www.britannica.com/biography/Bartolome-de-Las-Casas  The entire text is available from Gutenberg Books at: http://www.gutenberg.org/ebooks/49298  


Population pressure is one of the most powerful causes of wars, genocides, and civilizational collapses. It is especially difficult to study because of psychological and cultural taboos.

**Corruptions of Governance**

This perpetual cause of conflicts presents other dilemmas, starting with defining — much less measuring — corruption. The most corrupt politicians on earth often think the only truly corrupt ones are their political adversaries, domestically or internationally. Hypocrisy on this item is monumental. Since governments fund most social science research and define what their laws consider corruption, they often crank out endless commentary on how corrupt other governments are, while proclaiming that theirs are blessed by God or at least are governed by a host of angels. Therefore, sadly, civil society non-profits like *Transparency International* have more reliable data on this topic than most governments provide.

That noted, one can still find libraries of commentary, both scientific and otherwise on how corruption cripples nations all over our earth. At the worst, it armors and cements the power of police-states. Corruption is prominent in virtually all civil wars, unlike some inter-state wars. Everywhere corruption diverts scarce public resources into private fortunes maintained by a global industry of tax havens, and structures like the Swiss banking system.

The most important contribution of “corruptions of governance” to the Developing Global Crisis is preventing solutions to the great problems of our time.

It is tempting to illustrate this with examples from great power rivals or from impoverished, Third World kleptocracies. But that would be impolite. The US has many examples of our own. Therefore, we will focus here on climate change, and how constructive responses to that great global problem have been severely retarded in the US due to corruptions of governance here.

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28 Transparency International was founded in London in 1994, at: [https://www.transparency.org.uk/](https://www.transparency.org.uk/) It provides an annual measure and survey of corruption among governments worldwide.

29 A comprehensive and international review of corruptions among governmental and global elites can be found in the “Paradise Papers” created by an International Consortium of Investigative Journalists in 2017, and available at [https://www.icij.org/investigations/paradise-papers/](https://www.icij.org/investigations/paradise-papers/)

30 The Swiss Federal government is generally regarded as one of the most honest and transparent in the world. But its banking system is also considered one of the best places on earth to store illicit funds, so Switzerland has been the financial destination of choice for endless warlords, dictators, and crime gangs. That itself is a good example of the endless permutations of corruption that enrich the already wealthy and further impoverish the already poor.
At Minnesota’s leading public policy institute,\textsuperscript{31} we began talking about climate change in 1982. It took 26 years for our federal government to begin talking openly about responses to that topic, and very few have been adopted or implemented as late as 2020. The most fundamental reason why is because legacy fossil fuel interests spend about $200 million per year lobbying against such open discussion, and funding calculated disinformation campaigns designed to frustrate public understanding.\textsuperscript{32} In modern America, national interests and public opinions often mean very little compared to hard cash provided to politicians by wealthy people and groups.\textsuperscript{33}

That dark power is so great today that it extends into our national intelligence agencies. While attending a conference at our National Intelligence University in 2005 (housed in a very secure Defense Intelligence Analysis Center) I was told by two sources that they had been “forbidden to discuss this (climate change) subject,” even though the Pentagon had commissioned studies of it two years earlier.\textsuperscript{34} Vice President Dick Cheney and Defense Secretary Donald Rumsfeld were making most of the important national security decisions at that time, and both had made tens of millions of dollars as chief executives of legacy commercial interests. Cheney in particular was an active denier of climate change, and defender of commercial interests of the fossil fuel industry.

This was more than unfortunate, because the engineers, physicists and biologists had figured out workable solutions to most of the practical problems presented by climate change by then. We are just not allowed to implement most of those solutions, because big scale solutions require big government involvement. There is also an efficient solution to the difficult financing problem. That solution is called a “Carbon Tax” to be levied on producers of fossil fuels, with funds derived going to promoting renewable, non-carbon-based energy sources. This is Econ 101.\textsuperscript{35}

\textsuperscript{31} The Hubert H. Humphrey Institute at the University of Minnesota.
\textsuperscript{32} Taylor, Matthew, “Revealed: big oil’s profits since 1990 total nearly $2 trillion,” in The Guardian, February 12, 2020. Taylor cites another report that documents the top five firms spent approximately $200 million per year on lobbying against climate change or actions to address it, accessible at: https://www.theguardian.com/business/2020/feb/12/revealed-big-oil-profits-since-1990-total-nearly-2tn-bp-shell-chevron-exxon
\textsuperscript{35} This is Economics 101: Tax what you want reduced and use funds to promote what you want instead. A Carbon Tax could do that very efficiently. Despite that, and despite profound national and global
But we still do not have that in the United States, because legacy oil and coal interests oppose it. Wall Street prefers partial solutions that establish new markets they can manipulate and profit from (in this case a scheme called “Cap and Trade”). Public opinion strongly supports direct conversion to a renewable energy economy, yet our national interest is sacrificed every day to defend oil fields far away rather than reducing dependence on those polluting energy sources.

Many books have been written about that topic, and there are many other types of high-level corruption in America today. For example, we call ourselves the land of free and brave people, but we incarcerate a higher percentage of our citizens than any other country on earth. We claim to be a land of opportunity, where “All men are created equal,” but express endemic and systemic racism. We call ourselves a peaceful nation but spend more on “defense” than the next ten countries combined. While being so peaceful, we have killed at least six million people in other countries during my lifetime, few of whom attacked us.

security consequences of ignoring climate change, the US continues to do so, and dozens of mainly Republican Senators have become “true believers” in climate change denial. 97% consensus among climate scientists worldwide cannot apparently overcome the power of money from donors with vested interests in not solving that problem. Such is one measure of corruption in the USA today.


37 Minneapolis, Minnesota, USA acquired an unwanted international reputation when a black man named George Floyd was murdered in broad daylight on a city street by a ‘rogue’ policeman, sparking massive demonstrations in over 700 American communities and many others worldwide. A summary of that period can be found at: https://en.wikipedia.org/wiki/George_Floyd_protests#:~:text=The%20George%20Floyd%20protests%20are,Minneapolis%20on%20May%2026%2C%202020.


39 Approximately 3 million people were killed in both the Koreas and around Vietnam, if we count the Chinese killed near the Yalu River, and Cambodians and Laotians in Southeast Asia. More conservative estimators sometimes omit those and many other “collateral” casualties of our wars. About one million Iraqi’s died by US arms during our brief invasion of 1991, twelve years of weekly bombing, and our much larger occupation that started on March 20, 2003, in an alleged search for weapons of mass
We honor ideals like equality with words every day, while maintaining one of the most unequal income distributions and health care systems on earth.\footnote{Schaeffer, Katherine, “6 facts about economic inequality in the U.S.,” Pew Research Center, February 7, 2020, accessible at: https://www.pewresearch.org/fact-tank/2020/02/07/6-facts-about-economic-inequality-in-the-u-s/} And justice for the rich is not remotely similar to “justice” for poor people in the country I still love today.\footnote{The Sentencing Project, “Report to the United Nations on Racial Disparities in the U.S. Criminal Justice System,” April 19, 2018, accessible at: https://www.sentencingproject.org/publications/un-report-on-racial-disparities/}

That love requires me to mention a few of the better things that America has done too, despite our many flaws. We helped to preserve freedom in Europe during World War I, even though nothing required us to. A few decades later, we prevailed with many allies in World War II. But rather than exacting vengeance or demanding crippling economic costs, we financed rebuilding efforts that helped make Japan and Germany two of the world’s leading economies today. And since these peaceful nations do not spend fortunes on pseudo-defense, they take better care of their citizens than the US does today. We sent men to the moon and may someday send women to Mars on behalf of all humankind. For generations Americans were a beacon of support for human rights, civil liberties, and ‘rule of law.’ Sadly, others must lead on those ideals now. We built a global positioning system that everyone uses for navigation and rescues at sea today. And we built the Internet, which has transformed everything, mostly for the better. Despite our many flaws, Americans have done some great things also. So, it makes me cry how corruption in my beloved country stops us from leading with solutions to the great problems of humankind today.

Corruptions of governance are among the most important causes of wars and other distress on the earth today because, a) they prevent solutions to many great and threatening problems, b) they drain scarce public resources to private piles of loot that are then used to further corruption, and c) because they confuse fundamental concepts like “freedom,” “democracy,” “equality,” “rule of law” and other ideals. There are ‘little’ types of corruption, like the petty graft and thieving kind well known to law enforcement and every bureaucracy. But I think the big corruptions of ideals, language and especially of laws are much more destructive.\footnote{In fact, our intelligence prior to invading Iraq the second time included creation of fraudulent documents (like a letter alleging Iraq had bought large quantities of “yellowcake” from Niger) and so many examples of willful distortion of critical details that the head of Great Britain’s MI6, Sir. Richard Dearlove, told his Prime Minister Tony Blair on July 23, 2002 that “The facts are being fixed around the policy.” This is high-level intelligence speak for calculated fraud to support an illegal and immoral war that killed a million Iraqi’s and helped to generate horrific death cults like ISIS that went on to help destroy Syrian civil society as well as Iraq’s. As with most secret intelligence scandals, this one is very destruction that did not exist. The story of how intelligence on that topic was manipulated to support this horrendous policy failure is a vivid story of corruption at every level of our national security elites. See more below.}
Authoritarian Law and Militant Religions

In my opinion, authoritarian law and militant religions should be considered together, because while different, they are intimately related. They also resonate synergistically as causes of wars and lesser conflicts. Authoritarian political systems concentrate practical power among small political elites who often exercise that power with impunity. Militant religions claim absolute authority over moral and spiritual “truths,” and are far more likely to attack each other or nearby democracies than democracies are likely to attack each other. There are many reasons “secular” societies fear “theocracies,” foremost because theocracies create notoriously authoritarian and aggressive political systems that generate conflicts with neighbors over whose truth is truer.

In English language social science, these tendencies are described by something called “democratic peace theory,” originally proposed by philosophers Immanuel Kant and political theorists Thomas Paine and Alexis de Tocqueville. Empirical support for this theory was found by the correlates of war project in 1976. Vigorous academic debate followed noting many difficulties of definition of key terms (like war, peace, and democracy).

The Chinese philosopher Lao Tzu anticipated this debate about 2500 years ago in his classic work, the *Tao te Ching*. Challenges for accurate translation of such ancient works are profound.

complicated and hard to document, but I did my best for an annual gathering of intelligence professionals in Europe called the “Need to Know” conferences (#5, November 2015). One reference is Andregg, M., “The US Decision to Invade Iraq in March 2003, Chasing Phantom WMD: How Human Intelligence was Used, Abused and Politicized to “fix the facts around the policy.” This was published in their Proceedings but can also be accessed at the University of Minnesota’s Digital Conservancy at: http://hdl.handle.net/11299/208817


Kant, Immanuel, “Perpetual Peace: A Philosophic Sketch,” 1795, accessible at: https://www.mtholyoke.edu/acad/intrel/kant/kant1.htm


Therefore, I commend Appendix 1 in that translation, where DC Lau describes “The Problems of Authorship” over pages 147-162. He explains in great detail problems of accurate translation of such ancient works that are familiar to anthropological linguists everywhere, but seldom to fundamentalists.
That noted, Lao Tzu wrote in his *Tao te Ching* that to achieve peace leaders should “Reduce the size and population of the state” and “Ensure that even though the people have tools of war for a troop or battalion, they will not use them.” To Lao Tzu, martial arts were for “defense only” in some contrast to his possibly contemporary Chinese philosopher Confucius.\(^\text{50}\)

The problem of “militant religions” is vividly illustrated by Islamic terrorist groups like ISIS or “Islamic State.”\(^\text{51}\) But it is a grave mistake to conclude that violent methods are confined to any religious group, large or small. Rather, I observe that Christians, Jews, Muslims, Hindus and even Buddhists have militant versions that vie with much more peaceful “ecumenical” wings that cite peaceful or even pacifist advice from the same scriptures.\(^\text{52} \text{53}\)

Two psychologists found clues for resolving this paradox of nominally peaceful religions spawning violent, terrorist behaviors by “true believers” in them. Canadian Bob Altemeyer won the American Association for the Advancement of Science (AAAS) prize for best behavioral science research in 1988 when he published *Enemies of Freedom: Understanding Right-Wing Authoritarianism*.\(^\text{54}\) William Eckhardt, an American who worked out of the Canadian Peace Research Institute in Ontario, published *Compassion: Toward a Science of Values* in 1972.\(^\text{55}\) Eckhardt’s apex work was *Civilizations, Empires and Wars: A Quantitative History of War* (1992).\(^\text{56}\) Their common conclusion was that authoritarian political ideologies that oppose enlightened democracies, and militant religions that cite mostly peaceful scriptures, reflect psychological predispositions among ordinary people more than higher level, abstract theories.

\(^\text{51}\) “ISIS,” “Islamic State,” “ISIL” and the Arabic word “Daish” are different labels for a terrorist organization notorious for exceptionally brutal public executions and other punishments of anyone who opposed them including fellow Muslims. They were born as an affiliate of Al-Qaeda, grew out of the chaos of post-war Iraq in 2003, went on to control much of Syria and to create or engage or inspire other terrorist groups worldwide. It declared a worldwide Caliphate in 2014 and was substantially destroyed by 2019 although fanatic supporters and spinoff groups will linger on much longer.
Fundamentalists of many religions are also typically pronatalistic (encourage large families).\textsuperscript{57} They often truly believe that their ‘God’ wants them to rule the entire earth.\textsuperscript{58} They also tend to repress women’s rights, enforcing tribal concepts of gender roles justified by ancient scriptures. Their relative militancy and associated authoritarian politics reduce civil liberties, increase population pressure at home, and create conflicts with neighbors near and far. Encyclopedia Britannica describes fundamentalist forms of most contemporary religions quite well.\textsuperscript{59} They also describe common objections to study of these issues, noting that “… some scholars have argued that the negative connotations of the term (fundamentalism) aptly characterize the nature of fundamentalist movements, many of which seek violent overthrow of national governments and the imposition of particular forms of worship and religious codes of conduct in violation of widely recognized human rights to political self-determination and freedom of worship.”

This quickly becomes hideously complicated, politicized, and fraught with peril for people who dare to point out the huge contradictions between original scriptures and theocratic governments or violent death cults like Islamic State (often described by critics as neither Islamic nor a State). So, I wish to cut through this angry debate with a simpler summary conclusion.

In my opinion, violent, theocratic political ideologies are just using “religious” words to justify the ancient logic of selfish genes.\textsuperscript{60} That logic is brutally simple. Genes “want” to out-reproduce competitors, by any means practical. People so motivated may use any rationalization to justify their predatory behaviors toward other people, whether those others are gentle, ‘live and let live’ members of other religions or tribes, or are other authoritarian competitors for the prize of best breeders in the contested area. When that area includes the entire earth, violent conflicts are inevitable, and the living system that supports all civilizations is in serious jeopardy.\textsuperscript{61}


\textsuperscript{61} The fields of evolution, population genetics and behavior genetics are obviously more complicated than this brutally simplified conclusion.
Two more complications from social psychology deserve some attention here. The hardest is the impact of psychopaths on societies.\textsuperscript{62} Psychopaths are evil, powerful, and are especially adept at exploiting secret power systems.\textsuperscript{63} Secret power systems are more common than many suppose.\textsuperscript{64} The other complication, but a key to solutions, is that dimension of “Compassion versus Compulsion” mentioned by Eckhardt, and also by at least a few ancient philosophers.\textsuperscript{65}

Relatively early in my study of the dark side of secret power systems, I got a challenging clue from a former CIA psychologist that: “The agency sometimes recruits for psychopaths, because they make better spies … if they can be controlled.” Why? Well it is much easier for psychopaths to fool lie detector tests, for example. Psychopaths lie like normal people breath, and living double lives is routine for them. Psychopaths also have few, if any, moral objections to many of the more severe techniques that are sometimes employed by intelligence agencies.

But true psychopaths are also extremely hard to control, and they thrive in secret power systems which every intelligence agency is. If they are ‘high functioning’ psychopaths, they often excel in bureaucratic knife fighting, so they can become more concentrated at the top than at entry levels.\textsuperscript{66} Ordinary society endures perhaps a one percent incidence of psychopathy, depending of course on how that is defined and measured.\textsuperscript{67}


\textsuperscript{63} Secret power systems include organized crime cartels, intelligence agencies, some banking systems, many cults, and a plethora of secret societies each of which intends to control the whole earth if they can.


\textsuperscript{65} Like Gautama the Buddha, and Jesus of Nazareth, whether divinely conceived or merely inspired by our Creator. “Compassion” was also recommended by many pure philosophers, like Plato of Greece, Confucius of China and the contemporary Dalai Lama. His “Little Book of Wisdom” is worth reading often.

\textsuperscript{66} Another large group of ‘secret power systems’ is organized crime cartels. They also tend to concentrate psychopaths at the top where their exceptional skills at deception, betrayal and ruthlessness are useful.

\textsuperscript{67} Parry, Wynne, “How to Spot Psychopaths: Speech Patterns Give Them Away,” in Livescience, October 20, 2011, accessible at: https://www.livescience.com/16585-psychopaths-speech-language.html#:%3B:text=Psychopaths%20make%20up%20about%201,profoundly%20selfish%20and%20lack%20emotion. This author provides some additional context worth noting: “Psychopaths make up about 1 percent of the general population and as much as 25 percent of male offenders in federal correctional settings, according to the researchers. Psychopaths are typically profoundly selfish and lack emotion. ‘In lay terms, psychopaths seem to have little or no conscience,’” write the researchers in a study published online in the journal Legal and Criminological Psychology.” That lack of conscience is quite critical.
That number becomes much higher in prisons, organized crime entities and intelligence organizations, unless stringent efforts are employed to restrain that process. I have been told by one French intelligence official in a position to know, that this is why the French screen specifically for psychopathy in entry tests, to exclude them from the secret services despite their unusual skills and operational efficiencies.

Polite societies have had to deal with psychopaths in the criminal, political and business sectors for millennia, so this is not really a new problem. But “normal” people, who are pretty nice most of the time, are very vulnerable to psychopaths’ skills in manipulation, deception and betrayal. This topic and the related topic of “forces of evil” are too complicated for this short review, so I will close those topics here with one rare reference.

Andrew Lobaczewski was a Polish psychologist who survived World War II and post-war occupation by the Soviet communists. With much help from a team of like-minded social scientists, he wrote a study of the founders and supporters of oppressive political regimes called Political Ponerology: A Science on the Nature of Evil Adjusted for Political Purposes in 1984.68

Finally, it must be noted that while natural psychopaths are rare,69 some organizations have learned how to get a large fraction of ordinary people to behave like psychopaths if so ordered by certified ‘authorities,’ especially in secret power systems.70 This is how Hitler’s regime got millions of “Good Germans” to support genocide against Jews, Gypsies and millions of others including their own citizens. It is also how millions of very good Americans joined US military and intelligence organizations for patriotic reasons focused on protecting our citizens and our Constitution, only to learn later that we often supported corrupt dictators and cruel authoritarians of many kinds in service to somebody’s idea of our “national security interests.” Every nuclear weapons power on earth today uses similar methods to help millions of people to work without noticeable psychological distress on building a system designed to destroy civilization itself.


69 Psychopaths can never become majorities in a functional society, because they are fundamentally parasitic on other people who produce wealth, heal the sick and so forth. If true psychopaths become too common, the society eats itself and disintegrates. But they can become concentrated at higher levels of power and wealth due to their exceptional skills, lack of genuine morals, and ruthless pursuit of power and wealth. From there, they often distort the laws of polite society to support their parasitic existence.

70 The classic English language works in this domain are Stanley Milgram’s Obedience to Authority: An Experimental View, (first published in 1974) and Philip Zimbardo’s 1971 “Stanford Prison Experiment,” which can be accessed at: https://www.prisonexp.org/
Syria, 2010 – 2020

In 2010, Syria’s population growth rate was about 2.4%.\(^71\) This results in a doubling time of less than 30 years and a highly pyramidal age distribution with momentum.\(^72\) Such demographic statistics can have huge consequences, depending on the rest of the context. It is difficult for developed economies to sustain economic growth rates that large in good times, and Syria had other big problems to contend with including all of the factors discussed in this paper as “the Developing Global Crisis.” By 2011, those problems morphed into barbaric repression of dissent by Syrian military forces and complex civil wars. By 2015, half of Syria’s pre-war population of 22 million people had been displaced. Six million fled the country entirely, spreading population pressure to every neighbor except for Israel, which would kill them if they tried to enter there.\(^73\) About eight million Syrians were “internally displaced” and one million Syrian refugees went on from near neighbors to Europe causing major political dislocations there.\(^74\) International crises are always far more complicated than analysts can describe (or readers can bear to read) with complex internal politics, external actors some of whom flock to crises with agendas of their own, and a myriad of other factors.\(^75\) Perspectives on which factors or politics are most important always vary with observers, so a diversity of sources is essential.\(^76\) Rigorous academic studies often dive deep into political or sociocultural variables.\(^77\) They seldom look hard at basic demographic or biological variables, however, which is more than unfortunate. So, we will examine in more detail how climate change (a derivative of population pressure) affected Syria’s situation, after reviewing a source that integrates factors of the developing global crisis.

\(^{71}\) The CIA’s World Factbook, published by their Institute for the Study of Intelligence, is one good source for such numbers, another is the UN Demographic Yearbook. I tend to use the Factbook simply because it covers more variables, comes out every year and is easier to access, while the Demographic Yearbook is biannual and more narrowly focused. The World Bank also publishes systematic demographic data. The 2010 edition of the World Factbook can be accessed at: https://www.cia.gov/library/publications/download/download-2010/index.html

\(^{72}\) The shorthand formula for doubling times is 70/growth rate in %, and the accurate formula is natural log of 2 divided by the growth rate. It is exactly the same for compound interest on investments as it is for population growth.

\(^{73}\) UNHCR Syria Regional Refugee Response/Total Persons of Concern” UN High Commissioner for Refugees, 29 August 2015.

\(^{74}\) Migration Policy Institute, “Moving Europe Beyond Crisis.” This is an aggregation of academic work on migration in Europe, archived at: https://www.migrationpolicy.org/programs/moving-europe-beyond-crisis?gclid=Cj0KCQjw3Nv3BRC8ARIsAPh8hgKwo1cOxALNHnh1iP51m0tWSdjyyp4N4HGXI153kqjMEhy8xwqYO4V8aAjB9EALw_wcB This was accessed by this author on 27 June, 2020.


\(^{76}\) Al Jazeera, April 14, 2018, “Syria’s War Explained from the Beginning,” accessible at: https://www.aljazeera.com/news/2016/05/syria-civil-war-explained-160505084119966.html

Other Syrian scholars tried to explain those factors to the World Bank (like Andrea Liverani).\(^{78}\)

In 2020, Primož Manfreda tried to summarize this complex genesis of a real series of civil wars that virtually destroyed a relatively well-developed country in “10 Factors that led to the Syrian Uprising.”\(^{79}\) His first factor is “political repression” (which I would label authoritarian law). His fourth factor is “drought.” His fifth is “population surge.” His seventh is “corruption.” His eighth is “state violence.” His ninth, “minority rule.” His sixth on “social media” and his tenth on “Tunisia effect” reflect truly new factors, like the revolution in technologies available to people today, and what others have come to label the “Arab Spring.” That echo of events in Tunisia inspired many previously repressed populations in the Levant to protest bad governments.

Seldom mentioned in less comprehensive reviews was the role of drought, Manfreda’s 4\(^{th}\) factor. About 85% of Syria’s livestock perished in 2010 during the worst drought there in recorded history.\(^{80}\) Something like 1.3-1.5 million farmers left barren land to find help in overcrowded cities with large teen-aged populations who lacked opportunities to build normal, hopeful lives.\(^{81}\) The power of that drought was reviewed by The Guardian six years later.\(^{82}\) Vice news summarized, that “The drought collapsed agricultural yields and livestock herds, driving as many as 1.5 million Syrians from rural areas into cities, where resources were already scarce.”\(^{83}\) It is harder to write about population pressure or derivatives like climate change, which increases droughts around the world, than it is to describe the evils of politicians (like Syria’s Bashar al-Assad, or Russia’s Putin, or American leaders who got involved, or even Israeli military attempts to change the balance of power in the area). Focus on blame ignores powerful underlying forces.

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\(^{82}\) Kahn, Brian, “Syria’s drought ‘has likely been its worst in 900 years,’” in The Guardian, 2 March, 2016, accessible at: https://www.theguardian.com/environment/2016/mar/02/syrrias-drought-has-likely-been-its-worst-in-900-years

\(^{83}\) Stokes, Elaisha, “The Drought that Preceded Syria’s Civil War was likely the Worst in 900 Years,” in Vice News, 3 March, 2016, accessible at: https://www.vice.com/en_us/article/3kw77v/the-drought-that-preceded-syrias-civil-war-was-likely-the-worst-in-900-years
So, most attention goes to the usual suspects, bad or even evil political leaders and historical conflicts between neighbors in rough neighborhoods, while deeper factors like demographics and interactions between authoritarian law and militant religions are neglected. Very simplistically put, when drought and population pressure sent millions of desperate rural Syrians into cities already filled with better educated teenagers seeking opportunities of their own, they faced a corrupt Syrian government that reserved most opportunities for Assad’s Alawite minority (about 11% of the population in 2010) and some Christian and other allies. Majority Sunni Muslims (about 74% of the Syrian population then) did not get equal opportunities. Rather, they got barrel bombs targeting hospitals and occasional banned chemical munitions. When students protested seeking more economic justice (inspired by the Arab Spring, but also driven by desperation) Bashar al-Assad responded with brutal repression like his father had in Hama decades earlier.\footnote{Wikipedia, “1982 Hama Massacre,” accessible at: https://en.wikipedia.org/wiki/1982_Hama_massacre} But this time, protestors had smart phones and computers, and militant forms of “religion” like ISIS were rising in the area. The combination of corrupt, authoritarian government with militant religions and powerful demographic forces at work proved to be explosive, like combining charcoal, saltpeter and sulphur can create gunpowder. Each factor is not very dangerous alone. Put them together, ignite, and you can change nations or destroy civilizations.

**War, Genocide, Terrorism, Failing States, WMD and the Fate of Civilizations**

Nuclear weapons introduced humanity to the concept of “half-lives.” Radioactive elements or isotopes of elements decay into more stable isotopes over time such that half of their total changes over a period unique to each radioactive element or isotope.\footnote{Encyclopaedia Britannica, entry on half-life definition and properties, accessed 28 June, 2020 at: https://www.britannica.com/science/half-life-radioactivity} This concept can also be applied to civilizations faced with the dilemmas of general nuclear war.

We introduce this concept here, because the largest military powers on earth today behave as though they can watch chaos spread around the world forever, safely, so long as they retain the ability to annihilate anyone who threatens us with military force. But that is an illusion promoted by a flawed strategic concept called “Mutual Assured Destruction” (aptly reduced to “MAD” in many publications). This idea was created during the earliest days of the nuclear arms race between the US and then Soviet Union. But it is flawed by something called the “rational actor assumption.” In purest form, this assumes that all world leaders are “rational” all of the time, according to definitions of a few physicists and economists. The idea that anyone can surround their home with the most terrible weapons ever made, confident that these will never be used, is worse than unwise.
It is a theory that enabled development and deployment of a doomsday system of weapons, now owned by many, oblivious to responses by the targets of such terror.86

Cutting through many details, a general thermonuclear war would probably destroy all of human civilization. MAD theory says that this should convince every leader on earth never to use such weapons because they assure destruction of nearly everyone. But theories of war that rely on human behavior and historic experience, rather than on sterile abstractions created by people to justify massive expenditures on exotic new weapons, are less optimistic. What is the exact probability that a general nuclear war will be triggered by some madman in some country, by accident,87 or by some clever attack by terrorists who acquire a few nuclear warheads by any method? No one knows or can know that theoretical number. But we can calculate the half-life of human civilization for any such probability using Poisson statistics.88

So, simply put as always, if the probability of a general nuclear war is 1% (one percent) per year, the half-life of our civilization would be about 69 years. If global civilization avoids that dark fate for 69 years, but retains the hardware, weapons, doctrines, and mindset of MAD, then the danger continues according to the same arithmetic. The combined probability of the rare event occurring (in this case a general nuclear war) asymptotes to .9999 (near certainty) very quickly on the time scale of civilizations. The practical result of such calculations is to recognize that humankind does not have forever to solve the “Developing Global Crisis” which already generates tens of millions of desperate young men every year with very stark economic futures. People who have nothing to lose and plenty to envy can be remarkably dangerous even with primitive weapons. Dominant powers call them terrorists, but they call themselves freedom fighters for oppressed peoples. And some of them spend every day trying to build or acquire the same weapons that dominant powers now use to sustain their dominance of global affairs.

86 The Bulletin of the Atomic Scientists was created by Nobel Prize winning physicists who helped create the first nuclear weapons during the urgencies of World War II. They recognized the long-term danger of reliance on global destruction for safety, or what is now called “MAD.” Since 1947 they have maintained a metaphorical “doomsday clock” that indicates their estimate of how close we are to a nuclear midnight that would end civilization “as we know it.” Today that clock sits at 100 seconds to midnight. Each year the Bulletin’s board revisits this issue, issues a new estimate, and publishes the evidence and reasons behind their decisions. The whole Bulletin is a warning to humankind that this system cannot last forever. Their 2020 estimate and reasons can be accessed at: https://thebulletin.org/doomsday-clock/?gclid=CjwKCAjw_D3BRBIEiwAjVMy7ABUnmqA2jfgkOOZZGM78hiH-nbhiMwHkekFOCn8-i1_5QXXBi49dhoCypAQAvD_BwE


Elsewhere many people have described hundreds of scenarios where this might occur. So, I will illustrate it with a single example here. Suppose that a well-financed terrorist group like ISIS managed to purchase just a few modern nuclear warheads, from say Pakistan that is sympathetic to many goals of militant Islamic groups. Smuggling heavy items is remarkably easy in our fractured world; ask any drug cartel. Suppose these “terrorists” choose to use the same tactics that dominant powers use, attacking enemies that bomb them every year.

Imagine one warhead in Washington D.C., one in Moscow, and one in Tel Aviv Israel, set to detonate simultaneously. Is anyone sure none of those nuclear powers would retaliate against targets they suspect? When the US wargames such nuclear scenarios, most of them escalate quickly to general nuclear war due to the exigencies of attack and uncertainties of the “fog of war” when capitol cities disappear in radioactive fire. Recognizing this basic instability of the MAD doctrine, four of the architects of America’s nuclear deterrence system called for the elimination of all nuclear weapons worldwide. They too have been ignored by a system that continues due to economic momentum among vested interests as much as for any strategic security reasons.

Glimmers of Hope

In 2017, the Nobel Peace Prize went to an International Campaign to Abolish Nuclear Weapons (ICAN) “for its work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons and for its groundbreaking efforts to achieve a treaty-based prohibition of such weapons.” The UN responded by convening an international conference to negotiate a “legally binding” treaty called the Treaty on the Prohibition of Nuclear Weapons (TPNW) that was quickly supported by a vote of 122 states in favor, with one vote against and one abstention. This Treaty was opened for signature on September 20, 2017, but every nuclear weapons state has declined to participate at time of writing. Thus, “legally binding” is toothless in this case.

Nuclear weapons treaties that are ignored by all of the nuclear weapons powers are notoriously ineffective, but they can lay groundwork for real progress if geopolitical moods change. Large changes in that arena are often possible only after great disasters, or in nuclear issues, close calls with the global holocaust that MAD theory proclaims we must constantly prepare for.

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The dyad of Kim Jong-un in North Korea and Donald Trump in the US seemed particularly ripe for a stark test of that “rational actor assumption” discussed in previous sections. Others are inevitable.

On the environment and global warming fronts, US withdrawal from the Paris Climate Accords was a huge setback. Despite this paralysis, maintained by corruption in a government addicted to payoffs from legacy fossil fuel interests, hundreds of large corporations and even several US states have declared their intentions to work hard to achieve Paris climate goals despite resistance from federal agencies.92 Tens of millions of US citizens also act in many different ways each day to accomplish those goals. There is a lot of hope in younger generations worldwide, if current powers that be would just listen more to their cries for generational justice.

And while authoritarian political systems (which are doomed to perpetual conflict) are rising today against truly representative democracies, people worldwide continue to rebel against such systems and are slowly learning how to use the new information technologies more nimbly than repressive governments. The art of rigging elections has been perfected, but the struggle between freedom and tyranny as organizing political principles has not been lost yet.93

**Why Asia Needs to Lead**

We who study threats to all of human civilization sometimes write about the “fast death” of a general or catastrophic nuclear war, and the “slow death” of grinding, incremental destruction of the living system that sustains us all. The latter will lead to a world of failed states unless and until population pressure is reduced by enlightenment and positive changes, or by far higher death rates than any compassionate person desires. On both nuclear and environmental issues, it is time for Asia to lead because the West (or at least America) cannot anymore.

Half of the nuclear weapons states today are Asian (Russia is both Asian and European).94

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93 Belarus is the latest test case of this proposition. It is too early in 2020 to know how this will turn out, but the people are showing surprising resilience in the face of repression from Europe’s “last dictator.” Their dictator, however, has shown that modern technology and repression can radically distort results.

94 A more thorough discussion of why Asia could and I urge should lead on nuclear weapons issues today will be published in the *Journal of Asian Politics and History* in 2021, under the title “Why Asia Needs to Lead a Global Push to Eliminate Nuclear Weapons,” by Andregg, M.
The most unstable dyad in that arena might be Pakistan and India because of their history of conflicts. But the entire nuclear deterrence system is unstable. Japan has the strongest moral position on this issue of any nation on earth, and substantial economic and technical resources it could devote to implementation of progressive changes should wisdom dawn. The US and Russia are paralyzed because of strong domestic constituencies devoted to endless arms races, among other reasons, while France and Britain are too small to become prime leaders of a global push to eliminate (or radically reduce) nuclear weapons inventories. One key must thus be China.

On the environmental front, Chinese appetites for exotic parts of rare animals (like rhinoceros horns, or tiger parts) are the leading threat to extinction of such animals today. Entire habitats of forest and jungle are also being harvested at ever-growing rates to feed global markets for timber and palm oil. Chinese fishing fleets roam everywhere, sometimes quite indifferent to laws of the sea and international conventions on sustainable management of resources. China also is a command economy that could change such priorities more quickly than most, if leadership there concluded that survival of human civilization is at least as important as dominance by the Chinese Communist Party. And no one has had more experience with the great difficulties of trying to create, implement, and adjust national population policies over two generations.

Therefore, with help and inspiration from visionary statesmen in Mongolia like J. Enkhsaikhan, I have concluded that both large and rich nations like China and Japan, and small, relatively poor countries like Mongolia, which are rich in global vision, are in a good position to catalyze real change in global norms to promote a sustainable future for all of humankind.

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96 Thränert, Oliver, “New Challenges in Nuclear Arms Control,” in CSS Analysis in Security Policy, No. 232, October 2018, Switzerland, accessible at: https://css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/CSSAnalyse232-EN.pdf
Conclusions

For thousands of years, thousands of people have predicted the end of the world in various ways for various reasons, and every one of them has been wrong … so far. Therefore, my alarming conclusions should be assessed with all due skepticism and withering criticism of errors of fact, hidden assumptions, or possible unintended consequences of proposed solutions. On the other hand, who can deny that weapons of mass destruction have affected such estimates? The world’s human population has also quadrupled during the last century. Who can deny that this affects the fate of the living system which sustains us all, and the prospects for conflicts of all kinds?

Therefore, I suggest a dual track approach to these problems. One track would be incremental change, like we see today but with a greater sense of urgency and more international cooperation to avoid both the quick death of nuclear holocaust and the slow death of incremental destruction of Earth’s living system. The other track would be preparation for if the nuclear war comes.

In the 1980’s ordinary American citizens without great resources sponsored thousands of public education programs about nuclear weapons in efforts to restrain the arms race between primarily the US and the Soviet Union at that time. These events were accelerated by growing public talk about the feasibility of waging, and winning, a “limited” nuclear war with the Soviets. Internal Pentagon estimates of resulting US casualties were about 60 million dead in America, which some people considered acceptable if the alternative was surrender to the Russians. No estimate of worldwide casualties made it outside of the military security bubble of that time.

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100 Editors, History.com, “Nostradamus,” updated May 14, 2020, accessible at: https://www.history.com/topics/paranormal/nostradamus

Nostradamus was a French astrologer and physician who published a book in 1555 CE called The Prophesies where he predicted the end of the world in the year 3797. If he had picked an earlier date, like thousands of others have, events would have proven him wrong by now. Instead, he gained international fame and his book is still in print today.

101 For one example, one tiny, non-profit, all-volunteer, education group in America called Ground Zero Minnesota sponsored about 5,000 educational programs in schools, churches and civic groups in a five-state region during this time. We were microscopic compared to larger efforts like when one of America’s three national TV networks (ABC) sponsored a movie called “The Day After,” which was seen by more people in the USA than any other program in our history to that time. This was even shown on the Soviet Union’s state TV in 1987. More information on this extremely rare, made for TV educational effort can be found in Wikipedia, at: https://en.wikipedia.org/wiki/The_Day_After

To the great surprise of millions of people, our country (and many others) thought through the consequences of even “limited” nuclear wars and decided that this would not be good for America or the world. So major efforts at more significant nuclear arms control began, resulting in an Intermediate Nuclear Forces treaty (INF), SALT, SORT, START (all bilateral treaties between the US and the Soviet Union) and other multilateral agreements like the Comprehensive Nuclear Test Ban Treaty. Therefore, today, those largest nuclear inventories of Russia and the USA are at most one-fourth of what they were at their peaks, and there is better surveillance.

So, once in a while, citizen efforts can make a real difference in the fate of nations. Tragically, much of that progress has been reversed in the last few years by the latest group of people who can never get enough nuclear weapons, or money to create, refine and deploy them. And as noted earlier, both Russia’s President Putin and America’s President Trump have talked publicly and recently about using nuclear weapons in “tactical arenas” like Eastern Europe and North Korea.

Therefore, I tell those who ask today that they should work hard for peace in incremental ways, but also prepare for worst case scenarios like another World War. I have often claimed that even after a general nuclear war, “there will be survivors, and they will build a better civilization.” But that is more aspirational hope than calculated conclusion based on empirical evidence.

Turning the nuclear arms race around was incredibly hard, and imperfect. How much harder must restraining the corruption which runs rampant in our countries be? Much harder. How hard will it be to restrain the appetites for authoritarian law that emerge with every generation that wants to blame its problems on some “other”? Very hard. And who can persuade militant fundamentalists of any religion that the Creator of us all really does not want us killing each other’s children? Well some people try every day, but progress on that front is remarkably slow.

I offer two last concepts here that might help, one given by some of the Native Americans who were almost exterminated by westward expansion of European peoples across North America. This is planning for the welfare of the seventh generation when politicians make big decisions for our countries, towns and villages. If modern politicians truly cared about the welfare of the seventh generation after they made public policies, most of these great crises could be resolved.

China is alleged to take a long view of international relations. It is also written that creating a “Great Harmony” or “Great Unity” is integral to Confucian philosophy, and as I read Confucius, this does not imply police-state governments afraid of independence anywhere.

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If modern China could actually embrace that goal, many current frictions could be set aside in the interests of our common, human survival. If elites in Japan and the US could join or lead that enlightened spirit of reconciliation, and restrain the factions ever eager to exploit conflict, anything is possible.
Strategy vs. Humanity? American Corporations May Be Facing a Momentous Paradigm Shift in the Age of Diversity, Equity and Inclusion

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The business discipline of strategy was born at Harvard Business School in the America of the 1970s, an era of disorienting economic fluctuations and sometimes naked vulnerability that was punctuated by disturbing events like the OPEC oil embargoes and the Iran hostage crisis. By the end of the decade, strategy claimed the imaginations of business executives and relegated its predecessor, marketing, to a distant second place. Marketing, whose focus was serving customer needs to grow demand, was neither tough enough nor quick enough to deal with the sudden appearance of economic and cultural monsters invading American life.\(^1\)

Ultimately, of course, corporations had to serve customer needs one way or another, but business leaders now were much more focused on developing ways to win — and success (“winning”) meant beating the competition, first and foremost. According to our most influential theorist on the subject, Michael Porter, firms employ strategy to “win” through exclusivity.\(^2\)

\(^1\) While strategy displaced marketing as the most influential discipline in business schools in the 1970s, marketing is not really a direct ancestor of strategy. As Michael Porter explains in an interview of 2002, there were three major influences on the development of his version of strategy. Porter brought together the strengths of the two disciplines of industrial organization and business policy (which was the closest thing to today’s notion of strategy) to help develop his ideas on “five forces” and strategy. He did this because the most popular procedure to determine the strategy of a firm used by scholars of business policy in the 1970s took months or sometimes more than a year to complete. This procedure was known as SWOT (“Strengths, Weaknesses, Opportunities, and Threats”). Porter explains why he believed the SWOT methodology was inadequate: “We needed a more disciplined way to think about strategy. We needed a more rigorous approach, a systematic way to look at industries and where firms stood in their industries. The prevailing SWOT model of strengths/weaknesses/opportunities/threats was based on the idea that every case is different and that the relevant considerations are company-specific. As I was struggling to teach using the SWOT framework at HBS, I set out to add more rigor.” See Nicholas Argyres and Anita M. McGahan, “An interview with Michael Porter,” *Academy of Management Perspectives* 16.2 (2002): 43-52.

\(^2\) In this article, the word “strategy,” unless otherwise specified, refers to Michael Porter’s description of strategy. Although there are many uses of the word “strategy” in business education, I believe it is safe to assert that Michael Porter’s work on strategy has been, by far, the most influential construction of strategy in the academy as well as in business. There are, of course, other uses of the word. Some interpret it as a very general word akin to the meaning of “planning.” Others have created contending versions, like “Blue Ocean Strategy.” But it is Porter’s work on strategy that has shaped business practices of industrialized nations in the past 40 years. Porter’s version of strategy is, in general, “strategy,” which is why I’m not specifying Porter’s authorship repeatedly in this piece.
In other words, strategy’s main focus is to enable companies “to achieve sustainable competitive advantage by carrying out unique activities in unique ways.”

The growth of the persuasiveness of strategy as a way to run business had to be due, at least in part, to the profound shocks felt in the American economy during the 1970s (such as the decline of the US auto industry and the rise of “stagflation”), along with the increasing fears and frustrations American consumers felt because of them. Imagine growing up as a white teenage boy in the 1960s enamored by the Beach Boys’ songs about fast cars only to find out that your brand new 1973 Pontiac GTO — which was outta sight, by the way — couldn’t move because foreign countries had cut off their petroleum supplies to your local gas station? In many ways, this was a metaphor for the fortunes of the American economy writ large (and encapsulated by another catchy and unintentionally prophetic tune by the Beach Boys, “No-Go Showboat”).

Businesses became desperate, too. Many no longer believed in the potential strength of the American economy as a whole. In this slowly-sinking economic ship, executives often felt that they had “to kill or be killed” to survive as long as they could. To extend the metaphor, companies had to delay that slow sinking by throwing competitors overboard into the leaky lifeboats they had managed to gather in an attempt to keep their own heads above water.

And because the discipline of strategy (which has a history, by the way: a beginning, a middle, and an eventual end) remains the dominant paradigm in American business today, it has also brought along with it (like a hidden stowaway in a time machine) the fear and ruthlessness of its early progenitors. Certainly, strategy was only part of a general cultural trend and unspoken conservative intellectual consensus that focused on “bulking up” corporations at all costs (or, at least, at the expense of the general population). Another important ally to this trend included Ronald Reagan’s subsequent attack on government’s efforts to keep the economic playing field as level as possible, and thus increasing economic opportunities for more ordinary Americans.

One of the most salient artifacts of this move from marketing to strategy — from growing customer demand to winning in the marketplace — was an article published in 1981 by Philip Kotler, a leading academic in the field of marketing who would remain influential well into the twenty-first century.

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Kotler was a shrewd reader of the economic and cultural trends in the late 1970s and did his best to re-cast marketing as the able servant of strategy in this time of crisis. Note that this article appeared in the inaugural year of the *Journal of Business Strategy*:

As the 1980s get under way, numerous signs point to an era of slower economic growth. Scarce resources, proliferation of technological resources across nations [i.e., new sources of competition], sharply rising costs of energy, economic slowdowns, trade barriers, political tensions, leveling off of population growth in the developed world, and other factors suggest that company prospects for prosperity and growth will become tougher in the years ahead.

Companies will have to pursue their profitability at the expense of other companies, through market share gains rather than market growth gains. The scene will move from normal marketing competition to marketing warfare. Successful marketing will require devising competition-centered strategies, not just customer-centered and distribution-centered strategies.4

To rephrase Kotler’s point, the goal of strategy is to sustain competitive advantage for as long as possible for the purposes of growth maintained through subjugation (in one form or another) of the competition. This is done not by being cooperative or generous in the marketplace. It’s done by beating the competition that must relinquish after being exposed to the pressures of another company’s competitive advantage. This is profoundly un-inclusive.

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Fast-forward to 2021, and we can see that the cultural influences that helped to create business strategy in the 1970s have not changed dramatically, which means that strategy has not been pressured to change, either; nevertheless, strategy is currently under considerable stress at the margins that could (and should) eventually create significant challenges for its future as the reigning business paradigm.

What hasn’t changed is that the fundamental impetus for the creation of strategy—fear—still looms large in American culture. To be specific, Americans from the 1970s and the 2020s still generally worry about these major issues: looming threats to national pride and identity; either losing their jobs or not being able to find one; a declining standard of living; and, most alarming for Americans, losing their freedom to choose and their autonomy.

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Unfortunately, Americans’ answer to the general problem of fear in the last fifty years (and this differs from culture to culture) has often been to accuse one another of betraying core values (political or moral) instead of recognizing that a (if not the) fundamental betrayal lies in the economic realm — namely, the fraying of human bonds between employer and employee. This increasing separation between these two groups has shaken many workers’ faith in a prosperous future. Milton Friedman famously kicked off this trend in the beginning of the 1970s by insisting that corporations were only answerable to their shareholders; Michael Porter ended that decade by further undermining workers’ economic peace of mind with the assertion that the primary goal of a company’s plans for the future (another word for “strategy”) was to create and exploit a “competitive advantage” over other companies (other companies, we should note, that were filled with other people).

What has changed is that the economic extremes encouraged and enabled by strategy’s narrowly focused goal have begun to upset the foundations of the healthy business climate that had allowed the immense growth of recent decades to occur in the first place. Strategy’s win-lose paradigm has swung the advantages so much in the favor of crony capitalism (the cronies having dominated the win-lose scenarios) that they are suddenly and unexpectedly among the forces recently stepping into (albeit gingerly) the market-balancing role that the American government used to fill more vigorously between the 1930s and 1970s.

But do those promoting these egalitarian and humanitarian initiatives within companies and society really understand the implications of these (potentially radical) moves? These moves are taking us towards a dramatic clash between past economic paradigms and present demands for more equitable treatment for all. Consider the following example.

There is an intriguing and largely unnoticed contradiction that very well-meaning business executives are stepping into when they strongly promote goals outlined by growing public demands to prioritize “Diversity, Equity, and Inclusion” (or “D-E-I,” which is inclusive in intent) within organizations whose ultimate goal is to win at the expense of others (which is exclusive in intent). If we can imagine organizations vigorously pursuing win-win D-E-I goals and rhetoric while ignoring how they also contradict the win-lose (or “zero-sum”) worldview of strategy, some interesting future conflicts start to come into view.

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5 The gap is social as well as monetary, with the latter aptly measured by the ever-growing distance between the salaries of average workers and the CEOs they work for during the last 40 years.

6 For example, trust in unseen participants along a long train of relationships required to complete a transaction in a complex economy lowers costs and creates considerable efficiencies. Trust has eroded substantially within the United States and I’d venture to say that related costs have been enormous (COVID-related costs, for instance, in a climate of deep mistrust of “outside” influence).
Here’s a thought experiment about some potentially destabilizing impacts of D-E-I, both short-term and long-term, within and between companies that pursue competitive advantage:

Internal Conflicts in the Short Term
- By welcoming and including diverse people who really have a wide variety of values into a company as employees, the dominant culture of business (which includes many unspoken assumptions initially shaped by a white male culture) will be questioned and put under pressure by a variety of people who really have different backgrounds, beliefs, and aspirations.
- Creating a new culture from this unstable mixture will be full of uncertainty (for example, “what are standards of acceptable behavior?”) for which there is no obvious solution.
- This cultural experimentation would take a long time and would necessarily decrease efficiency. This, in turn, would clash with current short-termism and demands for constant revenue growth.

External Conundrums in the Short Term
- Will existing companies pull back on their strategy arsenal when they come up against fledging start-ups led and/or owned by minorities?
  - If growth took a hit for the sake of diversity, how would companies realign expectations with shareholders? Could they?
  - If diversity lost out to growth, then would leaders seem to be deeply hypocritical, further undermining trust within our society and, eventually, long-term economic stability?
- Will existing companies truly put human-centered values ahead of maintaining competitive advantage? Would they pull back on efficient supply chains and cheap energy, for instance, for the sake of sustainability, even if that might lead to a decrease in company revenues or its rate of growth?

In this phrase, the word “destabilizing” is broadly descriptive and is not used pejoratively. While following the vision of D-E-I to its conclusions would truly upset current equilibriums of thought and of economic institutions, the resulting changes, although complicated to enact, would probably ultimately be salutary. Also, I should underline that this is a thought experiment outlining probable outcomes of the thorough application of D-E-I values in a business context. It is not a prediction that the egalitarian ethos of D-E-I will emerge triumphant over strategy.

I should explain here that I am not suggesting that D-E-I is necessarily “inefficient.” The inefficiency lies in trying to integrate two very opposing views into business activity – exclusivity and inclusivity – simultaneously within the same organization.

Profitability is still fundamentally important, of course. But it’s different than “competitive advantage” and I don’t believe that competitive advantage is a necessary ingredient of profitability.
In the long term, D-E-I (pursued to its logical conclusions) ultimately may challenge us to judge success by new metrics that strategy does not entail or envision. The most important metric of economic health today is the assumption that continuous growth built by sustaining competitive advantage is an imperative. However, those who are committed to the implications of D-E-I may feel quite differently. For example, perhaps happiness (along with and largely enabled by a decent standard of living) is a more important and valuable goal of business activity?

While adjusting to new internal and external economic relationships in a future calibrated by a “win-win” worldview will be profoundly inefficient in an economy that has been shaped by a “win-lose” worldview, that doesn’t mean that these new kinds of relationships are not attainable eventually. Humans are creative. Can’t we envision and create win-win economic paradigms, not just for a particular relationship between a company and its consumer but for all companies and for all consumers?\(^\text{10}\)

**The “Vision Thing” and Our Future**

While I lament the influence of strategy on business and its subsequent impact on social cohesion and individual well-being, I make no pretention of claiming that I’ve either somehow “disproven” strategy in the details of its execution or shown that it doesn’t have valuable tools and insights that businesses should keep using into the future. We can apply much of the genius used to conceive business strategy to understanding and helping to plan the futures of important, life-affirming organizations and institutions, like hospitals (as Michael Porter himself has notably done in recent years). What I do take issue with is the ultimate vision of business strategy (or lack thereof).

All elaborate systems, plans, and institutions begin with a premise that is the product of a human choice and belief, not of scientific or mathematical laws. Those laws are often used to support a particular premise. The United States, for instance, began with the premise that “all men are created equal.” The only proof Thomas Jefferson provided for that premise in the Declaration of Independence was to say that it was a “self-evident” truth. Because many have accepted that assertion, the country has been generally (if not consistently) shaped by that premise. (It’s life-affirming, egalitarian implications over the decades assured that the numbers of loyal adherents to that premise would grow over time.)

\(^{10}\) For those who are asking themselves about my ultimate vision of a healthy economy for all, that is very much a work-in-progress because this is a difficult problem I’m trying to unearth. So, no, I’m not advocating as a solution (as some might be quick to conclude) a dictatorship in the name of the people often popularly known as “communism” as an alternative. I’m (only) advocating beginning a serious critique of and making major adjustments to the current state of our economy that seems to be causing more harm than good in the long term (an assertion that many will agree with).
Likewise, strategy began with its own premise — i.e., that sustaining “competitive advantage” was the ultimate goal of all business. But because competitive advantage is *not* life-affirming, many people have grown uncomfortable under its yoke, even if they’ve never heard the term “business strategy.” D-E-I is just one of the more notable recent cultural-political movements that implicitly points to a revolutionary conclusion about the way we do business in this country: it’s time to change the premise of strategy; or, perhaps it’s more precise to say that it’s time to change the premise of business that’s been decisively shaped by strategy for more than forty years. It’s also time to realize that *the goal* set out by strategy is not derived from timeless economic theorems, as it often appears to be in its sophisticated applications. It is, in fact, a choice — a choice that we can (as a society) modify or retract if we want to.

What has to happen now is that we need to sharpen our analysis of the social problems engendered by business so that these implicit but imprecise critiques of business strategy (and related business activity) gain power and efficacy through becoming explicit and focused. In other words, you have to see a problem before you can fix it. I’m arguing that the belief that competitive advantage is the ultimate goal of a corporation presents us all with a problem (i.e., an obstacle to prioritizing human needs in business) that needs to be fixed.¹¹

What are the details about some possible solutions? Those are ideas for other articles.

¹¹ And if you’re wondering if I also mean to say that the differences between D-E-I and business strategy as it’s practiced today are irreconcilable, the answer is, “Yes.”
The Russian Sphinx: Contemplating Danilevsky’s Enigmatic Magnum Opus Russia and Europe

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“…This book is based on the idea of the originality lying in the soul of the Slavic world. The book embraces this issue so deeply and fully that it could be called a catechism or codex of Slavophilism.”
- Nikolay N. Strakhov.

“Up to a point, he was successful, after his own fashion, in modernizing Slavophilism without a bizarre confusion of Christian charity and gunfire.”
- Robert E. MacMaster.

Abstract

The relations between Russia and the West have never been particularly easygoing or unambiguous, and, presently, they are yet again at an all-time low. The way to better understand, as well as to successfully communicate and cooperate with another society is through learning about evolution (and revolutions) of their (as well as one’s own) history and culture. Are there any important sources in the Russian cultural heritage that could illuminate these ages-old problems, tendencies, and trends? The year 2021 marks 150 years since publication of Nikolay Danilevsky’s book Russia and Europe (1871), while the next one, the year 2022, denotes 200 years from the date of birth of Danilevsky (1822-1885) himself. The paper highlights multiple sociocultural, sociohistoric, geopolitical, and historiosophic layers of the Danilevsky’s enigmatic civilizational legacy. Based on that analysis, it suggests ways for improving relations between the West and Russia.

Keywords: Danilevsky, Russia and Europe, cultural-historic type, local civilization, Pan-Slavism, Slavophilism, Pochvennichestvo, Fourierism

1 Creating Russia and Europe

During the years 1863-1867 the prominent Russian biologist, historian, mathematician, and philosopher Nikolai Danilevsky led yet another groundbreaking scientific expedition, this time surveying the geography and the wildlife of the Black Sea, as well as its tributaries. From the latter part of 1863 until late in 1867, he conducted a series of six grueling surveys; around the Sea of Azov, to the river Dnieper, to the river Manych, around the Black Sea, to the river Kuban, and to the river Danube. (MacMaster, 1967: 101). Danilevsky’s biographer and translator Stephen M. Woodburn explains:
In the following year, 1863, Nikolai Iakovlevich … was assigned as “head of an expedition for the investigation into the fisheries of the Black and Azov Seas.” This expedition lasted five years. In September 1863 Nikolai Iakovlevich took his family down the Volga to Tsarina, then crossed the Don by rail and went down to the Black Sea. He tried to arrange a permanent residence for his family, first in Feodosia, then in Nikita, but finally settled in Miskhor on the South Coast [of the Crimea] on 9 March 1864. From Miskhor he made six journeys in the following order: in 1864, around the Azov Sea; in 1865, on the Dnieper; in spring 1866; on the Manych [River, tributary of the Don]; in 1867, from 19 May to 19 June, around the Black Sea; from 10 September to 17 October of the same year, to Kuban, and from 23 November to 26 December on the Danube. (Woodburn, 2013: XXXI).

In the year 1866, for an outstanding performance in conducting biological, geological, geographical, climatological, and ethnological research, the scientist and explorer won the highest award of the Imperial Russian Geographical Society — the coveted Constantine Medal. (MacMaster, 1967: 101). During the same years, filled with intense scientific research, field, and administrative work, between 1865 and 1868, Danilevsky wrote his historic, politological, and philosophical treatise Russia and Europe.

What is this book? Why, after its appearance exactly one hundred and fifty years ago, do scholars and thinkers, as well as geopolitical “movers and shakers” continue to argue about its meaning? Perhaps, one of the reasons is that it is not one book, but rather several books in one. Like the iconic Russian wooden “matryoshka doll,” the volume contains multiple layers of historiosophy, geopolitics, culture, and even arts, as well as a whole lot of theorizing about the evolution of societies and, of course, about human nature. Let us take a brief look at the historic and cultural movements contextualizing, as well as a number of seminal ideas underlying this perplexing work.

2 Russia and Europe as a “Catechism or Codex of Slavophilism”

Danilevsky’s complex book reflects in itself multiple historic as well as contemporary sociocultural, socioeconomic, and historiosophic ideas, movements, and trends. Among some of the most influential are Pan-Slavism, Slavophilism, Pochvennichestvo, and Fourierism.

2.1 Pan-Slavism

Pan-Slavism was an ideology and a movement among the Slavic peoples in the 18th and the 19th centuries.

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1 Tsaritsyn (1589–1925), then Stalingrad (1925–1961), and presently Volgograd - a city on the western bank of the Volga river. (Author’s note).
It originated and was most widely spread in the Balkans, where the non-Slavic powers, such as the Byzantine Empire, the Republic of Venice, the Austro-Hungarian Empire, and the Ottoman Empire had ruled the South Slavs for centuries. Recognizing a common ethnic, historic, cultural, and linguistic background among the Slav peoples, Pan-Slavism was based on the idea of some form of Slavic integration and/or unification for the achievement of the common cultural and political goals. The American philosopher and historian Hans Kohn summarizes:

Pan-Slavism, a movement in which nationalist elements were mingled with supranational and often imperialist trends, was a product of the political awakening of the intellectuals in central and eastern Europe, which was brought about by the French Revolution and the Napoleonic Wars. But even more potent was the influence of German romanticism and of a linguistic Pan-Germanism as represented by Arndt and Fichte. Pan-Slavism proclaimed the affinity of various peoples, in spite of differences of political citizenship and historical background, of civilization and religion, solely on the strength of an affinity of language. It could thus arise only at a time when under the influence of Johann Gottfried Herder the national language, the mother tongue, was regarded as a determining factor for man’s loyalty — and his intellectual and spiritual life. … In 1826, the word Pan-Slavism was first used. Like similar words — nationalism, socialism, etc. — it owed its origin and its spread to the early 19th century. (Kohn, 1960: IX; 325).

2.2 Slavophilism

Another source for Danilevsky’s concepts has been the movement known as Slavophilism. In the mid-19th century, Russia is beginning to absorb the ideas and culture of Western Europe at an accelerated pace, and that inexorably creates an unstable sociocultural and socioeconomic climate. There is a tremendous growth in revolutionary activity accompanying a general restructuring of tsardom where liberal reforms, enacted by an unwieldy autocracy, induces a sense of tension in both politics and civil society.

Slavophiles vigorously oppose the dissemination of Western institutions in Russia, and, instead, envision its development upon the values derived from its early history. Some of the founders of the Slavophiles movement are littérateur Ivan S. Aksakov (1823–1886), his brother, critic and writer Konstantin S. Aksakov (1817–1860), religious poet Aleksey S. Khomyakov (1804–1860), literary critic and philosopher Ivan V. Kireyevsky (1806–1856), historian and journalist Mikhail P. Pogodin (1800–1875), one of the architects of the Emancipation reform of 1861 Yuri Samarin (1819–1876), great Romantic poet Fyodor I. Tyutchev (1803–1873), and poet Nikolay M. Yazykov (1803–1846).
Besides Danilevsky, among the most prominent Russian thinkers influenced by Slavophiles ideology are author and philosopher Konstantin N. Leontyev (1831–1891), writer and philosopher Fyodor M. Dostoevsky (1821–1881), writer and philosopher Leo N. Tolstoy, religious and political philosopher Ivan A. Ilyin (1883–1954), as well as the 20th century novelist and historian Aleksandr I. Solzhenitsyn (1918–2008).

There is quite a difference of opinions among social thinkers about the roots of Slavophilism itself. Some Western scholars suggest them to be German classical philosophy (Schelling, Hegel) and the German idealism (Friedrich von Schelling). The American political science scholar Thornton Anderson notes:

Often presented as an indigenous pattern of thought peculiar to Russia, Slavophilism becomes more readily understandable if viewed instead as a part of the great philosophical reaction against the devastating rationalism of Hume, Voltaire, and the French Revolution. Its elements — its admiration for ideals (even when plainly contradicted by realities), its opposition to materialism and its tendency toward mysticism, its emphasis upon religion and its attempt to submerge reason in it — in short, its inconsistencies and irrationalities, then are more understandable. The most fruitful segment of that reaction, German idealism, attained in Friedrich von Schelling a form of religious mysticism adaptable to Russian Orthodoxy, and beginning with the professors of science in the universities, his system gradually captivated many Russians. It thus formed the principal connecting link by which the conservative thought of the West spread to Russia and reinforced opposition there to the importation of innovations from the West. (Anderson, 1967: 213).

Yet, the Slavophiles themselves defended the idea of the originality of Slavophilism, describing it as having been built on the premises of the Byzantine sociohistoric and religious heritage, as well as Russian Orthodox theology. In some ways, a classic of civilizational thought, the British historian Arnold J. Toynbee reconciles those contradictory views. He notes that in any society that needs to confront a more powerful adversarial civilization, two movements may arise: Herodianism — calling for the introduction of new ideas, as well as copying the advanced foreign institutions, and Zealotism — advocating isolation in order to preserve the traditional way of life. (Toynbee, 1957: 231-238)

2.3 Pochvennichestvo

Pochvennichestvo² was a late 19th-century movement in Russia that, while sharing a number of features with Slavophilism, represents a more conservative and assertive version of it.

² Pochvennichestvo: from Russian “почва” - “soil.” (Author’s note).
The prominent representatives of this school of thought were the writer and philosopher of history Konstantin Leontyev, philosopher, publicist and literary critic Nikolay N. Strakhov (1828-1896), as well as Danilevsky himself.

While supporting the emancipation of serfs, both the Slavophiles and the Pochvenniki rejected the universalism of the Enlightenment and the liberal and the Marxist ideas, as well as opposed Europeanization in general. At the same time, Pochvenniki adopted a more assertive anti-Protestant, anti-Catholic, and generally anti-Western stance, as well as embraced Pan-Slavism.

As is evident from Danilevsky’s and Leontyev’s legacy, they also developed and advocated the view of history as evolution of the unique “local” civilizations (cultural-historic types) while extolling the “true and eternal” virtues and values of the steeped in the Byzantine sociocultural, sociopolitical, and religious tradition Pan-Slavic “civilization.”

### 2.4 Fourierism

In the 1840s, the utopian-socialist ideas of the French thinker Charles Fourier are becoming very popular among the younger representatives of Russian intelligentsia.³ Danilevsky eagerly studied and has been greatly influenced by them. For example, the features of the Fourier’s phalanx ⁴ may be discerned in Danilevsky’s idealized depiction of the Russian rural obshchina.⁵

The American historian Frank Fadner notes that “the principle of nationality which supported the ideological structure of pan-Slavist thought ... most completely synthesized in the work of N. Ya. Danilevskii. ...” (Fadner, 1962: 1). The Danilevsky’s biographer and translator Stephen M. Woodburn agrees, noting that “… classical Slavophilism lacked ambition and goals, its adherents having a narrowly Russian focus, rooted in the past. Danilevskii crystallized the identity politics of the Slavophile movement, but gave it a broader future orientation outside Russia’s borders. (Woodburn, 2013: XII-XIII). The Russian philosopher, publicist and literary critic Nikolay N. Strakhov recapitulates: “It is certainly logical to attribute Russia and Europe to what is called the Slavophile school of our literature, since this book is based on the idea of the originality lying in the soul of the Slavic world. The book embraces this issue so deeply and fully that it could be called a catechism or codex of Slavophilism.” (Strakhov, 2013: XXXVIII).

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³ François Marie Charles Fourier (1772 – 1837) - a French philosopher and one of the founders of utopian socialism. (Author’s note).
⁴ Phalanx - a utopian socialist commune. (Author’s note).
⁵ Obshchina (Russian for "commune") peasant village communities in Imperial Russia in the 19th and 20th century. (Author’s note).
Thus, there is a definite consensus among prominent social scholars and thinkers, that Danilevsky has skillfully conflated, laboriously substantiated (correctly or not), and impressively aggrandized the main ideas of Pan-Slavism, Slavophilism, and of related schools of thought, as well as “weaponized” them, thus creating a Bismarckian-type theory of a hard-nosed Pan-Slavic “realpolitik.” Let us now look deeper into Danilevsky’s thought process.

3 Russia and Europe as an attempt at great historiosophy

3.1 Cultural-historical types as local civilizations

Encyclopedia Britannica authoritatively informs us that Danilevsky “was the first to propound the philosophy of history as a series of distinct civilizations.” (Danilevsky, 2021). The thinker publishes his classic book, initially as a series of articles, in a monthly literary and political journal Zarya during the year of 1869.

Danilevsky is unhappy with canons of the contemporary to him, religion-based historic studies which claim a linear, teleological evolution of world history, as well as a rigid division of it into “ancient,” “medieval,” and “modern” periods. As a natural scientist, Danilevsky is searching for a rational as opposed to a superficial method of study of the sociocultural world. In other words, he strives to offer a Copernican-type rather than a Ptolemaic-type system of social sciences, and he calls it a “natural” versus an “artificial” approach. (Danilevsky, 2013: 58-75).

The scholar identifies four categories of the sociohistoric activity in various societies: religious, cultural, political, and socioeconomic (Danilevsky, 2013: 405). In this thinker’s view, those have given rise to ten cultural-historical types: Egyptian; Chinese; Assyrian-Babylonian-Phoenician; Chaldean or ancient Semite; Indian; Iranian; Jewish; Greek; Roman; neo-semitic or Arab; Germanic-Roman or European. (Danilevsky, 2013: 73). According to the scholar, those and other advanced societies develop according to certain “laws of historical development”:

“Law 1. Any tribe of family of peoples characterized by a separate language or group of languages with similarities that can be readily detected without deep philological investigation constitutes a distinct cultural-historical type, it has already grown out of its infancy and is inclined toward and generally capable of historical development.
Law 2. For the civilization of a distinct cultural–historical type to be born and develop, the peoples belonging to it must have political independence.
Law 3. The principles of civilization for one cultural-historical type are not transferrable to the peoples of another type. Each type produces its own, influenced more or less by foreign civilizations preceding or contemporary to it.

6 “Zarya” (In Russian: “dawn”) was published in Saint Petersburg, Russia in 1869-1872. (Author’s note).
Law 4. The civilization of each cultural-historical type only attains fullness, diversity, and richness when its diverse ethnographic elements, independent but not combined into a political whole, form a federation or political system of states.\(^7\)

Law 5. The course of development for cultural-historical types closely resembles that of perennial plants that bear fruit only once, whose period of growth is indefinitely long, but whose period of flowering and bearing fruit is relatively short and exhausts its vitality once and for all.” (Danilevsky, 2013:76)

As it is clearly evident, Danilevsky consistently turns to bio-organismic metaphors in his analysis of his cultural-historical types, which, in his mind, originate and develop similar to living organisms. Each type proceeds through the predetermined stages of youth, adulthood, old age, and demise. And, just like live organisms, Danilevsky’s cultural-historic types are in a continuous competition with each other, as well as with the external environment. Thus, the course of history represents a process of displacement of one cultural-historical type by another. Stephen M. Woodburn comments on Danilevsky’s natural science-influenced analytical approach:

Here his scientific career informed his politics. It is crucial to remember that Danilevskii the nationalist was first and foremost a naturalist (or what we now call a biologist), concerned with the proper classification of specimens by their inherent similarities or differences. His vocation provides the essential metaphor and the scientific-positivist outlook shaping his book. …As a naturalist he was concerned with proper classification, grouping like organisms together on the basis of similarities. (Woodburn, 2013: XII).

As to Europe and the Slavs, Danilevsky believes that they represent fundamentally different sociohistoric types. The scholar perceives the Slavic sociocultural type as an entity in its youthful prime and conceives a geopolitical agenda for its future. The plan involves integration of the Slavic peoples into a Pan-Slavic Union with its capital in Constantinople. In relation to the New World, Danilevsky puts forward a similar idea of a forthcoming new and uniquely American cultural-historical type. (Danilevsky, 2013: 192; 368). Stephen M. Woodburn reviews for us Danilevsky’s thought process:

The book can be divided into three sections. The first, chapters 1-7, develops his theory of the biology of nations to explain the disconnect between Russia and Europe, and compares his theory to other sciences — which progress from data collection to an “artificial system” or flawed paradigm that requires a “natural system” or improved paradigm to resolve its flaws — to justify his theory of cultural-historic types as a “natural system” of this kind for the study of human history.

\(^7\)A correct translation from Russian would be “independent and not combined into a political whole, form a federation or political system of states.” See: p. 116 in Danilevsky, N. I. (2008). Russia and Europe. (In Russian). Moscow: Terra. (Authors’ note).
The second section, chapters 8-11, delves deeper into history to explain a series of differences or distinctions (razlichiiia) between the Germanic-Roman and the Slavic types: the difference in mental framework, the confessional or religious difference, and the difference in the course of historical upbringing. It concludes in an examination of Russian history diagnosing “Europeanism” (evropeinichan’e) as the sickness or syndrome afflicting Russia in its development forcing its growth into an unnatural course. The last section, chapters 12-17, concerns the Eastern Question (the host of issues surrounding the decline of the Ottoman Empire and the fate of its territories and waterways), in which Danilevskii saw a coming shock that would jolt the Russian national spirit to awaken from its slumber, shake off this disease, and fulfill its historical destiny: to create a political federation of Slavic states with Russia at the head, bringing the Slavic cultural-historical type to fruition. The second and third sections account for Danilevskii’s association with the Slavophiles and the movement known as Pan-Slavism, although this requires some context. While he did quote Slavophiles in the text and epigrams throughout the work, and while his friend Strakhov called the book a “catechism or codex of Slavophilism,” Danilevskii pressed the romantic nationalism of the Slavophiles into the pragmatic mold of Bismarckian Realpolitik. (Woodburn, 2013: XXIV).

3.2 Criticism of Danilevsky’s theory

Danilevsky is a true pioneer of the macro-level and long-term sociocultural studies. In his classic book, he laid the foundations of a number of scholarly areas of expertise. Practically all the scholars of global studies owe a debt of gratitude to him. The scholar brilliantly succeeds in criticizing the linear notion of the progression of world history and especially of the contemporary (to him) artificial division of it into the consequently arranged “ancient,” “medieval,” and “modern” periods. He correctly asserts that every society may have its own stages of sociohistoric evolution. However, he also made mistakes since some of the most fundamental laws of the structure and evolution of the sociocultural universe have been discovered only after his untimely demise during his last scientific expedition in 1885. (Sorokin, 1956, 1963, 1966, 1991).

For example, when it comes to the elaboration of the evolution of “life-careers” of the “cultural-historic types,” his highly metaphoric bio-organismic concept understandably falters. Being a naturalist, Danilevsky “appropriates” his notions and concepts from the familiar, contemporary to him “toolbox” of natural sciences. He did not, and could not take in to consideration yet undiscovered properties, characteristics, and regularities, specific only to the sociocultural universe. As a result, his highly metaphoric schema of the structure and the evolution of the “cultural-historic entities” remained, in his own words, “artificial.” Pitirim A. Sorokin addresses the structure of Danilevsky (and his followers) “artificial” paradigm of the sociocultural universe as follows:
The first fatal shortcoming of Danilevsky’s, Spengler’s, and Toynbee’s conceptions (on this point) consists of their acceptance of their “cultural-historical type,” High Culture, or “civilization” as a real unity, in the sense of either a causal or a causal-meaningful system. Like the so-called “functional anthropologists” and “totalitarian integrators,” they assume that the total culture of each of their “prototypes,” High Cultures, and “civilizations” is completely integrated and represents one meaningfully consistent and causally unified whole, thus making a sort of cultural supersystem that embraces in itself all the cultural phenomena of the Egyptian, Chinese, Appollinian, Magian, Faustian, or any other culture-civilization they mention. (Sorokin, 1963: 209).

Grounding his analysis in the fundamental theory of social and cultural dynamics Sorokin further explains that “the Danilevsky-Spengler-Toynbee type, High Culture, or civilization is neither a causal, nor a meaningful, nor a causal-meaningful system, but rather a cultural field where a multitude of vast and small cultural systems and congeries — partly mutually harmonious, partly neutral, partly contradictory — coexist. A part of the systems are meaningfully and causally connected to make vaster systems; a part are connected through causal ties only; a part only through indirect causal ties; and a large part are nothing more than spatially adjacent congeries. The totality of all these systems and congeries does not make any unified cultural system, whether Egyptian, Babylonian, Magian, or Mayan “civilization” or “culture-historical type.” … Thus all three scholars make the basic error of taking for a civilizational-cultural system something that is no unity at all. They crown this error by the further one of mixing up the cultural and social systems (organized groups), and they display an additional inconsistency even in this operation. After all, the Danilevsky-Spengler-Toynbee classifications are not so much classifications of civilizational or cultural systems as they are of social systems (organized groups).” (Sorokin, 1963: 213-214; 216).

As to the essential characteristics of theories which belong to the bio-organizmic paradigm, Sorokin briefly summarizes them as follows:

First, the society or social group is a special kind of an organism in a biological sense of the word. Second, being an organism, society resembles, in its essential characteristics, the constitution and the functions of a biological organism. Third, as an organism, society is subject to the same biological laws as those by which a biological organism functions and lives. Fourth, sociology is a science which is to be based primarily upon biology. (Sorokin, 1956: 201-202).

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The “life-careers” of groups and societies obviously differ from those of plants or living organisms. Sorokin notes referring to the fallacy of the organismic univariant life-course of their “civilizations”:

The second mistake of Danilevsky, Spengler and Toynbee (in his earlier volumes) is their contention that the life-course of all civilizations runs one univariant “organic” cycle: They are all born, then grow, and eventually disintegrate and die. This unduly generalized model of the life-course of civilizations can, at best, be applied to some of the organized social groups as the central agency of each of their “civilizations.” … But in no way can the univariant model of birth, maturity, and death be applied to any of the “civilizations.” Since the total culture of each of these “civilizations” has never been integrated into one consistent system, it evidently cannot disintegrate. (Sorokin, 1966, 219-220).

Thus, as an attempt at grand historiosophy, Danilevsky’s work fails to meet the rigorous criteria of contemporary scientific social research. The historiosophic schema, scrupulously elaborated by Danilevsky, is ultimately incorrect, although impressive. While striving to discover a rational, “natural” theory, he was able to offer only a highly metaphorical, “artificial” theory of humanity’s historic evolution. As all metaphorical schemas, it can only “work” within certain limits and to a certain extent.

### 3.3 New concepts

As we have already observed, Danilevsky’s book prefigured a number of theories in Oswald Spengler’s *The Decline of the West*, Arnold Toynbee’s *A Study of History*, Carroll Quigley’s *The Evolution of Civilizations*, and multiple other important sociohistoric sources, essentially establishing the field of the *comparative theory of civilizations*. For example, continuing in the framework of Danilevsky’s paradigm, Toynbee had proposed five main stages of the civilizations-societies evolution: *Genesis, Growth, Time of Troubles, Universal State, and Disintegration*. Quigley has expanded their number to seven: *Mixture, Gestation, Expansion, Age of Conflict, Universal Empire, Decay, and Invasion*. However, the model remained not only cyclical, which for the developed societies is essentially correct (they are all finite), but unnecessarily rigid.

Yet, there are ways to solve this problem. Using the results of contemporary fundamental social research, we have developed a “universal” model of the sociohistoric evolution of societies. In it, we not only increased the number of stages to nine, but also introduced a virtually unlimited amount of possible variations. It includes such stages as: *Emergence of Groups; Formation of Societies; Mixture; Gestation; Expansion; Conflict/Time of Troubles; Universal State/Empire; Decay, and Invasion / Implosion / Force Majeure* stages.
A society (or a “civilization,” perceived as society) proceeds either through all or through a certain unique combination of those nine main stages.

It also incorporates Toynbee’s *Hellenic, Chinese, and Jewish models*, Toynbee’s later stage “arrest” and “petrifaction” stages, as well as various Toynbee’s patterns of societal disintegration (‘two-and-a-half beat,’ ‘three-and-a-half-beat,’ ‘four-and-a-half beat,’ ‘five-and-a-half beat’), etc. One of the main characteristics of such a model is its flexibility. While including all of the stages proposed by Danilevsky, Leontyev, Spengler, Toynbee, Quigley, and others, it encompasses virtually unlimited variations of societal evolution. (Alalykin-Izvekov, 2011: 107-114).

4 Legacy

4.1 Danilevsky’s ideas and contemporary political discourse

Despite the flaws which are obvious to a contemporary social scholar, Danilevsky’s book has become a rather successful “piece of political prognostication and prophecy” (Sorokin, 1966: 187), thus making a considerable impact on philosophy of history, political theory, and the field of the *comparative theory of civilizations*, among others. In some ways, it also tangibly and rather disastrously influenced the external policies of the declining Russian Empire in its waning years.

*Marxism-Leninism-Stalinism* has interrupted the trajectory of Russia’s development along the path of *Slavophilism* and *Pan-Slavism*, and for most of the 20 century propelled it down the road of “class struggle” and “world revolution.” Yet, after 70 years of embracing those policies, Russia may be now returning to Danilevsky’s paradigm of multiple local civilizations (cultural-historic types) as opposed to the universal, global civilization, and choosing “every civilization for itself” policies and strategies.

Scholars agree that Danilevsky’s magnum opus has played, is playing, and is likely to continue playing an important role in Russian intellectual history. For example, Danilevsky’s ideas may have resumed their influence on contemporary political discourse. Let us see if we can discern the overtones of Danilevsky’s ideas in the national and ethnic agenda of the Russian President Vladimir V. Putin:

The Russian experience of state development is unique. Ours is a multiethnic society; we are a united people. This makes our country complicated and multidimensional and gives us unique opportunities for development in many spheres.

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However, when a multiethnic society is infected with the virus of nationalism, it loses its strength and stability. We must understand the far-reaching consequences of indulging those who are trying to incite ethnic strife and hatred towards people of other cultures and faiths. … The Russian people are state-builders, as evidenced by the existence of Russia. Their great mission is to unite and bind together a civilisation. … This kind of civilisational identity is based on preserving the dominance of Russian culture, although this culture is represented not only by ethnic Russians, but by all the holders of this identity, regardless of their ethnicity. It is a kind of cultural code, which has been attacked ever more often over the past few years; hostile forces have been trying to break it, and yet, it has survived. (Putin, 2012).

The echo of Danilevsky’s ideas may be also heard in recent statements of the Russian foreign envoys. On February 12, 2021, the top Russian diplomat mentioned that Russia is ready to sever ties with the European Union if the bloc would impose new, economically painful sanctions. He added: "If you want peace, prepare for war." (Lavrov, 2021). That same week German President Frank-Walter Steinmeier noted that “energy ties are almost the last bridge between Russia and Europe.” (BBC News, 2021). Stephen M. Woodburn correctly recapitulates:

… It is worth persisting with this text because of its important place in Russian intellectual history of the nineteenth century, and its impact on the thinking of a growing number of twenty-first-century readers. Danilevskii provides essential background for Russian Pan-Slavism and Eurasianism, the ideologies best poised to inform Russian policy over the next decades. This makes a case for calling Russia and Europe the most important nineteenth-century book for the post-Soviet period, and thus an object worthy of further study by specialist and non-specialist alike. (Woodburn, 2013: XXV).

4.2 What’s next?

Let us take a view of the planet as a whole. We see that, presently, the world is in deep distress. Humanity is dealing with unprecedented challenges, which include overpopulation, resource depletion, and global warming (Targowski, 2009). Starting in 2019, the world witnessed the COVID-19 pandemic unleashing its terrific force on human communities, cities, and societies around the planet.

The pandemic has greatly amplified already existing social, racial, ethnic, and economic disparities. Spurred by the pandemic, social tensions have ensued. (Alalykin-Izvekov, 2020; 2014). The adequate and extensive sociocultural and socioeconomic reforms are needed to ensure the continuing viability of humanity as a whole.
While Russia is “finding her roots,” the West, not excluding its leading nation, the United States, may be experiencing a “midlife crisis” of its own. In the aftermath of European Union Migrant Crisis (2014-Present), Hurricane Katrina Calamity (2005), Black Lives Matter Movement (2013-Present), Coronavirus COVID-19 Pandemic (2019-Present), Storming of the US Capitol by Insurrectionists (2021), Texas Power Crisis (2021), European Union Coronavirus COVID-19 Vaccination Debacle (2020-2021), it may need to take a long and hard look at the civil, political, social, ethnic, racial, cultural, and human rights issues in its own realm.  

As our analysis demonstrates, Russian and Western elites may be finding ourselves in rather different mental civilizational paradigms, and therefore, operating in different civilizational frameworks. While Western elites tend to think and act in the universe of the Fukuyamian “End of History” paradigm of the liberal “universal” and “global civilization,” the Russian upper classes are inclined to think and act in the framework of the Danilevsky-type, “pluralistic” world of multiple “local civilizations” (“cultural-historic types”). As a result, the present level of the relations between the West and Russia is dangerously low. The obvious and reasonable foundation for balanced and mutually beneficial relations between Russia and the West may be something that both sides can agree on. Such a foundation exists. It is the Universal Declaration of Human Rights together with other related documents, such as the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social, and Cultural Rights.

In his monograph on the origins and the evolution of universal human rights, the American scholar Jack Donnelly postulates, “human rights have become a central, perhaps even defining, feature of our social and political reality. The vison of human dignity they reflect and seek to implement is accepted by almost all states as authoritative, whatever their deviations from these norms in practice.” (Donnelly, 2003: 61).

The Universal Declaration and other UN documents enshrine the essential rights, values, and freedoms of all human beings. Created following the horrors of World War I and World War II, it was accepted by the General Assembly in Paris, France on December 10, 1948.

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The Universal Declaration model treats internationally recognized human rights holistically, as an indivisible structure in which the value of each right is significantly augmented by the presence of many others. (Donnelly, 2003: 27).

The principal drafters of the Universal Declaration were representatives of many countries — Canada, France, USA, USSR, Lebanon, China, and Chile. (Donnelly, 2003: 61). All member states of the United Nations have either signed on in agreement with the Universal Declaration of Human Rights or ratified at least one of the nine binding treaties influenced by the Declaration, with the vast majority ratifying four or more. Presently, all involved sides, including Russia and the West, could substantially benefit from carefully re-reading those fundamental documents, as well as actually acting on them.

Conclusions

1. Nikolay Ya. Danilevsky is a major representative of 19th century sociocultural, historiosophic, sociopolitical, and socioeconomic thought. His magnum opus Russia and Europe contains multiple layers of a thoroughly elaborated civilizational legacy. Among important sources for Danilevsky’s ideas are many seminal historic and contemporary theories, including such major schools of thought as Pan-Slavism, Slavophilism, Pochvennichestvo, and Fourierism. There is a definite consensus among social scholars and thinkers that Danilevsky has skillfully conflated, laboriously substantiated (correctly or not), and impressively aggrandized the main ideas of Pan-Slavism, Slavophilism, and of related schools of thought, as well as “weaponized” them, thus creating a Bismarckian-type theory of a hard-nosed Pan-Slavic “realpolitik.”

2. However, as an attempt at great historiosophy, the work fails to meet the rigorous criteria of contemporary scientific social research. The scrupulously elaborated by Danilevsky highly metaphoric historiosophic paradigm is ultimately incorrect, though impressive. It offers, in his own words, an “artificial” theory of humanity’s historic evolution. As all metaphorical constructs, it can only “work” within certain limits and to a certain extent. It is not the scholar’s fault since many important laws and regularities of the structure and evolution of the sociocultural universe have been discovered only after his untimely demise in 1885. Despite flaws which are obvious to a contemporary social scholar, Danilevsky’s book has become a rather successful “piece of political prognostication and prophecy,” thus making a considerable impact on philosophy of history, political theory, and the field of the comparative theory of civilizations, among others. In many ways, it also tangibly influenced the external policies of the declining Russian Empire in its waning years.
3. Danilevsky’s book prefigured a number of theories of other prominent social scholars, essentially establishing the field of the *comparative theory of civilizations*. However, his and his followers’ models remained not only cyclical, which for the development of societies is essentially correct (they are all finite), but unnecessarily rigid. Using the results of contemporary fundamental social research, we have developed a “universal” model of the sociohistorical evolution of societies. In it, we not only increased the number of stages but also introduced a virtually unlimited amount of possible variations. Since one of the main characteristics of our model is flexibility, it encompasses a virtually unlimited amount of variations of societal evolution.

4. *Marxism-Leninism-Stalinism* has interrupted the trajectory of Russia’s development along the path of *Slavophilism* and *Pan-Slavism*, and for most of the 20th century propelled it down the road of “class struggle” and “world revolution.” Yet, after 70 years of embracing those ideologies and based on their policies, Russia may be now returning to Danilevsky’s paradigm of multiple *local civilizations* (cultural-historic types) as opposed to the *universal, global civilization*, and choosing “every civilization for itself” policies and strategies. Scholars agree that Danilevsky’s magnum opus has played, is playing, and is likely to continue playing an important role in Russian intellectual and sociopolitical history. Providing an essential basis for the *Russian Pan-Slavism and Eurasianism*, it may influence Russian ideological paradigms and policies for decades to come.

5. At the same time, the *West* may be experiencing a “midlife crisis” of its own. In the aftermath of the *European Migrant Crisis* (2014-Present), *Hurricane Katrina Calamity* (2005), *Black Lives Matter Movement* (2013-Present), *Coronavirus COVID-19 Pandemic* (2019-Present), *Storming of the US Capitol by Insurrectionists* (2021), *Texas Power Crisis* (2021), and *European Union Coronavirus COVID-19 Vaccination Debacle* (2020-2021), it may need to take a long and hard look at the civil, political, social, ethnic, racial, cultural, and human rights issues in its own realm.

6. As our analysis demonstrates, Russian and Western elites may be finding ourselves in rather different mental *civilizational paradigms*, and therefore, operating in different *civilizational frameworks*. While Western elites tend to think and act in the universe of the *Fukuyamian “End of History”* paradigm of the liberal “universal” and “global civilization,” the Russian upper classes are inclined to think and act in the framework of the Danilevsky-type, “pluralistic” world of the multiple “local civilizations” (“cultural-historic types”). As a result, the present level of the relations between the West and Russia is dangerously low.
The obvious and reasonable foundation for balanced and mutually beneficial relations between Russia and the West may be something that both sides can agree on. Such a foundation exists. It is the *Universal Declaration of Human Rights* together with other related documents, such as the *International Covenant on Civil and Political Rights* and the *International Covenant on Economic Social and Cultural Rights*.

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The Architecture of the Universe:  
A Look into Extraterrestrial Civilizations

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Abstract

The article advances a synthesized view of the world based on an intelligently communicated undivided Universe. It presents a fundamental component-based architecture and characterizes the controlling role of info-communication processes in the interplanetary system. The Fermi Paradox is then considered, which leads to a discussion about the concept of God as it pertains to Albert Einstein’s and Stephen Hawking’s theories. The article next introduces the author’s own understanding of God. The approach adopted in this study situates Earth’s civilization within the broader context of extraterrestrial civilizations, and it considers what this means for modern humans. Further research is also suggested in this area regarding the current needs of human civilization on Earth. The study uses an IT approach that is based on system-integrated info-communication processing. The approach is horizontal rather than vertical, which is popular for natural sciences such as physics and chemistry.


Introduction

The purpose of this study is to present the architecture of an intelligently communicated undivided Universe and, on this basis, to characterize the approach to this worldview. It is a worldview that unites previous worldviews. Although worldviews thus far seemingly contradict one another, when analyzing and interpreting their nature, it appears that, apart from their extreme elements, they can be made consistent with one another. This is possible due to the progress of info-communication-driven science and technology.

Whether the Universe is (a) stable or unstable, (b) open or closed, (c) shrinking or expanding, or (d) flat or spherical has no practical meaning for humans, for the processes shaping the Universe are carried out over exceptionally long periods, measured in millions and billions of years.
Whether the Universe will last another 50 or 60 billion years is also not practically important for humans; however, this does not mean it is not necessary to do research on the nature of the Universe, as some findings can affect our transient lives.

Although the affairs of the Universe are not the subject of daily interest and concern for most people, an understanding of what governs the Universe can bring us contentment, for it can help us see that we are not alone in this hot “soup” of gases, liquids, solids, and other frightening ingredients. Moreover, there is a real possibility that we may be able to colonize Mars and the Moon, which is currently being explored as part of a business project by the two richest people in the world. It is, therefore, important to develop a view of the world that is undivided and connected, for it can provide a basis for meaningful modern education for enlightened and wise people.

This study is based on an information technology (IT) approach that characterizes information and system-integrated processes in terms of their technologicality in the Universe. It is more of a horizontal (taking into account many fields) than the vertical (specialized) approach, which characterizes individual sciences such as physics and chemistry. The study does not analyze the probability of life on other planets. The literature is extensive and constructive on this subject (Wallace, 2020). The analysis presented in this paper argues that Earth is a relatively young planet. After all, it was formed 9.5 billion years after the Big Bang and the creation of the Universe as we have known it, and other planets probably formed earlier; thus, there is most likely an exceptionally long history of civilization development. Furthermore, while it has taken Earth-based civilizations the last 500 years to develop modern science and send humans to the moon, aliens may have known modern science and technology for millions of years (and maybe longer). Therefore, their level of civilizational technology and role in the functioning of the Universe is likely dramatically more developed than that of the people of Earth.

The opinion of the eminent science fiction author Arthur C. Clark is amazement at the following thought: “There are two possibilities. Either we are alone in space or we are not. Both are terrifying.” Furthermore, the famous astrophysicist Avi Loeb, head of Harvard University’s Department of Astronomy, says that “extraordinary conservatism keeps us extraordinarily ignorant” (Loeb, 2021). In this study, therefore, let us look at the Universe from a position not of physics, but of a technologist of info-communication-oriented civilization development.

Civilization at the Crossroads in the 21st Century

Thanks to advances in education, people in the 21st century have come to realize that their civilization is failing because of a risky lifestyles and the depletion of strategic resources (Targowski, 2019), including global warming.
As a result, some now believe the solution to be the colonization of other planets, including Mars (which is being pursued by the world’s richest person, Elon Musk) and the Moon (being pursued by Jeff Bezos, the second richest person in the world). These businessmen see colonization as an important goal full of business potential.

This immediately begs the question whether we humans, as highly intelligent organisms, are alone in the Universe. This is probably one of the most important scientific and philosophical questions that can and should be asked today. Now, in the 2020s, we are approaching an answer in the affirmative: biological life is possible in the Milky Way galaxy and beyond. The number of planets with living organisms is estimated to be huge, perhaps in the order of billions. In the next 25 years, we may find an answer to the question of what life is like in spaces closest to Earth. We can get this knowledge by carrying out excavations with the help of advanced science on planets nearest to us, searching for similar forms of life, as we know on Earth. That advanced science possesses such possibilities is evidenced, for example, by the confirmation of the existence of the Higgs boson particle (called the “God particle” by some), which is said to have existed before the Big Bang. Nonetheless, so far, science has not attempted to investigate the times before the Big Bang.

Over the years, the constitution of the Universe has been a problem that has occupied the best and the brightest minds among theologians and scientists. The first modern breakthrough was made by Nicholas Copernicus about 500 years ago. Several centuries later, in the 20th century, our understanding was expanded by the bold theories of Albert Einstein, Edwin Hubble, Roger Penrose, Stephen Hawking, and others. Numerous authors of science fiction, such as Isaac Asimov and Stanisław Lem, also contributed to our knowledge. Science continues to uncover the great mystery of the Universe and life; however, the more we know about it, the more pessimistic our view of humanity’s fate can be. The greatness of the Universe and our own smallness are in such contrast that it seems that we are stuck in a hopeless situation, even if we only consider the prospect of life on earth. However, the study of the Universe can bring some unexpected surprises, and humanity may have a future if we decipher the mystery of how and by whom the Universe was created.

**Conflicting Views on the Universe in the 21st Century**

We can distinguish the following worldviews about the universe, which at first glance may appear mutually exclusive:

- **Theological view of the world**: God voluntarily created a free world in which humans have the autonomy to choose their own aims of life; however, if people should choose to live in love and goodness, the result will be eternal transcendental salvation. Different religions differ in the details.
- **A naturalistic view of the world**: Humans are a random byproduct of chaotic but evolutionary natural forces. From this perspective, the world is created by the natural forces themselves. We humans must “redeem ourselves” through science, technology, and wisdom. The starting point is Darwin’s theory of evolution, according to which there is natural selection and the most fit survive.

- **Intelligent design**: Nature has patterns, the best explanation of which is a deliberate design rather than a random chance. This perspective argues that Darwin’s theory has too many gaps and unexplained situations to be true (Dembski & McDowell, 2008). This view is met with criticism from scientists that it is a hidden continuation of religious views.

- **Extraterrestrial intelligent civilization (ETC)**: The debate on extraterrestrial life has had a huge impact on science, popular culture, and secular and theological worldviews. Such discussions have led to a non-anthropocentric worldview, called “biophysical cosmology”. This cosmology is still unproven, but if extraterrestrial intelligences are discovered, the cultural impact of the debate so far will only be a minor prelude. The result of this approach has been the search for extraterrestrial intelligence (SETI), which includes watching for signals from extraterrestrial civilizations and investigating reports of UFOs (such as the 2017 UFO sighting that occurred in the US State of Nevada).

These worldviews appear to be mutually exclusive, and their supporters have been fighting ruthlessly and bloodily to uphold them for millennia; however, the views are, in fact, complementary.

**Intelligent Communication in the Undivided Universe**

According to this author, these worldviews are not mutually exclusive, for there is sufficient empirical evidence in nature to prove the existence of both a higher intelligence and chaos. What is this higher intelligence (HIN)? On Earth, higher intelligence in humans is based on modern science and technology, which is only 500 years old. Furthermore, advanced higher intelligence is based on the use of supercomputers, which is only about 50 years old. How many years has higher intelligence existed on other planets given the trillions that are older than Earth? This suggests that higher intelligence could be very ancient, dating back millions, perhaps billions of years or more. Such extraterrestrial civilizations could have overcome the barrier of traveling at the speed of light; however, we do not currently possess knowledge of such civilizations, nor will we, perhaps, for a long time.

Let us return to HIN: Who is God? According to the Judeo-Christian religion, God is the creator of the world and is a being with higher intelligence. God is a biologist, geologist, physicist, chemist, philosopher (moralist), and probably a computer scientist.
Of course, this is not to be thought of as a single person nor a staff of organized specialists who “pulls the strings” both in terms of chaos and the deliberate organization of matter. For example, the Christian Church, for tactical reasons, discusses the nature of God only in terms of morality, so as not to make mistakes in defining the creator and to expose the conception to criticism. However, what is, for example, the Holy Spirit? If it communicates the intentions of God to followers, then it must be a “telephone” of sorts that uses God’s “telephone network” in a system unknown to us.

Albert Einstein, one of the greatest physicists of the world, believed that “God does not play dice with the universe.” In the same letter, he wrote that “God tirelessly plays dice according to the laws he himself has established.” Einstein believed in laws of nature, and if they are laws (he discovered some of them), then there must be a legislator. Einstein was curious about the laws in God’s “basket” that he, Einstein, did not know about. For him, God was not human-like, but pantheistic (an all-encompassing and omnipresent being), as Baruch Spinoza saw back in the 17th century. Einstein perceived the presence of will and purpose outside the sphere of human existence. However, Einstein’s God is like a “cloud” of knowledge and wisdom. It is something not explained, as if magical and mysterious. For the author of this text (a technologist of civilization), God is a higher material intelligence housed in a living organism. Is this organism human-like? Not necessarily, but it is a self-contained, well-organized, and functioning organism. Works of science fiction characterize such organisms and give them an enormous scope of power. However, we cannot yet see what HIN looks like, for the journey of humans to other planets using techniques known to us would take a very long time, counted in the order of light years.

There are many real and puzzling events called “miracles” that have taken place (alongside many overinterpreted cases). If science cannot explain such cases, they are attributed to God. In other words, God exists in the experiential mentality of humankind. In fact, God is most likely an intelligent organism outside of our planet. God can be thought of as the “highest and smartest head of the design office,” if taking an intelligent design approach. However, for tactical reasons, this approach does not use the term “God”. An exceedingly difficult question is, who created God? It may have arisen from chaos, which, over billions of years, developed and came to possess a very deliberate higher intelligence that influences us and teaches us how, for example, to live morally. Therefore, if there were no religion, it would have to be created.

1 The author of this text has experience in this regard, for how can one explain the fact that he came out alive from under the corpses of those executed in the Warsaw Uprising of 1944? This happened when he first entered into a long hallway where his mother stood, having been shot with a series of bullets. She lost consciousness. The Russians were shooting in German uniforms, and then one of the gunmen shouted, “here are the Russians.” They stopped shooting and told the Russians to leave. Those who were still alive then came out. The Virgin Mother appeared to my mother and told her to pull me out from under the corpse of the nanny who had covered me with her body. For us, it was a miracle that we made it out alive.
At any rate, that is what happened. Nonetheless, because religion is organized and practiced by humans, it possesses shortcomings typical of humans, the analysis of which is not the subject of this study.

The following worldview is used in this study (Figure 1)

- **Intelligent communication controls the undivided world.** The undividedness of the Universe was first defined by David Bohm (1980).

This study was undertaken in consideration of the role of intelligent communication in the Universe (ICU), but with the condition that the existence of an intelligent extraterrestrial entity must be scientifically verifiable at some point in time.

**Fermi’s Paradox – “Where Are They?”**

There is a problem known as the Fermi paradox, which is said to have been formulated in 1950 when a group of physicists (including Enrico Fermi, best known for creating the first nuclear reactor) discussed the question of why we have not yet been visited by alien lifeforms.
Given that (a) the Sun and Earth are part of a young planetary system (4.5 billion years old) compared to the rest of the Universe (14 billion years) and (b) interstellar travel for extraterrestrial civilizations has been achieved, the hypothesis states that the Earth should have already been visited by aliens.

Modern responses to Fermi’s paradox are the following:

1. Perhaps aliens have visited, but they are invisible to us. Just as our civilization has aircraft invisible to radar, so too extraterrestrial civilizations, which may be billions of years older than ours and probably more intelligent, may have advanced systems capable of avoiding detection.
2. Perhaps HIN aliens have developed robotic artificial intelligences that have defeated them and are not interested in space travel. After all, Ray Kurzweil (2005) predicts that when computers “think” faster than humans (with such progress being seen as early as the 2020s), then there will be a point of singularity (similar to the Big Bang), that is, there will take place the transformation of the human species into a human-machine hybrid (perhaps a cyborg of sorts).
3. Perhaps HIN organisms, if they are still alive, have decided that humans do not pass some test or condition required for contact and have concluded that they have no interest in us.
4. Perhaps HIN organisms do not want conflicts with humans and, as a result, do not visit us or reveal themselves to us.
5. Perhaps interstellar wars are so intense that aliens do not have the resources and time to visit Earth.
6. Perhaps there are no aliens.
7. Perhaps there is another reason.

The topic of Aliens provokes the question, what is the evolution of HIN in space? A model of this evolution is illustrated in Figure 2. Initially, that is, about 14 billion years ago, there was chaos. Then, through evolution, there was created after a few billion years a Higher Intelligence (HIN), whose shape we do not know. From there, it took about 4 billion years for living organisms to appear on Earth. We should also take into account the fact that on older planets, organic life may have formed up to 10 billion years ago. Moreover, on Earth, the evolution of humans from apelike ancestors took about 6 million years, and it took the past 500 years for advanced science to be able to produce robots with artificial intelligence. Thus, if early HIN aliens were able to build similar machines in a similar timeframe, this could have occurred just under 10 billion years ago, giving them wide-ranging experiences we cannot even dream of.
Carl Sagan (1994), one of the most prominent American astronomers, stated that there could be many manifestations of extraterrestrial intelligence that modern astronomy does not understand and which, therefore, remain a mystery. This could include, for example, natural quasars or very intense gravitational waves that come from the center of our galaxy. He estimated that there could be at least one million other stars and planets in which advanced civilizations exist. He also argued that there is a good chance that many civilizations are sending signals our way. However, due to the huge distances between stars, we cannot establish cosmic contact by radio transmission (one conversational adjacency pair could take around 600 years). Our civilization does not have enough time and resources for such communication; however, perhaps communication between advanced civilizations takes place with other forms of science and technology, which are not yet available to us.

So far, we have found nothing that can be, without doubt, considered extraterrestrial (ET) communication; however, there have been some suggestive “events,” such as signals that meet all ET intelligence criteria except one: the signal never repeats itself.
Nonetheless, our search for these signals has only just begun. If they are ever captured, our view of the Universe and ourselves will change forever.

Hypothesis of Intelligent Communication in the Universe (ICU)

This study is conducted on the assumption that intelligent organisms are active in the Universe. Based on this assumption, the following hypothesis is advanced:

**Hypothesis 1:** Human life is part of a hierarchical information-, energy-, biology-based system, whose first intelligent-triggering communication came from outside the Milky Way Galaxy.

If this hypothesis is true, then the efforts of physicists to define the *Grand Unified Theory* (GUT) (Hawking, 2010) or the *Theory of Everything* (TOE) (De Aquino, 2012) cannot succeed unless they include the integral role of information communication processes in the Universe. The role of information communication is presented in Figure 3. Life and matter are presented here as a single info-energy-biological-material process (i.e., one that is physical, chemical, and biological). Furthermore, the relationship between DNA and the rest of the Universe is maintained by a human info-communication process. This is a digital process, now increasingly explored and improved upon. The dynamics of DNA (as well as RNA) processes reflect (a) the flow of analog information to and from the brain, (b) the flow of digital information to and from the mind, and (c) the role of hidden memory fields.

The key to understanding the mechanism of info-communication synchronization between life and matter in the Universe is the ability to define the nature of quantum potential and its relationship with the processes of intelligent communication as well as its relationship with other information and energy systems in our civilization. Currently, we do not possess the right tools to investigate and define this mechanism. Thus, today, this mechanism may appear to some as supernatural and for others as something from an extraterrestrial civilization.

The main components of this model are the following:

- **Quantum potential** is a central concept in quantum mechanics, formulated by de Broglie and developed by David Bohm in 1952. As part of their theory, quantum potential is a force in the Schrödinger equation that directs the movement of quantum particles.

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2 DNA is a molecule that contains codes for the development and functioning of the body.
Based on their interpretation of quantum theory, David Bohm, and Basil Hiley showed how the concept of quantum potential leads to the concept of “the unbroken whole of the Universe,” suggesting that non-locality is a basic new quality introduced by quantum physics (Bohm & Hiley, 1993). Hence, the Universe is indivisible (Bohm, 1980).

Figure 3. Model of the dynamics of the Universe (Targowski, 2009, p. 422)

- **Super quantum potential** refers to waves that carry molecular quanta that act in the Universe outside our planet. Here, we only guess what the dynamics are of the Universe.
- **The implicate order** is the term introduced by D. Bohm. It is the world unknown to us, and we can only guess what it may be. What takes place, for example, in religions? Bohm believed that science and art would someday be a whole, and Pope John Paul II believed that there was no contradiction between faith and science.
- **The explicate order** is the world as we know it, thanks to our science.
However, this is a domain of limited knowledge reduced to mechanics, and it excludes “non-mechanical” relationships, e.g., those with extraterrestrial intelligences.

- **Quintessence force** is a dynamic force evolving over time. It is a spatially dependent form of energy with negative pressure sufficient to drive accelerated expansion.

- **Extraterrestrial intelligence** includes HIN organisms and machine AI.

The inability of physicists to advance a persuasive GUT/TOE is because they do not include information in their models, nor “intelligent design” and intelligent extraterrestrial communication. The role of quantum potential is also not considered in their assumptions and calculations. Our current level of knowledge in civilization prevents us from characterizing this aspect of the Universe empirically. However, we should be aware that information communication can come from outside our very young civilization and that this may be the key to understanding the logic of the Universe.

**Architecture of Elements of the Universe**

In order to understand the mechanisms of intelligent design, super quantum potential, and quintessence force, it is necessary to define the architecture of the Universe, which until now has been studied mainly by physicists as “civil engineers of the Universe.”

The architecture of the Universe is shown in Figure 4. From this, the following hypotheses can be derived:

**Hypothesis 2**: Among the more than billion solar-like systems in the Universe, some should have the right conditions for life, for given such a huge set of planets, Earth statistically should not be the only life-friendly environment.

Statistically speaking, this hypothesis may be highly likely; however, it cannot be empirically proven by science at this time. Thus, statements about life on other planets are just guesses. Nonetheless, Polish astronomer Alexander Wolszczan discovered the first Earth-mass planets outside our solar system at the end of the 20th century, indicating that the Universe may have the conditions to sustain life outside of our planet (Wolszczan, 1994). Since then, new planets have been discovered from time to time.
Hypothesis 3: Life in the Universe may have been present long before its existence on Earth (about 5.5 billion years before life began on Earth) and could therefore have developed more advanced scientific and technical knowledge as well as civilizational wisdom than ours.
Intelligent humans (i.e., *Homo sapiens*) have inhabited the Earth for about 200,000 years, but only in the last 500 years they have developed and applied advanced scientific and technical knowledge. If hypothesis 3 is true, then living creatures from other planets could also have developed knowledge and technologies much more advanced than ours.

**Hypothesis 4:** The development of civilization requires intelligent design and a quintessence force that comes from a civilization at a higher level of development than our own or from the creator.

This hypothesis is a generalization of hypothesis 3, which was applied to our solar system. If human civilization is not unique in the Universe, then according to the Copernican principle, no cosmological theory can be advanced in isolation. This suggests that civilization cannot be created by itself; rather, it requires “rules” from the outside.

**Hypothesis 5:** The triggering of the Big Bang requires the existence of a primary atom or info-energy process (the first signals) that came from a higher civilization. Such a signal is the Higgs-boson molecule, experimentally confirmed in 2012 at the Hadron Collider at CERN in Geneva.

This hypothesis holds that no Universe can be created from within: It also requires “regulations” from outside. Steven Hawking (after Peter Higgs in 1964) assumed that before the Big Bang (T=0), there must have been some original force or particle that caused the explosion.

**Dynamics of the Seven Forces of Nature and Their Intelligent Control**

Recent observations from the Hubble Space Telescope and Wilkinson’s Microwave Anisotropy Probe (WMAP) have shown that most of the Universe is made of dark energy that works by a dark force. Current mass/energy balance estimates place dark energy at about 70 percent of the Universe, while visible matter and dark matter make up less than 30 percent. Thus, most of the Universe consists of something we know nothing about. This observation allows the following hypothesis:

**Hypothesis 6:** At the time of the Big Bang, dark energy interacted with an integrated force composed of four sub-forces: a strong force (that has the power to bind the molecules of an atom), an electromagnetic force (that holds atoms together in waves), a weak force (that controls radioactive decay), and the force of gravity. This interaction may have been triggered by an external force coming from some external environment.
The proposed role of the external force in this process of creating and maintaining the functioning our (inner) Universe is illustrated in Figure 5.

Figure 5. The role of the quintessence force in the Universe

It can be hypothesized that the controlling function of the quintessence force is triggered by the external force and is involved in all the intersections of the seven basic forces that rule the Universe, shown in Figure 6. This control function is based on a certain kind of quantum potential signal as well as other kinds of signals which we do not know at this time and which are being searched for by several research centers, including SETI.
The role of the intelligent steering info-communication processes, which control the operation of the seven forces of the Universe.

Figure 6. The role of the intelligent steering info-communication processes, which control the operation of the seven forces of the Universe

The dynamics of the seven forces of the Universe are illustrated in Figure 7. This provides a basis for modifying the GUT (Grand Unifying Theory). On the other hand, the TOE (theory of Everything) should be based on the GUT as well as the role of intelligent steering and natural info-communication processes (self-active processes integrated into planetary dynamics). Even Albert Einstein believed that the TOE should consider God’s role in the creation of the Universe. On the other hand, Stephen Hawking — who claimed to know how God thinks (Hawking, 1988) — thought that most theorems are incomplete, so we cannot develop such a theory. This brilliant physicist was not only a prisoner of his greatly inoperable body, but also of his view that a theory of the Universe must be constructed through only physical forces of nature. It would be as if we perceived the functioning of the modern city merely through the forces of lighting, heating, nutritional energy, and sewage.
On his deathbed, Einstein asked for notes about the TOE. Unfortunately, he refused the presidency of Israel in 1952 because he believed that he did not have enough experience and that he was not qualified for dealing with human relations. In short, he had no organizational experience. Such being the case, how could he think how God thinks? It is a pity he refused the presidency, for if he had had such an experience, perhaps he would have come to know the answer to this question.

Let us try to think about how “God” thinks and who he is:

1. “God” (as we, humans, imagine “God” to be, that is) is the cleverest being in the Universe, almighty, omnipresent, good, just, and merciful.
2. If “God” is the almighty and the wisest, “God” thinks like an executive head of “popes” (in Christianity) who are responsible for individual planets.
Some of these “popes” we make “saints.” Thus, “God” is the head of the “saints” but is not the same as the saints. He worries about them, their fate, and their living conditions, including the climate, natural resources, and places to live in the Universe. “God” has HIN organisms and information processes that control constituencies and nature.

3. If “God’s” surveillance over us is not an illusion a la David Copperfield, then it must occur via some physical organism or mechanism. It is possible, however, that “God” was eliminated via intelligent machines, built by “God’s” subordinates. Such a super HIN could have evolved over, say, a billion (±) years (let us remind ourselves that modern science and technology is only about 500 years old) through the development of science and technology on one of the planets of the Universe. This would be such a highly advanced intelligence that it would seem supernatural to us, Earthlings. Any presumption of its nature would seem tactless on Earth and would seem unworthy of a believer. For example, the average person’s brain has 100 billion neurons. In contrast, the octopus has 500 million, of which 300 million are distributed in its 8 legs and 200 million in its head. In some sense, then, the octopus is “multi-brained.” In the water, it is more efficient than humans because it thinks not only with its head, but with every limb. Human limbs do not think, for there is only central “head” of thought. That is why octopi win against sharks, whose fins are incapable of thought. In contrast, “God” could have 1+ trillion neurons distributed throughout the body, as a result of evolution on some other planet. Thus, “God” could have numerous centers of thought, similar to how a supercomputer can have thousands of processors that process information in parallel. Therefore, “God” is almighty and extraordinary. This is a material fact of “God’s” existence. For humans, the consequences of this are culturally positive, for it allows a focus on positive morality. People need “God.” “God” gives people hope for a better life, and who would not want that?

4. If we can call a civilian person a “saint,” why cannot a super HIN organism be called “God” and the designs of such an organism intelligent? This is evidenced by hundreds of unsolved mysteries in the evolution of life and nature, including the results of major Earth disasters (e.g., why did some animal species die and others survive?).

5. “God” (the name varies from religion to religion) for most Earthlings is the supreme moral authority and is a ubiquitous creator (whose image we do not know). God must have made advanced civilizations capable of intelligently communicating with the Universe (unless eliminated by intelligent machines).

6. If the results of “God’s” action are material, “God” should be material. The whole meaning of the Trinity’s dogma is an answer to this question. In Christianity, “God’s” hypostasis is fulfilled in the form of “God” becoming incarnate. Furthermore, faith in the belief that life does not end in physical death has been accomplished by the mission of Christ, and the dilemma of contact with “God” has been solved by prayer and grace through the Holy Spirit.
Several decades ago, an experiment was conducted by interconnected radio stations. They announced to their listeners that on a given day and at a given time, they would ask the listeners to pray for the recovery of a named person. Special instruments for measuring electro-magnetic waves in different locations of the globe recorded large increases in these waves at those points. It is interesting that the concept of Nirvana in Hinduism is so close to Christian Eternal Life.

According to John Lennox, a mathematician at Oxford University, paying homage to mathematical materialism over the last century has caused enormous intellectual and social havoc (Lennox, 2006). Lawrence Krauss (2012), a physicist at Arizona State University, also writes about this issue. The main theme of his book *a Universe from Nothing* concerns the discovery that all the signs suggest the Universe could and probably did arise from a deeper nothing (involving the absence of space itself) and that one day, it could return to nothing through processes that not only cannot be understood, but also processes that do not require any external control. In a similar vein, Hoimar von Ditfurth (1982), in his book *the Origin of Life: Evolution as Creation*, wrote that science and theology are compatible and argued that evolution is a process brought to life by divine action. He also held that creation is not a single event, but rather a long-term process of evolution. The book opposed religious creationism and was described as similar to theistic evolutionism. This view is related to the theological concept that the act of creation is not an individual event, but is spread over the entire duration of the Universe.

Richard Dawkins, an atheist, is well known for his critique of creationism and intelligent design. In *the Blind Watchmaker* (Dawkins, 1986), he argues against the watchmaking analogy, an argument for the existence of a supernatural creator based on the complexity of living organisms. Instead, he describes evolutionary processes as analogous to a blind watchmaker since reproduction, mutation, and selection are not directed by any designer. In *the God Delusion* (Dawkins, 2006), Dawkins argues that a supernatural creator almost certainly does not exist and that religious faith is an illusion. However, Dawkins’ atheist stance is undermined by Lawrence Krauss and many other scientists.

7. The problem is, should we teach religion at school? More specifically, should we teach just one religion? The answer is “probably not”; rather, comparative religious studies must be taught with social values oriented towards those who have faith, agnostics, atheists, and those who believe in intelligent communication. “God” has given us humans the freedom of choice, so let us choose the values that are important to us.
These considerations suggest that further research on the Universe should include the role of info-communication processes and ET intelligence, for such research could bring solutions in technology and medicine that can be used in our civilization.

**Universe Cycle**

From the presented models of the forces of the Universe emerges a system of info-communication processes (ICPs) that occur in planetary systems, organisms, and intelligent machines. These processes are entangled and form a system that controls the cycles of development and actions of the Universe. First, there was chaos, and then there were planetary systems that gave birth to organisms, which in turn produced intelligent machines. Together they control the Universe, which will dissolve into chaos over time. This, in turn, may begin a new cycle of development in the Universe (Figure 8). The current cycle of the Universe is perhaps not the first cycle, and the next cycle may cause chaos, as the fall of the previous cycles did.

![Figure 8. Universe Cycle](image)

The presented model of the info-communication process of the Universe looks complicated; however, a microcosm of this process is used by people in the 21st century, namely, the Internet of Everything (IoE), which interconnects almost everything into a single system, thanks to the implantation of logical-computational chips (Figure 9). Why would we not assume, then, that ET civilizations, who have lived for millions or even billions of years, have not solved the problem of interplanetary communication in a similar way, for example, in the form of chaos control?
If hackers can now remotely influence the behavior of an e-car, why would ET civilizations not be able to affect, for example, the genome of organisms on Earth?

To define such a dynamic system as the Universe, one need to get out of Einstein’s 4-dimensional continuum of space-time (4D). By incorporating the role of info-communication processes and other forces, we can address the 10-dimensional (10D) continuum of the Universe (at least in this study, although reality may prove to be even more complex). The new 6 dimensions include the following: the info-communication processes of humans, cyberspace, HIN ET (extraterrestrial intelligence), intelligent design, quantum potential, and super quantum potential.

The task of defining the final GUT is impossible at our current level of knowledge. One of the best specialists in 4D space was the Russian mathematician Lew Pontriagin (1908-1988), who could understand this space because he was blind: his mind was not limited to a normal 3D system. One can thus begin to imagine how complicated 10D space is. To understand it, one must go beyond quantum theory, string theory, and the theories of entropy, fuzzy sets, complex numbers, and perhaps other factors.

**Conclusions**

Steven Weinberg (1993), a theoretical physicist who along with his colleagues defined part of the GUT, is optimistic about completing this project and states that this task reminds him of the geographical discoveries in the 19th century, when pioneers were moving towards the North Pole and gradually discovering new territories, mountains, and rivers until there was nothing left to discover. In a similar way, scholars are discovering the secrets of the Universe.
Perhaps in the 21st century and the third millennium, we will discover more and complete this task of defining the ultimate GUT. On the other hand, perhaps it is too early, and perhaps we will need another, say, 10 million years and more to do so. Alternatively, maybe there is no such theory, or perhaps there is a “creator” who does not want us to know too much about the GUT.

A. Further research directions:
- Explore how to integrate different worldviews into a unified, wisdom-based system that can serve as the basis for educating people.
- Examine how to implement a religious studies program that includes perspectives from different faiths, agnostics, atheists, and those who believe in intelligent communication.
- Explore the nature of human intelligence, civilization, planets, and the Universe.
- Explore the wisdom of humanity, civilization, planets, and the Universe.
- Explore how info-communication systems affect Earth’s physical processes and systems as well as how they affect our civilization.
- Explore how the colonization of planets could benefit humans in the short and long terms.
- Explore what technologies need to be developed for humans to travel to and inhabit other planets.
- Will perfect artificial machine intelligence be developed by humans?
- Investigate the probability that humans will not fall victim to intelligent machines.

B. Research opportunities:
- So far, research has been based on the analysis of four forces. It has not considered other forces, such as the integrated force, quintessence force, and dark force.
- So far, there is a strange fascination with the development of artificial intelligence, but is this fixation wise?
- So far, conflicting worldviews have been practiced: Can we not afford people who are well-educated with common, balanced, and wise ways of thinking, deciding, and persevering?

C. Additional ideas:
- If the Earth and the Universe are products of randomness, then what random strategies should people develop to calculate probabilities? Can we count on a long-term future? If not, what should be our short-term strategy? If there is hope, what should be our long-term strategy? How long will the human species remain on Earth?

D. Justifications:
- To investigate this black box known as the Universe, one needs to understand how its complexity is the result of a tension between order and chaos.
We want to know what info-communication impulses transformed the original “soup” of simple molecules into the first living cells and what the origins of life from millions of years ago can tell us about technological innovations today. Are they the result of randomness?

Of particular interest is how Darwin’s random process of natural selection could have created such a complex system as humans. Is there a kind of intelligent external engagement in info-communication? It is certainly a dynamic process and it cannot be driven solely by transformations of “dead” matter. What controls this transformation? If we use the term “control,” it suggests the existence of a “signal” as well as the flow of information in the channels. Needless to say, this kind of process will lead in the coming centuries to a new paradigm in regard to the architecture of the Universe.

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An Attempt to Arrive at the Meaning of Civilization as the Third Millennium Dawns

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Abstract

Civilizations may be understood as phenomena subject to differing perspectives. This article views civilization from the perspective of Geography. A civilization is a “Geographical Space” that arises from complex interactions over time. The core of civilization from a geographical perspective is this: every civilization is a geographical space, but not every geographical space is necessarily a civilization. A civilization has a “cultured soul” and an “advanced body.” We may use this approach to understand, measure, critique, and emancipate civilization in the third millennium.

Keywords: civilization, geographical space, the third millennium

Introduction

Conceptualizing civilization accurately depends on answering three types of questions:

- For understanding the topic: What is civilization?
- For critiquing civilization: How civilized is a civilization?
- For emancipating civilization: What must be done to free civilization from those processes that make it uncivilized?

Answers to these questions depend on how we conceptualize the phenomenon of civilization. As we know, every conceptualization is based on a particular perspective, a particular interpretation.

[Nietzsche] uses the word ‘interpretation’ to mean a belief about something as if it is like this or that. An interpretation is an understanding of the world from a particular perspective; and so, interpretations, like perspectives, relate back to our values. (Lacewing, 2009)

Civilization as a structure has long been studied. Here we offer the perspective of the science of Geography. In so doing, we use a basic conception of Geography: Geographical Space. Every civilization is a geographical space, but not every geographical space is necessarily a civilization. That is, each civilization occupies a geographical space and has an “advanced body” and a “cultured soul.”
I. What Is Civilization?

1. Every Civilization Occupies a Geographical Space

What is a geographical space? Space, the key topic of geography, gives entities identity and unifying focus. (Elden, 2009: 262) In fact, geography is often described as a spatial science (Kitchin, 2009: 268).

Thus, Doreen Massey (2009) writes:

Space is the product of relations (including the absence of relations). Space is a complexity of networks, links, exchanges, and connections, from the intimate level of our daily lives (think of spatial relations within the home, for example) to the global level of financial corporations.

[...] space is a “product”: it is produced through the establishment or refusal of relations. Space is in its very nature “social” (where social is taken to mean “more than individual”, rather than simply “human”). If there is to be a relation (or, indeed, a non-relation) there needs to be at least more than one thing to do the relating, or not. (Massey, 2009: 16-17)

Let us consider the following:

- a geographical understanding of space such as Massey’s incorporates the idea that the term ‘social’ implies multiplicity and also that civilization extends beyond the social to natural phenomena and artefacts (Massey, 2009: 17);
- a relational sense of space (space is relational because objects exist only in relation to other objects) (Elden, 2009: 265);
- “Space¹ is the result of the interacting functions of two socio-economic and natural-ecological environments.” (Saidi, 2008: 614)

“Space”, according to the geographical understanding, can be defined as follows: a concrete space involves intertwined networks that humans live by (thoughts, man-made and natural networks or layers). (Sadeghi, 2015: 25).

Thus, space, from the viewpoint of Geography arises as a result of complex interactions among human beings (humans with all their intellectual, political, economic, cultural, and social aspects) and non-human beings, over time.

¹Although the German word “Raum” has been translated into “space”, the word has a much broader meaning in German than “space” in English. Raum simultaneously involves “place” and “space”. (Saidi, 2011: 11)
Table 1 divides geographical space into two layers: body and soul. The table shows that non-human beings lie on a natural layer, above which is a man-made layer of things. At the top of the body level is a human layer (humans as biological-material beings). These three layers can be conceptualized as the body of the geographical space.

Above the layer of the body rises that of the soul. The soul of the geographical space involves only non-biological or immaterial aspects -- the thoughts layer. This upper layer of geographical space includes a dichotomy: thoughts in space and thoughts on space. These are elements of the soul of geographical space.

Table 1: Geographical Space and Its Layers

<table>
<thead>
<tr>
<th>Layer</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoughts Layer (all non-biological or immaterial aspects of space)</td>
<td>Thoughts of Space-Managers: Discourse, ideologies, beliefs, and viewpoints of managers</td>
</tr>
<tr>
<td></td>
<td>Thoughts of Space-Managing: Dominant and formally structured discourses, ideologies, values, rules and organizations</td>
</tr>
<tr>
<td></td>
<td>Thoughts of Space-Thinkers: Worldviews, beliefs, discourses, values and norms of scientists, philosophers, and artists</td>
</tr>
<tr>
<td></td>
<td>Thoughts of Space-Dwellers: Worldviews, beliefs, discourses, traditions, values and norms of people</td>
</tr>
<tr>
<td>Human Layer</td>
<td>All biological aspects of humanity (bodies, genes, nerves, and hormones)</td>
</tr>
<tr>
<td>Man-Made Layer</td>
<td>All human-made things (arrow and bow, airplane, spacecraft, etc.)</td>
</tr>
<tr>
<td>Natural Layer</td>
<td>All natural entities (atmosphere, hydrosphere)</td>
</tr>
</tbody>
</table>

(Sadeghi, 2016: 62-63; with changes and improvements)

Geography thus conceptualizes civilizations and recognizes the soul and the body (Table 2) from the most theoretical layers to empirical indexes (Table 3), but also it can imply two other approaches to the idea of civilization and a scheme of ways to model civilization (Figure 1).

Figure 1 indicates Andrew Targowski’s approach to civilization and culture. He presents three possible models.

First is the English, French, and American Mono-Element Model (MEM), which treats “civilization” and “culture” equally. “Civilization” contains all aspects of human life: religious, political, social, economic, and cultural. (Targowski, 2004: 12).

As Table 2 indicates, civilization is a geographical space that includes all aspects of human life but also distinguishes between the “body” of civilization and the “soul” of it. So, it can be argued that, as opposed to what is maintained by the MEM model, in fact “culture” is not “civilization” in its entirety but is rather a single component of it.
“Culture” here can be seen as the soul of civilization. All other aspects of human life are considered as the body of civilization. The geographical concept of civilization, on the one hand, considers the natural layer as a container upon which civilization emerges upward; on the other hand, it is a part of the body of civilization.

Next, the German Bi-Element Model (BEM), as presented by Targowski, subordinates zivilisation to kultur. This view limits zivilisation to useful things but nevertheless only to a value of the second rank. The value of the first rank is kultur which refers to religious, intellectual, and artistic achievements. The kultur controls zivilisation and develops as a result of the continuous motion of material-driven human development. (Targowski, 2004: 12).

Compared with BEM, the geographical view distinguishes kultur- the soul of civilization - from zivilisation, which can be considered as the man-made layer. Table 2 displays zivilisation and kultur, but geography distinguishes between zivilisation and kultur with the human layer (biological aspects of humans) and the natural layer, which are two substantial parts of the civilization’s body.

Finally, the Targowski Tri-Element Model (TEM) involves three elements:

1) Human Entity: organized humans (such as the individual, family, nation, and political society) in the pursuit of civilization; it is an existence-driven community,
2) Culture: a value-driven continuous process of developing a patterned human behavior, and
3) Infrastructure: a technology-driven additive process of acquiring and applying material means. (Targowski, 2004: 12).

As opposed to the geographical view, the “culture” element falls here within the thoughts layer or the same soul of civilization, and “infrastructures” are placed in the man-made layer of civilization. Although the circle designated “entity” means organized humans, it is not the same as the human layer of Table 1, because the human layer includes only biological aspects of humans (non-biological aspects of humans are placed in the thoughts level).

Compared with the Targowski Tri-Element Model, the geographical view involves also natural entities and biological dimensions of humans (Table 2). Not only the natural layer and the human layer are, and must be considered, as main parts of civilization but also they must increasingly be monitored as central to understanding civilization in the third millennium.

Thus, such global environmental problems as global warming, the melting cryosphere, and biodiversity loss are realities that threaten all civilizational phenomena. Today it is necessary not only to observe the biological aspects of humanity (the human layer), but also to monitor the effects of scientific advances (particularly in biology, genetics, artificial intelligence (AI) and neuroscience) on the man of the future, and consequently on the future of civilization.

Based on the models, scholarly conceptions of civilizational phenomena are not quite similar, and the comparison of each to other views causes a more comprehensive understanding of civilization (Table 2).

Table 2: The conceptualization of several models of civilization in relationship

<table>
<thead>
<tr>
<th>Geographical Perspective</th>
<th>TEM</th>
<th>BEM</th>
<th>MEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soul of Civilization</td>
<td>Thoughts Layer</td>
<td>Culture</td>
<td>Kulture</td>
</tr>
<tr>
<td>Body of Civilization</td>
<td>Human Layer</td>
<td>Human entity (?)</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Man-Made Layer</td>
<td>Infrastructures</td>
<td>Zivilisation</td>
</tr>
<tr>
<td></td>
<td>Natural Layer</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Civilization thus not only is a geographical-spatial phenomenon but also it exists in the historical realm. “Time is hidden in the nature of civilization because space is always in the process of becoming. Space is a practice, a doing, an event, a becoming; it is a
material and social reality forever (re)creating in the moment. It ‘emerges’ as a process of ontogenesis.” (Kitchin, 2009: 272).

Hence, civilization does not and cannot exist outside of time. Rather, it is continuously (re)creating, since space “is always “under construction”, as Massey (2009) points out. It is never a fully connected and finalized thing, like the “synchronies” proposed by structuralism, for instance.

There are always relations which are still to be made, or unmade, or re-made. [Therefore] the nature of civilization is also always open to the future.”(Massey, 2009: 17)

2. What are the Components, Scales and Relationships of the Geographical View of Civilization?

Figure 2 shows the various layers, components, scales, and special characteristics of civilizational phenomena current in our world.

Figure 2: The Geographical Conceptualization of Civilization as the world emerges into the third millennium

Geography conceives of civilizations today all having the same five layers (thoughts on civilization, thoughts in civilization, humans, man-made, and natural). Moreover, every layer has its own special components (see Table 3).

Civilization has a body (the human, the man-made, and the natural layers). The “thoughts on civilization” and the “thoughts in civilization” layers constitute its soul. Civilization can have different scales, from urban and national to regional and global, and even space.
Today, the borders of the scales have dimmed. In spite of all civilizational differences, any civilization is not pure, alone, and isolated. Rather, each has multiple relationships (see Table 4) with other civilizations.

Perhaps, then, they are actually constituents of a single Intertwined Civilizational Network. This implies the existence of a single global civilization, as Wilkinson (1987) writes, entities with some variations.

Wilkinson (1987) states:

- Today there exists on the Earth only one civilization, a single global civilization. As recently as the nineteenth century several independent civilizations still existed (i.e., those centered on China, Japan, and the West); now there remains but one. […] The single global civilization is the lineal descendant of […] a civilization that emerged about 1500 B.C. in the Near East when Egyptian and Mesopotamian civilizations collided and fused. This new fusional entity has since then expanded over the entire planet and absorbed, on unequal terms, all other previously independent civilizations. (Wilkinson, 1987:31)

It can be argued that the phenomenon of civilization can be view from three special perspectives:

1- Global-Becoming: as noted above, civilization is global and not limited to urban, national, or regional scale. That has been the result, worldwide, — as Wilkinson (1987) writes — of the process of globalization.

2- Space-Becoming: the scale of the civilization is not merely global but also is expanding into space beyond the Earth. Increasingly, mankind is sending humans, satellites, and scientific instruments into space.

3- Cyber-Becoming: contemporary civilization is increasingly becoming cyber and virtual as a result of the development of computers and the Internet. Civilization today, as was the case with previous iterations, not only has a real section (actual, tangible space) but also has a cyber section (cyberspace). This did not exist in previous civilizations (Figure 2).

3. Actual Components of the Geographical View of Civilizations

The geographical concept sees two “macro” layers (the soul and the body), four layers, and many micro-layers and empirical indexes (Table 3).
1. The Soul of Civilization: What is the civilization’s soul? Although its understanding and measurement are difficult, we may understand and measure it via the delineation of its components from conceptual layers to empirical indexes (Table 3).

The soul means all immaterial and non-physical components and aspects (the thoughts layer). That contains two parts: Thoughts on the Civilization Layer and Thoughts in the Civilization Layer. This relates to all up-down thoughts that rule and dominate civilization.

❖ Thoughts of Civilization-Managers layer. This addresses all discourses, ideologies, beliefs, and viewpoints of managers or statesmen who rule or manage a civilization or a part of it.

Further, this layer is the first software part of the civilization’s soul. The software part includes civilization-agents (managers (agency 1), dwellers (agency 2), and thinkers (agency 3).

By the term “Civilization-Managers” we mean managers of cities, country presidents, statesmen, heads of regional unions and agreements (such as EU, NAFTA, G8, and the G20), and also members and heads of global organizations such as the UN, WTO, IMF and the WHO.

This layer is very much affected by the circulation of the elites, the coming (being elected) and going (not being elected) of leadership affects discourses, ideologies, beliefs and viewpoints and causes effects on those organizations, unions and agreements, consequently, on the whole their civilizational territory.

❖ Thoughts of Civilization-Managing layer: the thoughts of civilization-managers layer mentioned above emphasize “managers” but there is actually another civilizational reality. That is the hardware part of the civilization’s soul. This part provides the template for civilization-managers’ activities.

Here are found all discourses, ideologies, values, rules, and organizations which are formally dominant. Current civilizational organizations have an urban scale (such as municipalities and city councils), a national scale (organizations within countries such as parliaments), a regional scale (such as the European Union), a global scale (the United Nations, WTO, IMF, WHO and others), and a spatial scale (such as NASA and other space agencies).

❖ Thoughts in the Civilization layer: this covers all bottom-up thoughts, those which dominate daily life for most people. This layer contains worldviews, beliefs, discourses, traditions, values, and norms of dwellers.
This is the most diverse part of the soul because every individual, family, society, and every civilization has its unique “life-world”. This layer is the second software part of the civilization’s soul because it contains dwellers.

Note: Another part of the soul of civilization is the “thoughts of civilization-thinkers” layer. This layer involves all worldviews, beliefs, discourses, values, and norms of those persons who have the power to affect views on civilization by (re)creating different discourses. For instance, it includes civilizationalists, historians, scientists, philosophers, and artists who affect civilization. These contributions may be via their scientific theories and findings, their philosophical and moral worldviews, or their created art, music, theaters, movies, and literature.

Such thinkers make up the third software part of civilization (agency 3).

Table 3 displays which civilization-thinkers can be found in the Thoughts on Civilization layer and which in the Thoughts in Civilization layer.

What constitutes the difference between these two layers?

If these thoughts and achievements are utilized by managers, they constitute a component of the Thoughts on Civilization layer, but if they are utilized by dwellers, in their everyday life, they are found as a component of the Thoughts in Civilization layer.

Of course, it is possible that civilization-thinkers participate both in the Thoughts on Civilization layer and in the Thoughts in Civilization layer.

2. The Body of Civilization: By contrast, what is civilization’s body? Answer: all material and physical components and aspects. As noted above, and below, there are three different layers here (Table 3): the Humans layer, the Man-Made layer, and the Natural layer.

1. The Human layer: this (highest of the Body of Civilization) layer involves humans only as biological beings with their material and ascribed aspects (population, body, and gender). Although human beings are biological beings and a part of the biosphere (indicated on Table 3 as the Natural layer) they have been separated from it because only they can - via their nonbiological aspect - (re)create the phenomenon of civilization.

2. The Man-made layer: all things which are made or changed by humans compose this complex layer (the Anthrosphere). The Anthrosphere itself can recognize two types of subsets: the Non-Geometric Factors and the Geometric Factors.
Table 3: The Components of Civilization (From Conceptual Layers to Empirical Indexes)

<table>
<thead>
<tr>
<th>More Conceptual (Macro)</th>
<th>More Empirical (Micro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoughts on Civilization</td>
<td>Thoughts of Civilization-Managers (software part: agency 1)</td>
</tr>
<tr>
<td></td>
<td>Discourse, ideologies, beliefs, and viewpoints of civilization-managers</td>
</tr>
<tr>
<td></td>
<td>Thoughts of Civilization-Managing (hardware part: structure)</td>
</tr>
<tr>
<td></td>
<td>Dominant and formally structured discourses, ideologies, values, rules and organizations on civilization</td>
</tr>
<tr>
<td></td>
<td>Thoughts of Civilization-Thinkers (software part: agency 3)</td>
</tr>
<tr>
<td></td>
<td>Worldviews, beliefs, discourses, values and norms of scientists, philosophers, and artists</td>
</tr>
<tr>
<td></td>
<td>Thoughts of Civilization-Dwellers (software part: agency 2)</td>
</tr>
<tr>
<td></td>
<td>Worldviews, beliefs, discourses, traditions, values and norms of dwellers</td>
</tr>
</tbody>
</table>

- **Non-Geometric Factors**: These are things which are made or changed by humans and are regardless of their geometric forms on the Earth. They include:

  - Biological aspects of humans (population, body, genes, nerves, hormones etc.)
  - Anthrosphere
    - Non-Geometric Factors
    - Geometric Factors
    - Materials
      - Extracted raw materials
        - Goods
        - Food
        - Wastewater
        - Waste
    - Energy
    - Points (Water wells, oil wells, etc.)
    - Polylines (Transportation networks, distribution networks of energy, etc.)
    - Polygons (Residential, industrial, agricultural zones and etc.)
  - Natural
    - Atmosphere
    - Cryosphere
    - Hydrosphere
    - Biosphere
    - Pedosphere
    - Lithosphere

*Source: (Sadeghi, 2016: 112; improved and adapted to civilization phenomenon)*
Symbols: unique pictures, shapes, and statues, which are special signs which display the soul of civilization. Symbols of civilizations are different from each other because every civilizational territory has its own particular soul.

Technologies: technologies such as biotechnology, info-technology, and nano-technology.

Capital: humans create capital; hence it is placed in the Man-Made layer. Although capital creates geometric factors, it enormously changes the natural layer, and this results in effects upon the soul of civilizations — in particular, at the present time, the economic system of capitalism constitutes a global economic system. Thus, it, itself, is a non-geometric factor.

Services: services are a form of non-geometric factors, but they have geometric effects such as an allocated area and building for educational services (universities and schools) or for health and medical services (hospitals, pharmacies, and more)

Diseases: diseases can arise from human or non-human origins, but they are placed in the Man-Made layer because they relate to humans. Diseases, particularly in the form of epidemics and pandemics, such as what we are currently witnessing with COVID 19, can have temporary effects on the soul, the body and relationships in the world. Closing down borders between countries postpones economics, sports, and similar activities. This can bring about permanent effects and may generate realities such as “I am healthy because you are healthy” and “I am alive because you are alive.”

Energy: the energy category includes all kinds of energy which are produced, consumed, and wasted.

Materials: this item contains all materials minus pristine raw materials (ones, that is, which humanity has not already extracted). Materials involve extracted materials (oil, coal, gold, iron, and more), goods (all goods which are produced by humans such as cars and computers), food, wastewater, and waste. Although the Materials item causes geometric forms to arise, it is not a geometric factor. For example, a car, as a good, is not a geometric form (a point, polyline, or polygon), yet it causes a geometric forms such as roads and highways on the earth.

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2. Consider “Game of Thrones” (an American fantasy drama television series created by David Benioff and D. B. Weiss for HBO). We could entitle an article as “The World, its Game of Corona Affecting Humanity (Civilization) and its Game of the Corona of Virus (COVID-19).” This would involve two main questions about civilization today: 1- What are or will be the civilizational impacts of COVID-19 on civilizational phenomena? 2- What vital civilizational reforms must be undertaken to provide a safer world that protects against unanticipated global events in the future?
Geometric factors: These are geometric forms which are made by humans. There are three types that can be displayed on maps: points (such as water or oil wells), polylines (transportation networks, and distribution networks of energy), and polygons (residential, industrial, agricultural, and zones).

3. The Natural layer: this layer contains all pristine parts of the Atmosphere, Cryosphere, Hydrosphere, Biosphere, Pedosphere, and Lithosphere, apart from those parts which are changed by humans. This layer is the oldest and the most primary part of the civilization’s body because it existed before the phenomenon of civilization emerged and because it is the primary layer upon which civilization arises.

4. Scales used in the Geographical View of Civilization

There are actual scales, the territory of a civilization on the Earth. Now this has become difficult because territories of civilizations are intertwined. A civilization may include a country (national scale) or many countries (regional scale); it can have a global scale and even is expanded toward space. Civilization in the third millennium simultaneously has all these scales because global-becoming and space-becoming are its main two characteristics.

There are also virtual scales, the unreal scale of civilization or the same “cyberspace.” Civilizational phenomena are increasingly becoming cybervirtual as a result of the development of computers and the Internet (cyber-becoming).

5. Relationships (Rs) Within and Among the Civilizations

Recognizing these layers and components of civilization facilitates the delineation of five main types of civilizational relationships shown in Table 4.

1: Intra \ Inter Civilizational Rs: civilizational relationships can be developed within one territory (intra-civilizational) or between two or more (inter-civilizational).

2: Spiritual \ Bodily Rs: these relationships involve three types of the intra-civilizational Rs (R1, R2, and R3) and four types of the inter-civilizational Rs (R4, R5, R6, R7).

Let us examine these various types of relationships more closely.

R1: Intra-Spiritual: this means all Rs within the soul of one civilization. Based on the Geological view, the soul of civilization has four parts (Table 3). Hence there are ten kinds of Rs within the soul of civilization (Figure 3):
Table 4: Five Main Types of Civilizational Relationships

<table>
<thead>
<tr>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intra or Inter</td>
<td>Spiritual</td>
<td>Bodily</td>
<td>Conscious</td>
<td>Unconscious</td>
</tr>
<tr>
<td>R1</td>
<td>Intra-Spiritual</td>
<td>Rs within the soul of one civilization.</td>
<td>C\U</td>
<td>A\V</td>
</tr>
<tr>
<td>R2</td>
<td>Intra-Bodily</td>
<td>Rs within the body of one civilization.</td>
<td>established by humans: C\U established by nature</td>
<td>-</td>
</tr>
<tr>
<td>R3</td>
<td>Intra-Spiritual-Bodily</td>
<td>Rs between the soul and the body of one civilization</td>
<td>C\U</td>
<td>A\V</td>
</tr>
<tr>
<td>R4</td>
<td>Inter-Spiritual</td>
<td>Rs between the souls of civilizations</td>
<td>C\U</td>
<td>A\V</td>
</tr>
<tr>
<td>R5</td>
<td>Inter-Spiritual-Bodily</td>
<td>Rs between the soul of a civilization with the bodies of other civilizations.</td>
<td>C\U</td>
<td>A\V</td>
</tr>
<tr>
<td>R6</td>
<td>Inter-Bodily</td>
<td>Rs between the bodies of civilizations</td>
<td>established by humans: C\U established by nature</td>
<td>-</td>
</tr>
<tr>
<td>R7</td>
<td>Inter-Bodily-Spiritual</td>
<td>Rs between the body of a civilization with the souls of other civilizations</td>
<td>C\U</td>
<td>A\V</td>
</tr>
</tbody>
</table>

1. Rs between the civilization-managers of a civilization: the civilization-managers of a civilizational territory (which may include many countries, cities, and so forth) can establish various Rs with each other, for instance, the diplomatic Rs between presidents of the EU as a part of Western Civilization’s reach (Figure 3, No 1).

2. Rs between the civilization-thinkers of a civilization: the civilization-thinkers (scientists, philosophers, or artists) of a civilizational territory may criticize and share their thoughts and achievements with each other. For example, all scientific conferences, music and arts festivals are forms of these Rs (Figure 3, No 2).

3. Rs between the civilization-dwellers of a civilization: these Rs include all Rs between people who are living in a civilizational unit. Thus, it includes, for instance, all informal Rs (Rs between persons, friends, or families) between citizens of the EU and North America, parts of Western civilization.) (Figure 3, No 3).
4. Rs between the civilization-managers and the civilization-thinkers: for example, scientists and virologists supported by managers seek to discover a workable COVID-19 vaccine; or strategies and decisions of managers concerning virologists and pressure on these scientists to resume educational, economic and related activities; and also, effects of the Clash of Civilization on political decisions. All of these can be examples of such Rs. (Figure 3, No 4).

5. Rs between the civilization-managers and the civilization-dwellers: for instance, the impacts of political or economic decisions of managers on people’s quality of life; or those relationships affecting dwellers’ civil and economic claims on managers’ decision-making (Figure 3, No 5).

6. Rs between the civilization-dwellers and the civilization-thinkers: effects of the political behavior of dwellers on the thoughts of political theorists; and the impacts of thinkers’ and scientists’ findings on dwellers’ lives can be samples of these kinds of Rs (Figure 3, No 6).

Figure 3: Intra-Spiritual Relationships of One Civilization
7. Rs between the civilization-managing and the civilization-managers: civilization-managing is a context or structure in which Rs 1 to 6 occur. Civilization-managers, thinkers, and dwellers have Rs within this structure. Because it is the legally structured and conventionally accepted part of the soul of civilization, a framework for activities and Rs between them exists. Rs between the civilization-managing and the civilization-managers: On the one hand, the civilization-managing layer, the laws and regulations of countries, global and regional organizations and unions (such as constitutions of countries, the laws of the UN, WTO, and the EU) provides a set of legal possibilities and limitations for managerial activities. On the other hand, managers as actors affect and change how civilization-managing occurs via their power to legislate (Figure 3, No 7).

8. Rs between the civilization-managing and civilization-thinkers: on the one hand, civilization-managing can affect the activities of thinkers by erecting legal and financial possibilities and limitations. On other hand, it is possible that civilization-thinkers indirectly change structures and laws by their influence over dwellers and managers by way of creating artistic works (movies, music, novels, or paintings), scientific findings (books, articles, and speeches), or philosophical-political thoughts. They may directly affect civilization-managing through being elected or appointed as managers (Figure 3, No 8).

9. Rs between the civilization-managing class and the civilization-dwellers: the civilization-managing level, on the one hand, delineates rights and obligations for dwellers, and it provides legal possibilities and limitations for political, economic, and civil activities. On the other hand, dwellers — with regards to the degree of democracy present — can change or reform formal laws and structures (Figure 3, No 9).

10. Rs within the civilization-managing and the civilization-managing levels: Today, civilizational territories include many countries which both have their special institutions and laws and the laws of transnational unions and organizations such as the United Nations, the World Trade Organization, and the European Union. The result of these Rs is ever-changing and the reforming of national laws in order to be accepted by transnational unions and organizations is quite present today. Rs between national and transnational laws can be entitled “vertical relationships”. This means that there is a dynamic tension between the laws of a country with the laws of relevant transnational organizations. In addition, there are Rs between various political, economic, and environmental laws within a country. These Rs can be entitled “horizontal relationships”. In short, Rs civilization-managing with other civilizations includes various vertical and horizontal Rs. (Figure 3, No 10).

R2: Intra-Bodily: Intra-Bodily Rs means all relationships within the body of one civilization (Table 4). The body of a civilization rests on three layers (the human, the man-made, and the natural layers); therefore, six kinds of Rs fall within the body of civilization (Figure 4):
1- Rs between the man-made layer and itself: for instance, the relationship between increases of capital attraction (a non-geometric factor) within extended urban areas such as megalopolises (as a geometric factor) in the contemporary world.

2- Rs between the natural layer and itself: all components of the natural layer have a lot of Rs with each other. Various Rs between the atmosphere, hydrosphere, cryosphere, biosphere, pedosphere, and lithosphere are samples of this type of Rs.

3- Rs between the human layer and itself: humans as physical and biologic beings make this layer of civilization. Therefore, all Rs within the body of a human (such as the relationship of heart with brain) and Rs between human bodies (such as the transfer of genes from parents to children) lie in this kind of relationship.

4- Rs between the man-made layer and the natural layer: for instance, on the one hand, effects of technology - as a non-geometric factor of the man-made layer (see Table 1) on the atmosphere or lithosphere as components of the natural layer of civilization. On the other hand, we find the effects of natural hazards (floods, earthquakes, and eruptions) on residential, industrial zones of cities (the geometric factors of the man-made layer).

5- Rs between the natural layer and the humans layer: for example, global warming impacts other components of the natural layer – such as on bodies of humans.

6- Rs between the human layer and the man-made layer: for instance, the effect of an increasing population, as a factor of the human layer, on the consumption of energy, food and goods, as the non-geometric factors of the man-made layer. Effects of developing of health and medical services as factors of the man-made layer, on the longevity of humans, is a sample of this type of Rs.

Figure 4: Intra-Bodily Relationships of One Civilization
R3: Intra-Spiritual-Bodily: Because of intertwining soul and body of civilization, every civilization in addition to Intra-Spiritual and Intra-Bodily relationships has Intra-Spiritual-Bodily Rs. These Rs involve all Rs between components of the soul and the body of civilization.

In Figure 5, below, we see the results of the dialectic and effects of the soul on the body (Figure 5, Relationships A) and the body on the soul (Figure 5, Relationships B). The soul and body of civilizations are connected to each other by these types of Rs, and these intertwine on immaterial and non-physical aspects of civilization as well as material and physical ones. Figure 5 displays which civilization is an intertwined set of various components with their different Rs.

Figure 5: Intra-Spiritual-Bodily Relationships of One Civilization

In addition to the intra-civilizational Rs (Table 4: R1, R2, and R3) which occur within one civilization, there are also four kinds of the inter-civilizational Rs (Table 4: R4, R5, R6, and R7). They occur between civilizations.

These relationships include:

- Rs between the souls of civilizations. Examples include the flow of worldviews, discourses, ideologies, believes, values, and norms between civilizations (R4: Inter-Spiritual).

- Rs between the soul of one civilization and bodies of other civilizations. For instance, the effects of capitalism as a discourse in Western civilization on the environment and the natural layer of other civilizational territories such as China, India, and Egypt and throughout the world (R5: Inter-Spiritual-Bodily).
Rs between the bodies of civilizations such as the flow of energy, food, goods, technologies, capital between civilizational territories, in particular, throughout the third millennium world (R6: Inter-Bodily).

Rs between the body of one civilization and the souls of other civilizations. For example, cities of a special civilizational territory such as China engage in architectural discourses with other civilizations such as Western architecture (R7: Inter-Bodily-Spiritual) (Table 4).

**Conscious-intentional\unconscious-unintentional Rs:** Civilizational Rs (Table 4) can occur consciously-intentionally or unconsciously-intentionally.

- Conscious-intentional Rs mean those Rs which are consciously established by humans to achieve given aims. These Rs are made on basis of human consciousness and intentionality.

- Unconscious-unintentional Rs mean those Rs which unconsciously are established by the human or nature not to achieve a given aim.

- All seven civilizational Rs can occur consciously-intentionally or unconsciously-unintentionally except those parts of the intra-bodily (R2) and the inter-bodily Rs (R6) which are not established or changed by humans. They occur in nature, by nature, and on the basis of the laws and forces of nature. For example, regarding those Rs between the hydrosphere (rivers, oceans, etc.) and the biosphere (plants and animals), humans have not already intervened consciously or unconsciously.

- In addition, there are intra-bodily and inter-bodily Rs where humans have intervened consciously-intentionally or unconsciously-unintentionally; the lead to negative effects of global warming as a result of human activities on plants and animals.

All other Rs (Table 4: R1, R3, R4, R5, and R7) can be conscious-intentional or unconscious-unintentional, because human beings are present in these of Rs.

For instance, a part of the democratization process’s relationship between civilization-managers and civilization-dwellers can be conscious and intentional, such as political movements or party activities; another part of this process may have established relations unconsciously and unintentionally, such as the indirect effects of civilization-thinkers’ activities (books, novels, and movies) on political movement (Table 4, R1: Intra-Spiritual).
The decrease-of-tax policy can have both conscious-intentional effects (such as the development of industrial activities) and unconscious-unintentional effects (for instance, environmental destruction (Table 4, R3: Into-Spiritual-Bodily). All global and regional organizations and unions (such as the United Nations, the European Union, the World Trade Organization, and the World Health Organization) are the examples of inter-spiritual Rs. Countries of different civilizations connect to each other via these organizations. (Table 4, R4: Inter-Spiritual).

Rs between one civilization’s soul and another civilization’s body can be conscious-intentional or unconscious-unintentional. For instance, capitalism as part of the soul and the civilization-managing structure of Western civilizations has had both conscious-intentional effects on other civilizations’ bodies (such as the increase of exploitation of natural resources throughout the world) and unconscious-unintentional effects (such as unintentional environmental effects which have emerged during time) (Table 4, R5: Inter-Spiritual-Bodily).

The seventh set of civilizational relationships address the relationship between the body of one civilization and the souls of other civilizations (Table 4, R7: Inter-Bodily-Spiritual). For instance, architecture styles of other civilizations (such as Greek, Roman, Medieval or Modern styles) may be used by architects consciously -- or unconsciously and unintentionally by people who have built houses to live in, not to consciously protect an architectural style.

**Actual\virtual Rs:** in addition to the seven Rs, a new type of relationship can occur because of the current "becoming-virtual" civilization. Thus, it is possible they virtually occur, except the Intra-Bodily Rs (R2) and the Inter-Bodily (R6) (Table 4). The R2 and R6 only happen actually. They cannot virtually do so because all their components are non-thinkers such as the atmosphere, buildings, or transportation networks (Table 3). They do not have the ability to participate in cyberspace.

Another type of Rs (R1, R3, R4, R5, and R7) can happen actually and virtually because the human subject is one of the actors here. The R1 (Intra-Spiritual) can be actual (face-to-face meetings, speeches, and more) or virtual. The R2 (Intra-Spiritual-Bodily): these Rs may be actual.

For example, we define the effect of managers’ decisions on increasing soil erosion as the bodily part of civilization. Although the bodily parts cannot participate in virtual relationships, it is possible they be participated in via cyberspace by humans. For instance, the soil of an area cannot share its erosion picture on the Internet, but it can be shared by people and affect managers’ decisions, and even thinkers and or dwellers.

The R4 (Inter-Spiritual): these Rs can occur actually (face-to-face meetings) or virtually (video conferences, teleworking, and so forth).
The R5 (Inter-Spiritual-Bodily): for instance, the creating of the environmental discourses by thinkers of a civilization can occur in face-to-face meetings or in cyberspace, which can cause the protection of the environment of the world.

Finally, the R7 (Inter-Bodily-Spiritual): these Rs, in addition to happening actually, can occur virtually. Becoming informed, people can work to oppose an environmental catastrophe (such as deforestation or diversity loss) in one corner of the world by cyberspace, and their worry over it is a sample of these Rs.

**Love-Hate Based Relationships**: As Table 4 shows, the R1, R3, R4, R5, and R7 type of relationships can occur along a loved-based (peaceful) to hate-based (violent) spectrum. The reason is that humans — as beings with potential and the possibility of both love (peace) and hate (violence) — find both within them. The Intra-Bodily and the Inter-Bodily Rs (R2 and R6) occur between natural beings; therefore, they do not originate from human love or hate.

The **Intra-Spiritual Rs** (Table 4, R1) involve the ten kinds of Rs between managers, dwellers and thinkers (see Figure 3). They can be organized on basis of the peaceful-democratic ways and structures or violent-nondemocratic.

- Rs of managers, dwellers and thinkers with their civilization’s body can be peaceful and love-based (such as environmental legislation to protect animals and plants) or violent and hate-based (such as the destruction of the environment) (Table 4, R3).

- Rs between the civilizations’ souls (Table 4, R4: Inter-Spiritual) may be peaceful or violent. The Clash of Civilizations theory and theories contrary to it try to explain these Rs. As Table 4 reveals (R5: Inter-Spiritual-Bodily), the soul of a civilization may relate to the bodies of other civilizations peacefully or violently.

For example, capitalism — as a part of the modern Western civilization’s soul - has peacefully connected to the body of Singapore which is a country out of the Western civilization’s basic geographical territory. Singapore not only has a free economy (rank 1 from 180, in the 2020 Economic Freedom Index (EFI) (Miller and others, 2020: 1). but also has an acceptable rank in EPI (rank 39 from 180, in the 2020 Environmental Performance Index) (Wendling and others, 2020: xii).

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3 This type of Rs have originated from a belief that the goal of a civilization is to minimize “hate” and maximize “love.” (Targowski, 2004:12).
Conversely, for instance, the capitalism relationship with the body of Qatar has been less peaceful (rank 31 from 180, in the 2020 EFI; rank 122 from 180, in the 2020 EPI).

The final type of Rs includes Rs between the body of a civilization and the souls of other civilizations (Table 4, R7: Inter-Bodily-Spiritual). These Rs can occur peacefully or violently. The body — because of its being non-human — is not able to have a lovable or peaceful, hateful or violent, relationship with other beings; conversely, the civilization-agents (managers, dwellers, and thinker) — because of their being human — are able to relate to the body of a civilization peacefully or violently. Attempts of geographers, climatologists, hydrologists, and others throughout the world to make more peaceful Rs between humanity and the body of the world are samples of these kinds of Rs.

II. How Civilized Is a Civilization?

All geographical spaces — from the smallest (a tribe, an ethnos, or a village) to the biggest (a country, a region, or all the world) — have all of the four layers (the thoughts, humans, man-made, and natural layers) (see Table 2).

However, components of the layers of every geographical space differ. All geographical spaces have the “thoughts” layer because all societies have non-biological and intellectual aspects. All societies (from small bands of hunters and gatherers to farmers and factory workers) produce cultures (combinations of the ideas, objects, and patterns of behavior that result from human social interaction) (Stearns and others, 2011:25). All geographical spaces include the “humans” layer because all humans, in addition to the non-biological aspect, have a biological aspect. All such spaces, because of involving human beings, have the ability to develop man-made things — from bow and arrow to airplanes and spacecraft; they have the “man-made” layer. Finally, because of living and acting humans on the earth, all geographical spaces have the “natural” layer.

Consequently, is it true that every geographical space is a civilization? According to the theory of geography, which distinguishes between the soul of civilization and the body of civilization, it can be said that every civilization is a geographical space, but every geographical space is not necessarily a civilization.

Now, the question is: What type of geographical space is a civilization? What criteria must the body and soul of a geographical space have in order for that space to be considered a civilization? Here we attempt to answer this question through the completing of this definition: “civilization is a geographical space.” The completed definition is: “civilization is a geographical space which has an “advanced body” and a “cultured soul.”
By considering civilization as a geographical space, this definition not only presents a systematic set (from the theoretical layers to the empirical indexes) to understand and measure civilization, in particular, today in the world (see Table 3); but it also presents two criteria (having an advanced body and a cultured soul) for:

- distinguishing civilization from barbarism;
- distinguishing kinds of civilizations from each other; and
- criticizing and emancipating civilization.

Now, what do “having a cultured soul” and “having an advanced body” mean?

**Having a cultured soul**: As Table 3 indicates, the soul of civilization (the thought layer) includes:

1. the hardware part (the civilization-managing), which means dominant and formally structured discourses, ideologies, values, rules and organizations
2. the software part (the civilization-managers, the civilization-thinkers, and the civilization-dwellers).

Hence, a soul is cultured which has both a cultured hardware part and a cultured software part.

What is a cultured “civilization-managing”? The answer is hidden in Aristotle’s definitions of man:

“Aristotle’s definition of man as zoon politikon […] can be fully understood only if one adds his second famous definition of man as a zoon logon eikon (“a living being capable of speech”). […] Aristotle meant neither to define man in general nor to indicate man’s highest capacity, […]”

“In his two most famous definitions, Aristotle only formulated the current opinion of the polis about man and the political way of life, and according to this opinion, everybody outside the polis — slaves and barbarian — was aneu logou, deprived, of course, not of the faculty of speech, but of a way of life in which speech and only speech made sense and where the central concern of all citizens was to talk with each other” (Arendt, 1998: 27).

If we accept that: (1) “to be political, to live in a polis, meant that everything was decided through words and persuasion and not through force and violence” (Arendt, 1998: 26); and (2) the goal of a civilization is to minimize “hate” and maximize “love” (Targowski, 2004:12); then, the civilization-managing must include a regulatory and legal framework of activities and relationships involving civilization-agents (managers, thinkers, and dwellers). Only then can we consider entities to be “cultured.”
These are ones that have a democratic structure. Because only a democratic “civilization-managing” can provide a legal structure with the possibility to participate by all people\(^4\).

This is so, for decisions to rest on words and persuasion and not through force and violence, as Arendt (1998) pointed out, and for minimizing “hate” and maximizing “love,” the goal of civilization as Targowski (2004) wrote.

The soul of a civilization is cultured when in addition to its the hardware\(\text{structure}\) part (the civilization-managing), its software\(\text{agency}\) part (the civilization-agents) also is cultured. In actually, what does the term cultured civilization-agents mean? The answer can be found within the definition of \textit{paideia}. Jaeger (1986) writes:

\begin{quote}
\textit{Humanitas} meant the process of educating man into his true form, the real and genuine human nature. That is the true Greek \textit{paideia}.
\end{quote}

It starts from the ideal, not from the individual; above man as a member of the horde, and man as a supposedly independent personality, stands man as an ideal. The ideal man is the universally valid model of humanity.

The essence of education is to make each individual in the image of the community. Greek education is not the sum of a number of private arts and skills intended to create a perfect independent personality.

The fundamental fact of all Greek education was this, which humanity always implied — the essential quality of a human being, his political character. It is a mark of the close connection between the productive artistic and intellectual life and community. (Jaeger, 1986: xxiii, xxiv, xxv, and xxvi).

On basis of the \textit{polis} as an institutionalized political community (Hansen, 2006: 56) and as “a system of government in which citizens had rights as well as duties under the rule of law” (Starr, 1986: vii) — the “democratic civilization-managing” is vital for being cultured, the civilization’s soul; but that alone is not adequate. Cultured civilization-agents are also vital.

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\(^4\)“Therefore, the definition of the polis as a community of citizens must be qualified. Aristotle presents us with a situation where a polis can exclude a substantial part of the native male population (apart from the always excluded women, children, slaves and metics)” (Vlassopoulos, 2007: 76).
Based on the conception found in *Paideia*, cultured civilization-agents are those who have been educated to understand and see themselves and others as men who are members of the horde, and also are supposedly independent personalities (Jaeger, 1986: xxiv) with the essential quality of a human being, his political character (Jaeger, 1986: xxvi); that “political” character which is his share of the universal ability of the citizen and by it he is fitted to cooperate and sympathize with the rest of the civilization in the life of the polis (Jaeger, 1986: 111).

**“Having an advanced body”:** The body of civilization consists of the humans, the man-made and the natural layers (Table 3).

The “advanced” adjective — which signifies being better — cannot be used for natural facts. Because each natural fact is unique and has itself a special function in nature. “Advanced” regarding the humans layers means humans who as biological beings have an advanced body. We can define this “advanced body” in two ways:

- having a normal and healthful body without ills, malnutrition, and so forth. Based on this notion, people who live in a civilization generally have healthier bodies, less malnutrition, and a higher life expectancy.
- having an ultra-normal and healthy body. It means a healthy body and also ultra-normal, which has been manipulated by advancements in sciences (particularly, Biology, Genetics, Neurology, and Biotechnologies).

This notion of “advanced” will develop significantly during the third millennium.

Finally, civilizations also have an “advanced” man-made layer. They have advanced non-geometric factors (for instance, advanced technologies, more capital, food, goods, services and so forth) and advanced geometric factors (such as advanced transportation and energy distribution networks).

Historians have identified a number of basic characteristics of civilization:

1- an urban focus,
2- new political and military structures,
3- a new social structure based on economic power,
4- the development of more complexity in a material sense,
5- a distinct religious structure,
6- the development of writing, and
7- new and significant artistic and intellectual activity (Duiker and Spielvogel: 2008: 8-9).

Peter N. Stearns (2003) discusses which civilizations, as a form of human organization, have economic surpluses.
These civilizations also have cities; most civilizations have writing and finally they have formal states (Stearns, 2003: 31). The geographical view of civilizations (Table 3) not only is able to involve the basic characteristics of civilization but also is able to distinguish them.

Many of these characteristics lie in the soul of the civilization layer (such as political, religious, social and military structures, formal state, artistic and intellectual activity, and writing). Many of them lie in the body of civilization (such as economic activities and surplus, and a material sense). Finally, the “urban focus” — as one of characteristics of civilization — is itself a geographical space which has its own special soul and body.

On basis of the definition of the “advanced body” and the “cultured soul”, Table 5 distinguishes types of civilizations.

<table>
<thead>
<tr>
<th>Type</th>
<th>The soul of Geographical Spaces</th>
<th>The body of Geographical Spaces</th>
<th>Types of Space</th>
<th>Types of civilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cultured</td>
<td>Advanced</td>
<td>Spiritually &amp; bodily Mature</td>
<td>Complete civilization (civilized)</td>
</tr>
<tr>
<td>2</td>
<td>Cultured</td>
<td>Mature</td>
<td>Spiritually Mature</td>
<td>Incomplete civilization (spiritually civilized)</td>
</tr>
<tr>
<td>3</td>
<td>Immature</td>
<td>Bodily Mature</td>
<td>Incomplete civilization (bodily civilized)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Immature</td>
<td>Bodily Mature</td>
<td>Spiritually &amp; Bodily Immature</td>
<td>Complete barbarization (uncivilized)</td>
</tr>
</tbody>
</table>

The soul of every geographical space may be cultured, uncultured, or lie along the cultured-uncultured spectrum. Its body may be advanced, primitive, or lie along the primitive-advanced spectrum. When the soul of a geographical space — such as a city, a country, a region, a civilizational territory, or all the world — is cultured, and its body is advanced, then the space is spiritually-bodily mature. We can consider it as the complete type of civilization. That space is “civilized” (Type 1). In the real world, no geographical space completely has a mature spiritual-bodily nature:

- Because its soul cannot completely be cultured. No civilization’s soul is definitely devoid of violence and force.
The soul is not completely full of activities and relationships which are done on “speech and reason”, and in an absolutely democratic “civilization-managing” way.

According to Massey’s conceptualization of space (1992) “space is full of power, arranged as a complex web of relations of domination and subordination” (Took, 2000: 569). Furthermore, all of “political” character of all civilization-agents (managers, thinkers and dwellers) do not bloom fit to cooperate and sympathize with the rest of the civilization, as Jaeger implied (Jaeger, 1986: 111).

- Because its body cannot completely be advanced. The notion of “advanced” is an endless process. As result, in the real world, all geographical spaces which have a mostly — not completely — cultured soul and a mostly advanced body, we can label “mostly civilized”, not “completely civilized”. All advanced societies which have a cultured soul fall within this type of civilization.

It is possible that a geographical space has a cultured soul but has not the advanced body; it is a spiritually mature space; therefore, it is an incomplete civilization (spiritually civilized) (Type 2).

Ancient civilizations which have disappeared had their buildings, cities, and dwellers, but their cultured soul is still alive, such as Greek civilization. They have been mostly “civilized” (Type 1) but because of losing their bodies over time, they have become an uncompleted civilization or the same type 2. When the soul of a geographical space is uncultured, but its body is advanced, that is bodily nature. Hence, it is an incomplete civilization (bodily civilized) (Type 3).

Peter N. Stearns has a conception of civilization (2003) that describes this type of civilization. Stearns (2003) points out that civilization is not necessarily better than other forms. It often involves more social inequality. It may not produce more kindness or happiness. Many non-civilized societies produce more courteous and generous people than many civilizations do. (Stearns, 2003: 32).

Therefore, if scientific and technological advances, and man-made productions (such as capital, goods, food, and energy) do not keep step with a cultured soul, the civilization of the third millennium will tend to the type 3 (bodily civilized).

If the civilization loses its body (the nature, the man-made, or the humans layers) by a ruinous global event — such as viruses, wars, or global warming — but keeps its soul, then the civilization will tend to type 2 (spiritually civilized).
When a geographical space has both a completely uncultured soul and a primitive body, that space is spiritually and bodily immature. That geographical space is “uncivilized” (completed barbarization).

In the real world, no geographical space is completely spiritual-bodily immature, because in the soul of every space, more or less, can found signs of a cultured soul; moreover, the body of every geographical space cannot absolutely be primitive because even making a bow and arrow in primitive societies constitutes a sign of advancement. Hence, all geographical spaces lie somewhere along the Complete Civilization - Complete Barbarization (CC-CB) spectrum.

“However, the idea that all human societies developed (or should develop) in a uniform process from a “cradle” to a “mature” civilization has now been largely discredited, and some world historians choose not to use the word civilization at all because its meaning is so value-laden. But they have not rejected the idea that about 5,000 years ago a new form of human society appeared, first in the valley formed by the Tigris and Euphrates Rivers.” (Mesopotamia). (McKay and others: 2011: 36).

The geographical theory of civilization, by presenting two “macro” criteria (cultured and advanced), on the one hand, has a value-driven understanding of civilization; it provides the possibility of understanding, criticizing and emancipating civilizations. On the other hand, it accepts that all societies have a degree of civilization and of barbarization. Hence, no society is complete civilization or total barbarization.

It is true that all societies must reveal, to be regarded as a civilization, two criteria “cultured” and “advanced”, the criteria are not two absolute points, based on historical realities, but they define a spectrum (Table 3) one upon which every society, more and less, has a degree of achievement or failure.

Finally, there are types of civilizations, not one type of civilization. There are different degrees of civilization and barbarization, no completed civilization or total barbarization.

Now we must ask: How civilized is a civilization? This is a critical question, one which requires us to present criteria to critique a civilization. The reply is: the degree of “being cultured” of the civilization’s soul and the degree of its body “being advanced” determine the level and type of its being civilized (Table 3).

For instance, social inequality and environmental unsustainability are two main problems in the world civilization of the third millennium. The rising of levels of inequality and unsustainability reduce the level of being civilized of spaces which are candidates for the label of civilization.
Social inequality is one of factors which decrease the level of the soul being cultured. Similarly, environmental unsustainability also does so; it is destroying the world’s existing body and reducing the level of bodily sustainability of civilization and threatening it.

III. Emancipating Civilization

Thus, as has been shown, “having a cultured soul” and “having an advanced body” also help to reply to the third main introductory question: What must be done to emancipate civilization from making uncivilized processes?

Based on the theories of geographical space and civilizations, the answer is: each process, action or reaction, whether human or natural, whether conscious or unconscious, which reduces the degree of the cultured soul and the advanced body functions as determinative in the making-uncivilized process.

Therefore, on the basis of the Geographical Theory of Civilization the steps that must be taken to emancipate civilization are:

1- for improvement of the soul: the presence of democratic “civilization-managing” structures that allow all civilization-agents to participate in decision-making processes; and also, the existence of an education system (Paideia) for bringing up “cultured” civilization-agents.

2- for improving the body: every process which improves the natural, the humans, and the man-made layers can be emancipatory. For example, increasing the protection of the natural layer (the environment) and the humans layer (protection of human bodies against diseases and malnutrition); and also (re)building an advanced man-made layer that is consistent with the environment — all these are samples to improve the body of civilization present in the world.

Conclusion

The geographical conceptualization of civilization means viewing and conceptualizing civilization from the viewpoint of Geography. Based on the prevailing geographical view, then, every civilization is a geographical space, but not every geographical space is necessarily a civilization. Civilization is a geographical space which has an advanced body and a cultured soul.

Via this definition, we can thus answer three types of questions on civilization.
Type 1: questions to understand civilization: What is civilization? It is a geographical space (see Table 2 and 3). What are its types? (The answer is in Table 5). What are its components, relationships and scales? (Answers are in Figure 2, Table 3, and Table 4).

Type 2: questions to critique civilization: How civilized is a civilization? The level of “being cultured” of its soul and “being advanced” of its body determines the degree and type of its being civilized (see Table 5).

Finally, Type 3: questions to emancipate civilization: What must be done to emancipate civilization from the process which lead to making-uncivilized? All processes which enhance the level of the soul’s being cultured, and which encourage the advanced nature of the body of civilization, help spark the emancipation of civilization.

Bibliography


The Blocks of History: A Step-by-Step Model for the Evolution of Civilizations

Shuai Wang
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Abstract

The Pattern Recognition algorithm in Artificial Intelligence has been applied to many fields and proven to be very effective when seeking out patterns that arise from huge amount of raw data. As world history has evolved, it has revealed the shift of hegemony from one civilization to another, for example, from the Spanish Empire to the Kingdom of France, from the Kingdom of France to the British Empire, and from the British Empire to the United States. As historians have shown, the relevant eras are the Spanish Golden Age, the Age of Enlightenment, Pax Britannica, and Pax Americana. Since the data about these eras are too huge to collect, I believe one can manually find out useful patterns by critically thinking about similarities in history. I propose a solution of finding each era’s beginning and ending year, then quartering years, along with similar but critical events which happen in these years. By applying this method, one can observe the evolution of history step-by-step and can extract the pure logic behind it.

1. Introduction

Pattern Recognition can be applied to extract pattern(s) from huge amount of data. For example, Walmart has applied this technology to analyze receipts, and it has found that on Monday night customers who buy diapers usually also buy beer. They soon realized it’s because for newly married couples, men often do shopping on Monday nights for the babies. The company put diapers and beer close to each other and found that the beer sales increased. A pattern can be thought of as something happening repeatedly over with a fixed period.

The view of civilization as an “organism,” offered by Oswald Spengler, is the foundation of this paper. In order to make things easier, the abbreviations ESP, FRA, GBR and USA will be designated for the Spanish, French, British, and American civilizations. We will use DEU for the Germanic civilization, including Prussia, the Second German Empire and Germany today. Similarly, we will use RUS for the Russian civilization and CHN for Chinese civilization.

A “step” could be considered to represent an era like the one generally designated as Pax Americana, or a period within it, such as the Gilded Age of the United States (from 1870s to about 1900), or something even longer.

Some features of each era are indicated in the following chart.
2. Initial Breaking Points: Comparing the United States and China

After reading *The Jungle* by Upton Sinclair, I did some research about the background of the period. I realized it is the dawn of the Progressive Era in the United States (from the 1890s to the 1920s). Before this period lies the Gilded Age (from 1870s to about 1900).

As a Chinese born in the 1980s, I soon found significant similarities between the Gilded Age of the United States and what happened in China during the 1990s to 2000s, known in China as the Era of Reform and Opening-up. This involved, but is not limited to industrialization, cheap labor, poor product quality, urbanization, pollution, and corruption of the bureaucratic system.

The next question I considered was, how did the United States manage to evolve from the Gilded Age to the Progressive Era? As my research went on, I found that the US restored the gold standard in 1879; in 1883 the building of the ABCD fleet occurred and during the same year the 1883 Pendleton Civil Service Reform Act was passed. These three key events in the Gilded Age paved the way for the next era. And they represent upgrades in the economy, the military, and the bureaucratic system.

China in 2002 joined the World Trade Organization. In 2006 it started its aircraft-carrier program (along with WS-15 aviation engine project, to be used in the J-20 stealth jet fighter). The same year saw the declaration of the Civil Servant Law of the People’s Republic of China.

Thus, 2002-1879 = 123, and 2006 – 1883 = 123.

These, then, constitute my first three initial “breaking points,” and they share this period of 123 years. Thus, what happened in the United States 123 years ago, now happened in China, albeit in a different form.

A summary of this section:

<table>
<thead>
<tr>
<th>Age/Era</th>
<th>Core</th>
<th>Ideology</th>
<th>Means of production</th>
<th>Production upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish Golden Age</td>
<td>ESP</td>
<td>Colonialism</td>
<td>Outsource to other countries</td>
<td>Purchase from workshops in other countries</td>
</tr>
<tr>
<td>Age of Enlightenment</td>
<td>FRA</td>
<td>Mercantilism</td>
<td>Workshop</td>
<td>Royally-chartered Workshop</td>
</tr>
<tr>
<td>Pax Britannica</td>
<td>GBR</td>
<td>Capitalism</td>
<td>Factory</td>
<td>Industrial Revolution</td>
</tr>
<tr>
<td>Pax Americana</td>
<td>USA</td>
<td>Consumerism</td>
<td>Factory with mass production</td>
<td>Electrification Revolution</td>
</tr>
<tr>
<td></td>
<td>USA</td>
<td>CHN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA restores the gold standard and joins the world trading system led by GBR</td>
<td>1879</td>
<td>2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>1883 Pendleton Civil Service Reform Act</em> abolishes the Spoils System</td>
<td>1883</td>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starts to build the ABCD fleet (modernization of the American naval force)</td>
<td>1883</td>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>China enters the WTO, which is led by the USA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Civil Servant Law of the People’s Republic of China</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>China starts to update the aircraft carrier the Varyag, purchased from Ukraine and the WS-15 aviation engine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Second Breaking Points: between AUT-DEU Alliance and the EU

When thinking about the end of Pax Britannica and the start of Pax Americana, I’d like to point out here that two major new powers arose near the end of Pax Britannica. These two are the United States and the German-led Austro-German Alliance. For the period of Pax Americana, there are two new major powers: the German-led European Union and China.

The question arises whether the German-led Austro-German Alliance parallels the European Union. Since Germany is the core for both, we find that in 1879 the Austro-German Alliance started and in 2002 the Euro became the single currency in Euro-zone Europe (vs Petrodollars). And we see that $2002 - 1879 = 123$.

During Pax Britannica, Germany (Prussia) united, rose in power, and finally challenged Great Britain. During Pax Americana, modern Germany reunited, rose in power, and tried to restore its political position (following its defeat in World War II). The similarity here is obvious to me. One cannot state that the European Union will challenge the United States later, or that by $1914 + 123 = 2037$ World War III will happen.

Statements like these require more proof concerning the magic number “123”. Therefore, in the following paragraphs, I will just assume this 123-year-period works and consider it like a constant in physics.

Here, I would like to divide major civilizations into several types. Type I civilization includes ESP, FRA, GBR and USA. Type II civilization is DEU. Type III civilization is RUS and Mongolia before it.
Type I focuses on expansion and always builds a system (with YANG features), but Type II focuses on perfecting (with YIN features).

4. The rise of the United States and its 123 year period

After trying out different starting years, I believe the year 1883 is perfect for the rise of the United States, and 2005 is the moment of the start of the fall of the US (since 1883 + 123 = 2006).

The reason is that China’s military power rises in 2006, but this doesn’t mean that the United States instantly declines in 2006. Think about a baby. The baby when born, it’s age one. But it’ll take at least 17 years before that child can formally join and function in society. This “age 18” is like the 1883 for US and 2006 for CHN, which means that the United States is ready and officially enters upon the international scene. The military upgrade (from defensive to offensive) is a key aspect of the pattern.

Thus, 123 = 30 +1 +30 +1 +30 +1 +30, so if we use 1883 as start, we can divide the period into:


The years 1913, 1944 and 1975 each reveal very important events for the United States. The Federal Reserve starts in 1913, the Bretton Woods System (Gold-dollars) starts in 1944, and the US Dollar is tied with oil (Petrodollars) in 1975. So, this quartering split clearly shows the evolution of American’s dominating financial system, which is obviously an important cornerstone of Pax Americana.

This is my definition of the Pax Americana, from 1883 to 2005, its critical years are 1883, 1913, 1944 and 1975.

5. The rise of Great Britain and its 123 year period

For Pax Britannica, by applying 123 years’ period, it should be from 1760 to 1882, like this:

| 1760 | 1789 | 1790 | 1791 | 1820 | 1821 | 1822 | 1851 | 1852 | 1853 | 1882 |

The most obvious pattern about Great Britain is that in 1821 the Gold Standard starts; 1821 + 123 = 1944 (the Bretton Woods System starts). But I can’t find how GBR built its Gold Standard nor how the Gold Standard evolved. For GBR’s military and political upgrade, in 1760 the new king, George III, started to expel the Whig Party and use the Tory Party (thus revealing a British bureaucratic system upgrade). And the Annus Mirabilis of 1759 is perfect for the end of FRA’s military might.
The 1789 French Revolution gives GBR an excellent edge to maneuver across the European continent. I believe arrangements must have been made in 1789 to ensure the stability of Great Britain’s financial system due to the disturbances in France, but as of yet, I cannot find any evidence.

So, I am led to assume that Pax Britannica runs from 1760 to 1882, and its critical years are 1760 and 1821. In addition, 1790 and 1852 require more study about the evolution of the British Gold Standard.

6. The rise of France and its 123 year period

For the Age of Enlightenment (or, if you will, the period of French hegemony)

| 1637 | 1666 | 1667 | 1668 | 1697 | 1698 | 1699 | 1728 | 1729 | 1730 | 1759 |

In 1636 an offensive by Spain and the Holy Roman Empire was launched against France, but in 1637 the French offensive began, and finally France won the Thirty Years’ War (1618-1648). Now it dominated the European continent, which is perfect for the start of the rise of France.

I can’t find enough material about the French financial system. It seems that Sir Isaac Newton made an agreement with French king Louis XIV in 1698 concerning silver coin casting; I just cannot find more details about it.

So, I assume that the Age of Enlightenment is from 1637 to 1759 (as mentioned above, the Annus Mirabilis of 1759), its critical years are 1637 and probably 1698, and 1759. Years 1667 and 1729 require more study about the evolution of French Mercantilism.

7. The Spanish Golden Age

For the Spanish Gold Age, our calculations are purely theoretical.

| 1514 | 1543 | 1544 | 1545 | 1574 | 1575 | 1576 | 1605 | 1606 | 1607 | 1636 |

I haven’t done my study about Spain yet, so I’ll just put the timeline here for now. The Spanish Empire is apparently the final step of the hegemony of the House of Habsburg, which was started by Rudolf I of Germany in roughly 1268 (LUX for Luxemburg), then develops into the Austrian Empire (AUT) in around 1391, and then, into the Spanish Empire (ESP).

This pattern of 123 years could be applied repeatedly backwards through history to show each era, running through the Middle Age of Europe. As you can see, LUX, AUT and ESP formed ever bigger steps of the hegemony of the House of Habsburg.
Similarly, FRA, GBR and USA formed yet greater steps in modern history. By doing this we can approach and study the evolution of history metaphysically.

Thus, a “big step” of civilization’s evolution comes via three smaller steps and lasts for a period of 123 times 3 = 369 years, like this:

8. Summary of year-based data

The table of four hegemonic civilizations in modern history is as follows:

<table>
<thead>
<tr>
<th>ESP</th>
<th>FRA</th>
<th>GBR</th>
<th>USA</th>
<th>Description</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1514</td>
<td>1637</td>
<td>1760</td>
<td>1883</td>
<td>Step 1: military and bureaucratic system upgrade</td>
<td>30 years</td>
</tr>
<tr>
<td>1543</td>
<td>1666</td>
<td>1789</td>
<td>1912</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1544</td>
<td>1667</td>
<td>1790</td>
<td>1913</td>
<td>Step 2: seizure of power to build hegemony</td>
<td>1 year</td>
</tr>
<tr>
<td>1545</td>
<td>1668</td>
<td>1791</td>
<td>1914</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1574</td>
<td>1697</td>
<td>1820</td>
<td>1943</td>
<td>Step 3: a powerful hegemony rules its time</td>
<td>30 years</td>
</tr>
<tr>
<td>1575</td>
<td>1698</td>
<td>1821</td>
<td>1944</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1576</td>
<td>1699</td>
<td>1822</td>
<td>1945</td>
<td>Step 4: the end of the several periods of hegemony</td>
<td>30 years</td>
</tr>
<tr>
<td>1605</td>
<td>1728</td>
<td>1851</td>
<td>1974</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1606</td>
<td>1729</td>
<td>1852</td>
<td>1975</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1607</td>
<td>1730</td>
<td>1853</td>
<td>1976</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1636</td>
<td>1759</td>
<td>1882</td>
<td>2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Conclusion

In this attempt I have proposed an experimental model of the evolution of modern history, and I have offered a method to split or combine eras, each one of which is assumed to last for 123 years. I started with the analysis of the four major eras of modern history, and I then observed the similarities between the United States and China.
These reveal that there is a recurring 123 year-long pattern. Then, we can apply this pattern to modern history and split every 123 years into four parts, each demarcated by significant events.

The model (for Type I civilization) is not perfect due to the insufficient historical evidence, but for each start year, the military upgrade provides an epoch-making pattern.

As a result, I have revealed two key patterns to investigate when studying any civilization: one rests upon its military system and the other upon its economic system. The evolution of these systems in Type I civilizations has shown certain similarities.

10. Aim and Summation

Each era can be split into smaller steps or combined to form bigger steps. Utilizing this method, like the zoom in/out function of a camera, once accomplished can display the evolution of history at different levels. It will show a clear shift of hegemony, or the main path of development of human history.

The next stage of study includes three major efforts.

1. To divide each era into eight parts, which is 123 = 15+15+1 +15+15+1 +15+15+1 +15+15.
2. A deeper study and understanding of Spanish, French, and British financial and military history.
3. The expansion of these 123 year eras backwards. The goal is to try to narrow down the starting location of human history. (It’s highly probable that this will be the Sumerian civilization)

11. Partial glance at patterns and prognostications

In 1883 the Americans started to build warships. Fifteen years later the United States started to use this military might to expand. This is one reason I intend to divide each era into eight parts with 15 years suggested as a minimal length for each segment. And in my opinion, 15 years is perfect for one generation.
## Patterns

<table>
<thead>
<tr>
<th>Event</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Austro-German Alliance (DEU-AUT) starts</td>
<td>1879</td>
<td>2002</td>
</tr>
<tr>
<td>The United States restores the gold standard and joins the world trading system led by Great Britain</td>
<td>1879</td>
<td>2002</td>
</tr>
<tr>
<td>1883 Pendleton Civil Service Reform Act abolishes the Spoils System</td>
<td>1883</td>
<td>2006</td>
</tr>
<tr>
<td>Start of the building of the ABCD fleet (modernization of US naval force)</td>
<td>1883</td>
<td>2006</td>
</tr>
<tr>
<td>Venezuela Crisis between GBR and USA (USA expands)</td>
<td>1895</td>
<td>2018</td>
</tr>
</tbody>
</table>

## Prognostications

The following prognostications are made without using a crystal ball or burning turtle bones or throwing sticks. They result from pure logic, informed by an educated guess.

<table>
<thead>
<tr>
<th>Event</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish-American War, US seizes control of the Caribbean Sea</td>
<td>1898</td>
<td>2021</td>
</tr>
<tr>
<td>Boer War, GBR fought very hard to control the diamond and gold mines found in South Africa</td>
<td>1899</td>
<td>2022</td>
</tr>
</tbody>
</table>

If China must have a similar fight, it will be to reunite with Taiwan or to utilize another method to control the South China Sea.

If US must have a similar fight, it'll be against Iran to take full control of oil supplies.
12. Postscript

Ecclesiastes 1:9 -- "There is nothing new under the sun."
Harry S. Truman -- "There is nothing new in the world except the history you do not know."

Even though sayings like this exist, history still has been used to undergird patriotism in many countries. Heroes, heroic stories and the glories of the fatherland have been repeatedly taught to the public in order to motivate a nation to achieve something (could be hard-work or war).

But they all have neglected one simple thing: no empire lasts forever. Every hegemony has a life-span, every hegemony falls at some point, that fate is inevitable because it’s man-made.

In this paper I have focused on hegemony, which is the most obvious period of any major civilization. Yet, if we think about a civilization’s life-span, then there must be a beginning and an end.

Think about 1764 and its impact for the settlers living in North American colonies. The British had won the Seven Years’ War, but they mistreated the people of the colonies, thus causing the colonials to form their own self-identity (they’re Americans instead of British). Think about the year 1641 (1641 = 1764 - 123) for the British; the Grand Remonstrance was passed, and it helped bring on the British Civil War in the next year. Then, equivalently, 1518 for the French, and 1395 for the Spanish.

I’m not saying these are perfect years to indicate the ushering in of a new era, just a way to be considered.

References

[3] Tao Te Ching
[4] I Ching
Brandeis Psychology in the Late Fifties: 
Further Comment on Feigenbaum (2020)

Jeffrey H. Golland
Mount Sinai School of Medicine

Recent articles in this journal spoke about A.H. Maslow and the Brandeis University Psychology Department of the 1960s (Feigenbaum, 2020, Lester, 2020), the first from a former junior faculty member, the second from a former graduate student. I learned from each of them, and they triggered my own memories as an undergraduate psychology major who went on to earn a PhD in clinical psychology. Maslow taught the introductory course in fall semester; I took it in the spring (1958) with Ricardo Morant, who succeeded Maslow as department chair, and held that position for decades.

I first met Maslow during my junior year, in his course on motivation, already having studied with Walter Toman, Ulric Neisser, Richard Held, James Klee, Richard Jones and David Ricks. All but Klee were young men who hadn’t yet made their mark. Maslow did hire one woman, Eugenia Hanffman, who did not teach, but instead founded the first college counseling service, a facility now universal in American higher education. Friends had told me Maslow’s introductory course was excellent; my recollection of his teaching was that it lacked organization and consisted mostly of anecdotes. However, at my graduate admissions interview I was asked to name three psychologists who had most affected my thinking. I cited Freud, Wilhelm Reich (1934), and Maslow.

Later, at the five-year anniversary reunion of my Brandeis class, I saw Dr. Maslow just outside the Brown Building. Eager to tell him I had just completed my doctorate, I thanked him for his leadership of the very special group with whom I had studied (by then several had decamped). He seemed to this newly-minted clinician to be depressed. He said he was sorry he’d chosen to be a psychologist and regretted much of what he’d written, especially the Abnormal Psychology text co-authored with Bela Mittelmann. I was shocked, reiterated my appreciation, and backed away. This was a year before his election to the APA presidency.

Maslow’s “humanistic psychology” could not be considered a specialty. It was instead a general attitude that influenced the entire profession. Ulric Neisser’s entry in The History of Psychology through Autobiography (Lindzey & Runyan, 2007) spoke of Maslow’s Humanistic Psychology as the “third force;” Freud and Skinner were the other two. Known as the father of “cognitive psychology” and coining that term, Neisser ultimately displaced Maslow to become a real third force. Maslow’s reputation as an eminent psychologist remained estimable, finding adherents (paradoxically, it seems to me) in Industrial Psychology.

I’ve often mentioned Maslow as my teacher, and I refer to myself today as a “flexible Freudian,” my flexibility related to the humanistic atmosphere conveyed by each of the several members of the Brandeis faculty Maslow assembled. Walter Toman and Richard Jones were the two faculty Freudians. Toman gave a definition of “cathexis” — “learning to appreciate” — that enabled me to resist the word’s quantitative implications then in fashion for the neologism, James Strachey’s translation of the German bezetzung.
Jones’s focus on applications of psychoanalysis (which led to his 1968 book, *Fantasy and Feeling in Education*) oriented me to Freudian thinking as a study of the human mind and its products. In several tutorials and a course, Klee exposed students to the multiple manifestations of offbeat ideas. Neisser taught a great statistics course, as well as one on memory, and Held taught the History of Psychology, the best single course I’ve ever taken. Jones and Ricks jointly led a “personality laboratory,” what is now referred to as a process group, not therapy but surely a therapeutic experience. Morant was a steadying influence, a research scientist and humanist who spent his full career at Brandeis.

I like to say that this faculty was — pound for pound — the best psychology department ever established. Like *Camelot*, that department would not last, but an unusually high number of classmates (plus many students in other classes at the time) became psychiatrists or psychologists, passing on the wisdom of those mostly young men. An important characteristic of contemporary psychoanalysis, which I hope is also true of psychology at large, is respect for multiple perspectives, and Maslow’s great accomplishment as founder and chair of that small department at Brandeis was, I believe, to nurture a quality of openness among the undergraduates lucky enough to have been there at the time.

**References**


A Brief Response to Dr. Jeffrey H. Golland

Kenneth Feigenbaum

I have read with much interest the letter of Dr. Jeffrey H. Golland describing for the Spring, 2022, issue of the CCR his experience as an undergraduate student in the Department of Psychology at Brandeis University in the late 1950’s.

I have no disagreements with his remarks concerning the quality of the faculty of the department at that time nor his estimation of Maslow as an undergraduate teacher. I also appreciated reading his subjective experience of Maslow as a mentor.

Maslow was a popular undergraduate professor both at Brooklyn College and, for many years, at Brandeis. As I reported in my letter (Feigenbaum, 2020), I conducted an informal study of his students from the class of 1955. In short, they loved him. His worldwide reputation and the perceived excellent quality of his teaching continued beyond Golland’s tenure at Brandeis with his experimental classes (Maslow, 2019).

Unlike Prof. Maslow’s close and supportive relationships with his undergraduate students, his relationships with his graduate students for the most part produced disappointment on the parts of both Maslow and his students.

According to Hoffman (Hoffman, 1988, p. 222):

At best, some doctoral student came to regard Maslow as unintentionally too self-absorbed to become involved with their training. They either worked autonomously or chose to train under someone else on the faculty. “If you want to get your doctorate,” was the inside saying, “don’t work under Abe Maslow. You’ll never get out of here if you do.” At worst, they muttered that he hypocritically espoused a whole agenda of humanist and socially relevant research while neither attempting it himself nor guiding anyone else who wished to accomplish it.

However, I strongly believe that hypocritical is not the correct word for describing Maslow’s lack of closely working with, and supporting the work of, the graduate students. Rather, he believed that a graduate student should possess self-direction by themselves without the hovering of an overbearing mother or father figure. This attitude combined with his emergence as a highly sought-after psychologist, which thus required much wearing travel; his limitations as to his energy due to his physical conditions; and his desire to spread his philosophy before he would die were the main underlying causes.

In the period during which Dr. Golland attended Brandeis the department’s fulcrum was still tilted toward undergraduate teaching.
By the time I began to teach at Brandeis (September of 1962) the emphasis in the department had already begun to shift to graduate education. The great majority of the faculty meetings were taken up by discussions about the graduate students. Discussions about the undergraduate curriculum and how to teach these students was left up to the individual faculty members.

The quality and devotion to teaching undergraduates varies over time in most colleges and universities. The Brandeis case may provide an example of institutions that overstretch their resources. This problem may be most severe in small liberal arts colleges whose faculty members have a strong interest in performing research.

I am almost jealous of the outstanding experience that Dr. Golland had with the faculty members who taught him at Brandeis. His letter provides a broader perspective of the Brandeis Department of Psychology than either Feigenbaum (Feigenbaum, 2019) or Lester (Lester, 2020) have portrayed.

References


Book Reviews


Reviewed by Vlad Alalykin-Izvekov

“Cyclical patterning of history in its various forms … has been and still remains man’s most valiant effort to make history into sociological science …”

Dr. Grace E. Cairns

The author of scholarly materials under review is a prominent Russian scholar, Doctor of Economics Prof. Mamikon S. Airapetian, the Leading Researcher of the Department of Macroeconomic Forecasting and Planning of the Financial University (FinU), Moscow, Russia.

In his book entitled *World Civilizations and Economic Cycles: A Comparative Historical Analysis* (Airapetian, 2020) Dr. Airapetian introduces an original, fundamental paradigm of global history. In order to substantiate and present his ideas, the author turns to a vast array of classical and contemporary scholarly sources as well as introduces a significant number of new concepts, such as, for example, the notions of “time paradox” and “cyclical wheel of time.”

A brief introductory summary of the book says, in part:

The study presents a new philosophical and historical concept of civilizations, economics and politics as a system of large and small world civilizations. Its structure includes the world economic, generational and national political cycles. This model is a major research project that allows for the analysis and forecasting of world and local history in a fundamentally different context than is customary in traditional and modern research. … The monograph will help to understand the multifaceted nature of world and local history and approaches to its interpretation, not limited to the narrow space-time framework adopted in modern management theory and practice.

The monograph itself is the first installment of a major, long-term research and educational project that will eventually include five parts. Those are named as follows:
Part I. Concepts and Determinants of World History.
Part II. Periodization of World History and Anthropocentrism.
Part III. World Civilizations and the Modern World.
Part IV. World Wealth and Modern Civilization.
Part V. Cyclical Processes and Economic Policy.

The cyclical patterning of history is one of the oldest, established, and most effective approaches in philosophical, historical, and economic fields of studies. One of the founders of ISCSC, the prominent Russian and American sociologist, historian, and philosopher Pitirim A. Sorokin authoritatively postulates:

…a study of the cyclical and rhythmical repetitions in social phenomena is, at the present moment, one of the most important tasks of sociology. It must be promoted by all means because it provides many conveniences for solving the most important sociological problems. The field of the repeated phenomena provides a possibility to grasp the regularities of social process: where there is no repetition, there is no possibility of observing regularity and, consequently, of formulating a sociological law or a valid generalization. Without such generalizations the very raison d’être of sociology, as a nomographic science, disappears.

In the second place, this field is more convenient for a study of causal dependence and functional interdependence of different social phenomena than the field of the unrepeated processes. In the third place, the repeated rhythmical processes seem to be the most convenient for a quantitative study, which is the final purpose of any generalizing science. If in this way we may obtain only an approximately true generalization, this must not trouble us. We still know so little in the “mysterious” world of social events that any real approximate knowledge is of great value. …

By the study of an ever-increasing number of different social phenomena which are repeated from time to time, we approach nearer a solution of the problems of what in the incessantly changing process of history is relatively permanent and what is quite temporary; what is relatively universal and what is purely local; what is the tempo of a change of different social processes; what relations between two or more phenomena are incidental and which are really causal. (Sorokin, 1927: 39-40).

Dr. Airapetian’s paradigm justifiably includes a significant number of interacting historical cycles, for example large, approximately 2200-year cycles, shorter, about 300-year-old cycles, as well as “generation-based” 34-year cycles.
For example, the “oil cycle” corresponds to the “oil generation” (1896-1930), the “nuclear cycle” to the “nuclear generation” (1930-1964), the “space cycle” to the “space generation” (1964-1998), and the “digital cycle” to the “digital generation” (1998-2032).

Even though some social scholars deem the generation-based cyclicity as being non-representative, or even superficial, in fact, the age-based approach rests on a firm scientific foundation.

In his classic volume, The System of Sociology, Pitirim A. Sorokin describes three main groupings based on race, gender, and age, as milestones of his group stratification. According to the scholar, these powerful congregations exert perennial influence not only on lives of other groups, as well as on the fate of the population, but on the course of social events in general. (Sorokin, 2008: 461-462). The scholar writes:

Among forms of struggle of many social groups on the historical field … there has been and remains - explicit or secret, conscious or not - the eternal struggle of “fathers and children.” ... All these and similar phenomena, all these shifts of rights and responsibilities associated with age, were caused by the activities of age groups. The age group is their creator. It rewinds the springs that cause these effects” (Sorokin, 2008: 459-460).

Sorokin further affirms these views in his magnum opus Society, Culture, and Personality. (Sorokin, 1947: 181-194).

All the scholarly materials under review abound with insightful observations, original thoughts, and profound scholarly judgments. They are well-structured and supplemented by sophisticated and well-presented diagrams. The volume is highly interdisciplinary, yet fundamental in character, as well as effectively and adequately addresses the postulated problems. The book as a whole presents a fundamental scholarly contribution to the theory of global, macro-level and long-term philosophical, sociocultural, socio-historic, and socioeconomic studies.

A few minor suggestions seem to be in order. On page 434 of the manuscript, the author suggests: “This bibliography shows the years of publication or creation of sources in the original language. A complete and updated bibliography, including in Russian, will be given in the fifth part of the study.” It would seem appropriate (however not mandatory) if the author would include such important components of the contemporary scholarly apparatus as:
1. A glossary of terms with definitions thereof.
2. A list of numbered notes corresponding to the book chapters.
3. An index, i.e. a list of paginated subjects and names.

References

What is history? Or rather, what are the appropriate time-scales that can be constituted as “history”? The general consensus among scholars is that history is the study of approximately the last 5,000 years or so due to the existence of written records. Anything prior to that is generally considered pre-history, at least as far as it concerns the existence of human beings on earth. As for the creation of the earth we live upon, or the solar system our planet dwells within, or the universe as a whole these are considered outside the formal domain of historical research. That is, until the advent of the field of Big History that has emerged within the past few decades to challenge these distinctions as merely arbitrary and encourage scholars to think on much larger time-scales. David Christian is generally attributed as the father of the field, and he outlines his vision for it in his monumental book *Maps of Time: An Introduction to Big History*.

In the Introduction, Christian declares Big History as being nothing less than “a coherent and accessible account of origins, a modern creation myth.” (pg. 2) According to Christian, modern people live in an age of “disenchantment”, as Max Weber famously argued, and as a result the questions to man’s deeper questions of existence often lack satisfactory answers. The implicit argument is that the stories told by traditional religious and spiritual beliefs no longer hold as much explanatory power in the modern world, and thus need to be answered “with modern knowledge and modern questions” (pg. 11).

From this vision Christian proceeds with his unfolding of a “modern creation myth” starting with the Big Bang and continuing into the modern age. The chapters are divided into six parts that each cover a coherent theme:

- Part I: The Inanimate Universe (Chapters 1, 2, and 3)
- Part II: Life On Earth (Chapters 4 and 5)
- Part III: Early Human History: Many Worlds (Chapters 6 and 7)
- Part IV: The Holocene: Few Worlds (Chapters 8, 9, and 10)
- Part V: The Modern World: One World (Chapters 11, 12, 13, and 14)
- Part VI: Perspectives on the Future (Chapter 15)
Each chapter follows the same general formula: a few pages that outline the existing data on the topic so far, followed by a quick summary at the end, concluding with a mini-bibliography of books to read for further information. Given the vast time-scales David Christian has to cover within this single book, and the vast amount of specialist literature one must consult in various fields, he does a sufficient job of introducing readers to the topics at hand. The book suggestions at the end of each chapter are also a nice touch as well for any reader curious for more information. Of course, for one book to cover this vast amount of information, certain detailed discussions are omitted. David Christian admits this issue within the introduction, and that his intention is “not overwhelming the reader with detail.” (pg. 6) In this sense, David Christian has indeed achieved a remarkable tour de force for at least providing the building blocks for a whole new field seeking to achieve interdisciplinary research on a grander scale.

The only real issue that remains with Christian’s account is how he deals with the issue of creation myths and the need for a modern version. This can be a quite tricky and sensitive issue, given the significant role traditional religions still play in world affairs. Whatever one’s personal religious beliefs, it is a reality scholars must take seriously. Thankfully, Big History as a field has matured considerably on this issue since David Christian first wrote Maps of Time, where any implicit issues of conflict with religious beliefs are cast aside and thus a healthy pluralism of beliefs are allowed to flourish within its frameworks.

While David Christian’s Maps of Time can be considered an introductory overview of Big History for a general audience, Evolution: A Big History Perspective edited by Leonid E. Grinin, Andrey V. Korotayev, and Barry H. Rodrigue may serve as a more scholarly introduction to an important subset to the field, that is the Social Evolutionary or Russian school of Big History. Each of the editors are themselves principal representatives of the school, and much of its agenda is outlined in this anthology of scholarly essays on various aspects touched upon by the field.

The introduction “Evolution and Big History: From Multiverse to Galactic Civilizations” by the editors opens with this declaration:

A macroevolutionary approach and the new field of Big History seek to develop an inclusive view of the Cosmos, Earth, life and humanity by erasing boundaries between disciplines.

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1 These issues were addressed at the 2012 Big History Conference in Grand Rapids, USA. See Satkiewicz, Stephen; “Big History and the Religious Perspective” at https://voegelinview.com/big-history-big-data/ Accessed 9/29/21
Big History is a versatile study that brings together constantly updated information from Astronomy, Physics, Geology, Biology, Chemistry, Anthropology, Psychology and other scientific disciplines, and then merges it with the contemplative realms of Philosophy and the Humanities.” (pg. 5, emphasis in original)

There are three main sections that the essays are grouped into, as follows:

1. Evolution and Understanding Big History
2. Big History’s Trends and Phases
3. Essays on Big History

It would be impossible to do justice to the wide range of topics addressed within this volume. The first main section “Evolution and Understanding Big History” contains several personal histories about the emergence of the field of Big History. David Christian’s essay “The Evolution of Big History: A Short Introduction” pretty much parallels the story he told in the introduction to Maps of Time. Barry H. Rodrigue’s “The Evolution of Macro-History in the United States” details how his experiences of teaching Western Civilization courses led him to the field of Big History.

Perhaps one of the most intellectually enriching essays in the whole book is “Biological and Social Phases of Big History: Similarities and Differences of Evolutionary Principles and Mechanisms” by Leonid E. Grinin, Andrey V. Korotayev, and Alexander V. Markov. This essay successfully outlines the theoretical models necessary for social evolutionary research (building upon the anthropological work of Christopher R. Hallpike), but also adds an important qualification on the significant differences between social and biological evolution. This is an especially crucial point to emphasize, since for too long many reductionist theories have dominated the discourse on the matter, at least in the popular science genre. The premiere examples of such would be the works of Richard Dawkins, Susan Blackmore in the Meme Machine (Oxford University Press, 1999), and E.O. Wilson’s Consilience: The Unity of Knowledge (Vintage, 1999), that almost seek to reduce all human behavior and thoughts to mere biological elements. Social scientists have rightfully been critical of this kind of biological reductionism, and thankfully even the field of social evolution itself has seemingly moved on from such presumptions over the past few decades.

This is in part due to the emerging fields related to Complex Systems Theory and Analysis (as researched at the Santa Fe Institute and the New England Complex Systems Institute) that have developed models of social and cultural evolution that do not negate the critical role of human agency, even if it is examined in wider contexts.
This multidisciplinary approach has yielded very insightful results related to the study of civilizational analysis. This marks an important turning point in trying to usefully synthesize the methodologies of both the natural and human sciences together to research the complex nature of human social relations.

Since the time of the publication of both of these books (roughly a decade or two), Big History as a field continues to grow and mature, as it should with its grand ambitions. The critical question remaining is how those scholars trained in the traditional humanities and social sciences should respond to the field. Thus far, the main reaction appears to be either hostility or indifference. It might be a great mistake to not at least be critically open to the field’s findings. There is still plenty to criticize about how Big Historians approach their materials, specifically how it can emphasize the natural scientific methodology over that of the human sciences. Nevertheless, the field is at least making a noble attempt to get the two forms of sciences to work together under a common feasible framework. Perhaps civilizational analysis may assist in that endeavor, itself being an interdisciplinary project in its own right.

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Reviewed by Mariana Tepfenhart

Harry Redner was a reader at Monash University in Melbourne, Australia, and a visiting professor at Yale University, University of California-Berkeley and Harvard University. His book has three parts: An Overview of History, The Present Predicament of History, and The Future Prospects of Civilization.

The book addresses two major issues affecting our society today. One of them is globalization and its effect on civilization. The topic is analyzed not only from a cultural perspective but also from a political and cognitive standpoint. The second issue is technology and its place in a global society. Redner argues Western civilization’s development of science, technology and a rational legal state might prove self-canceling. He examines our response to the problems facing our civilization, finds it lacking, and proposes to “break through this barrier of silence” (Redner, XV) and open an honest debate on the crucial issues of our time.

In the first section of the book, the author presents the elements of the historical evolution that has led to the predicament he sees: the long increase in population and production which eventually created five historical periods, five turning points in the development of human culture.

The first turning-point period was the emergence of human culture about 60,000 to 40,000 years ago, when humans spread all over the world, as proved by the art found in different places. The second was the Neolithic Revolution between 11,000 to 9,000 BCE which occurred in the Fertile Crescent. Although some historians compare the ill effects of the Neolithic Revolution with those of the Industrial Revolution, Harry Redner argues that some of the consequences of the Industrial Revolution such as pollution, climate change and ecological catastrophe, are far more harmful than any type of agriculture.

The third civilizational turning point-period dates from Egypt and Sumer around 3000 BC through the Axial Age of 700-300 BC, a period that produced some of the greatest minds in philosophy, religion, science. The Axial Age developed high-literacy book culture and ethics — expectations of human behavior (Redner, 40): the civic virtue of the Greeks, Judaic morality, and Confucianism’s connection of ethical life with political life.

It was in this period that civilizations appeared in different parts of the world, neither isolated nor derived from any one source.
Major cultural transformations during this period also included imperialism (which welded small political entities into kingdoms and empires) and militarism, the development of weapons, increased trade, and further increase in population.

The high-literacy book culture of the Axial period was a critical factor to the intellectual development of the next period, Modernity, from 1500-2000, centered in the West, an unparalleled cultural development. Redner’s chapter 3 deals with Modernity as a period of great discoveries and exploration, development of world trade, financial institutions, new weapons, architecture, new theories about the universe, and great achievements in art.

It was the Western civilization that shaped the world as it is today. Against those who attributed the high development of Europe to luck and borrowings from other nations, Harry Redner argues that Europe absorbed innovations and developed them further. Redner gives reasons why modernity started in Europe and not in other parts of the world. One cause is the development of modern capitalism, a new state with a judicial legal system. Another is the fact that Western Europe did not suffer from the Mongol invasion that devastated Russia and parts of Asia and Middle East. Their discovery of America gave the Western Europeans access to an abundance of material goods.

Although the Chinese and the Byzantines had more innovations than the Europeans, the Europeans made better use of the new technology. Western Europe had universities which provided freedom of research, explored possible different solutions to existing problems, and produced free thinkers, a new social class — the intellectuals. The high literacy of Western Europe allowed the rapid spreading of Enlightenment ideas and contributed to the creation of a government that included representatives of the people, and to democracy.

Redner cites civilizationist (and former ISCSC president) Toby Huff on why Modernity started in Western Europe and not elsewhere:

What happened in Europe was a social and legal revolution that radically transformed the nature of medieval society and civilization. From one point of view, it represents the grand fusion, for the first time, of Greek philosophy and science, Roman Law and Christian theology. (85).

Chapter 4 examines post–civilization, or beyond civilization, the present age. While past civilizations were defined by distinctive aspects of society, culture and individuality, by the end of Modernity a new civilization process occurred — globalization. The forces of modernity, capitalism, science and technology, and legal state are spreading across the world, at the same time as a dilution of ethics: the norms that characterized the “civilized individual” are in decline; high literacy is replaced by functional literacy, and ethics are displaced by legality.
Harry Redner considered the events of the last century that caused this unprecedented metamorphosis. He sees the World Wars, the Cold War, and the work of individuals like Hitler and Stalin, as contributors to the dissolution of the West. One of the consequences of these events of the 20th century is the rise of America to the status of superpower, and as the leading power for globalization.

Americanization created different reactions throughout the world. The philosopher Paul Ricoeur summarized the negative consequences of globalization:

The phenomenon of universalization, while being an advancement of mankind, constitutes a sort of subtle destruction, not only of traditional cultures, which might not be irreparably wrong, but also what I shall call for the time being, the creative nucleus of great mankind.... We have the feeling that this single world civilization the same time exerts a sort of attrition and wearing away at the expense of the cultural resources which have made the great civilizations of the past. The threat is expressed, among other disturbing effects, by the spreading before our eyes, of a mediocre civilization which is the absurd counterpart of what I was just calling elementary culture. Everywhere throughout the world, one finds the same bad movies, the same slot machines, the same plastic and aluminum atrocities, the same twisting of language by propaganda, etc. (Redner, 131.)

Chapter 5 is a general overview of the forces of globalized Modernity: capitalism and the legal state with a focus on science and technology. Global science is executed by large and highly specialized groups of people. The leaders of the world come from Ivy League schools and want to homogenize and unify the whole world — since that would make it easier for them to control all humanity.

In the past, many jobs required special skills. The new technology provides step by step instructions for a worker to execute a task, without any input from the worker. In consequence of intense computerization, literacy has declined. The ability to rationalize, to think analytically or concentrate, are all reduced by the use of computers.

Chapter 6 focuses on society in a post-industrial world. One characteristic is the development of megalopolises all over the world. There are some advantages of living in a large city like education, better health care, opportunities for employment and others. However, the author also points out social disintegration and the destruction of local communities. Shopping is online, self-service, working from home led to isolation and alienation especially among the elderly. In many of these megalopolises there are ethnic enclaves and those do not help the immigrants to fully integrate in the culture of the country they dwell in.

This is what Anthony Giddens said about the present transformations:
Among all the changes going on in the world, none is more important than those happening in our personal lives — sexuality, relationships, marriage and family. There is a global revolution going on in how we think of ourselves and how we form ties and connections with others … In some way these are the most difficult and disturbing transformations of all. (Redner, 217)

In Chapter 7, the author analyzes the impact of globalization on culture. He argues that the global culture will displace local cultures. Global culture becomes more influential with the people, especially the young ones. Advertisements, music, fashion, fast food are the favorite items for teenagers. America is leading the way in spreading the global culture which is based on market demands. All goods are evaluated according to their market value.

Capitalist industry also follows the market demands that can change very quickly. Advertising, marketing, and the media contribute to people's change of mentality and their adoption of new trends. This homogeneity also makes it easy for the big companies to control people.

All over the world, national states support capitalism as a source of increased revenue. Accordingly, they shift education from cultural instruction to the provision of experts in different fields of industry or service sector. Humanities take second place in education or are gradually eliminated.

Technology is also a factor in the decline of literacy, according to Redner. From an early age children are hooked on video games and different social media; this transforms their minds, which became dominated by the global culture.

In Chapter 8, Harry Redner presents the prospect of individualism in a global society. People are free to travel, and can take jobs that are more profitable. However there are different constraints that force them to conform to the rules of community or to the pressure of their peers. It begins in schools where children that are different are marginalized. To succeed, people must conform to the patterns of life required by society. Mass production forces individuals to mold themselves to the demands of success. Morality, virtues, scruples, and conscience are replaced by conformism. The result is the decline of the national state, ethnicity, and the traditional family.

Chapter 9, the Catastrophe of Nature and Culture, presents some predictions about the post-civilization period. The author notes that predictions are not certain. He states that most predictions are if-then or “hypothetical” in form: if such-and-such an action is performed, then certain events might follow. (Redner, 305)

Without unforeseen developments, Redner assumes that the current trends like globalization, capitalism, science and technology will continue.
People will live in mega-cities and it will be a challenge for the states to provide services and resources for the population. Some natural catastrophes that might occur are climate change, nuclear accidents, overpopulation.

Science and technology might continue to improve the lives of the people but at the same time will develop weapons of mass distraction. Lack of ethics and degradation of literacy seem likely to continue. Personal lives will change: there will be an absence of family and of community that could provide emotional support.

Chapter 10 is titled “The Future as It Might Be.” The author stressed the fact that in order to prevent the eradication of civilization, people should preserve the past, and an ethics of honor and social justice.

To restore society, Harry Redner recommends that people conserve the environment, their history and culture. Men and women must establish an equal partnership to make their relationship steady and strong. Ethics of the individual conscience must be restored, although Redner also believes that unrestrained individualism is harmful.

The intention of the author in writing this study was to reveal what is the direction of human history, the difficulties we are facing if civilization is eroded, and how to respond to these problems. The study is well balanced and presents with objectivity the mixture of political, cultural, social and literary developments that led to the present post-civilization period. The book is extremely well researched, and it could not come at a better time.

Reviewed by Constance Wilkinson

Empires of the Silk Road is an ambitious work that fulfills its stated ambitions, fully. Written with boldness and authority, it packs many punches and pulls few. Author Christopher I. Beckwith manages to cover ~5,000-years-worth of Central Eurasian history in this single volume; he sees those events differently than your common or garden-variety Central Eurasian historian/philologist and demonstrates patiently and precisely why he does so in a way that is rich and insightful. Beckwith’s work is both complex and concise. It is provocative and persuasive. It is frequently captivating, often surprising, occasionally perplexing, and sometimes slightly weird¹ (not that there’s anything wrong with that).

Beckwith begins by presenting a series of First Stories, an intriguing collection of Central Eurasian origin myths. In so doing, he demonstrates themes that persist as the cultural inheritance of descendant peoples of widely separated locations, re-told over time in daughter varieties of Proto-Indo-European languages, from the "Bronze Age Hittites and Chou Chinese; the Classical period Scythians, Romans, Wu-sun, and Koguryo; the medieval Turks and Mongols; and the Junghars and Manchus of the late Renaissance and Enlightenment." (p. 2)

These Central Eurasian origin myths share patterns: a special child is supernaturally conceived; its father, the true king, is overthrown by an evil usurper; child is left out in the wilderness to die but does not die, due to tender care by wilderness animals. The Shang dynasty child is protected by sheep and cattle and birds (p. 3); descendants of Aeneas of Troy, twin babes Romulus and Remus are left out exposed, but are "nursed by a she-wolf and fed by a bird² (p. 4); north of Dunhuang, the Wu-sun prince is left out on the steppe to die, but is suckled by a wolf and fed by a crow and survives (p. 6); in the north, Tumen is cast out to the beasts, but the pigs and the horses and the birds of the wilderness keep him warm, so he grows up to found the city of Ordus (p. 7); the ancestor of the Turk people is left out in the wilderness to die but is saved by a she-wolf (p. 8). In all these origin stories, a special child is born, undergoes trials and dangers but nevertheless survives to become a great warrior whose prowess attracts others with similar prowess; the hero warrior leads this brotherhood of warriors back to their homeland, where the hero and retinue overthrow prior evil tyrant(s) and found a glorious new dynasty. (p. 12)

¹ Dr. Beckwith has a thing about “Modernism,” whatever that is. He has a thing about T.S. Eliot and Ezra Pound. Go figure. Everything else about his book was fantastic.
² Specifically, a woodpecker.
The first-story happy ending of the lord and his blood-oath-bound retinue conquering all is at the heart of what Beckwith calls the “Central Eurasian Culture Complex,” a patriarchal comitatus structure that underlies the polities of Central Eurasia — and beyond — from the earliest times up nearly to the present day. The Central Eurasian Culture Complex is reflected in "historical sources on the Hittites, the Achaemenid Persians, the Scythians, the Khwarizmians, the Hsiung-nu, the ancient and early medieval Germanic peoples, the Sassanid Persians, the Huns, the Hephthalites, the Koguryo, the early dynastic Japanese, the Turks" (15) among many others. This is Beckwith’s thesis, and, over the succeeding chapters of his book, he proves his case (to this reader, at least).

Chapter 1, “The Chariot Warriors.” Beckwith uses historical linguistics and archaeology to trace the diaspora of Proto-Indo-European speakers, oath-bound bands of warriors who sweep through neighboring states, spreading their Central Eurasian Culture Complex traditions wherever they go.

Beckwith cites evidence of Central Eurasian Culture Complex traditions transforming the peoples living in Kroraina (p. 35), in Anatolia (p. 37), among the Maryannu (p. 39) and the peoples of the Indus in Northern India, even those of Mycenean Greece (p. 42). The CECC effect produces change in as far east as the Yellow River Valley (p. 43). Each contact leaves behind traceable traces, through language, actions, and objects.

In particular, the Proto-Indo-European mastery over the technology of warfare brought these freewheeling nomad chariot warriors victory and power: they knew how to engineer, build, and operate war chariots; they knew how to breed, train, and ride war horses; they invented the light but powerful compound bow and trained expert archers in their use. They seemed invincible.

Chapter 2, "The Royal Scythians," explains the rise of the mounted nomad warriors of the great grasslands as they coalesced into empires. A mounted nomad people, the Scythians "migrated into the Western Steppe and established themselves as a major power" (p. 58) while “at the eastern end of the steppe zone, in what is now Mongolia, former Inner Mongolia and the eastern Tarim Basin, the nomadic-dominant form of the Central Eurasian Culture Complex became an established life-style between the eighth and seventh centuries B.C.” (p. 70) Both empires depended on the trading system which would become known as the Silk Road to accumulate wealth and power. Polities which refused trade made themselves liable to invasion and defeat (if not outright destruction).

Chapter 3, “Between Roman and Chinese Legions,” concerns the era of expansion by Rome, the peripheral empire to the west of the Central Asian Steppe, as it came into conflict with peoples to its east: the Sarmatians, the Alans, the Parthians, the Tokharians, and the Kushan Empire of northern India.
At roughly the same time, central plains China, a peripheral empire to the east of the Central Asian Steppe, sought to expand into the Hsiung-nu empire to acquire its wealth (and eventually succeeded). However, the aggressive expansionism into Central Asia from east and west, eventually became a disaster for both invading empires: Silk Road commerce declined, both empires collapsed, and with the collapse of trade came “the end of Classical civilization.” (p. 92)

In Chapter 4, "The Age of Attila the Hun," Beckwith references the migration known as the Great Wandering of Peoples from Central Eurasia to its west and to its south. Of interest is that, although the fact of the migration is well-known, the specific reason for this migration remains a mystery. (p. 107) What is not at issue is that the Great Wandering of Peoples "re-established nearly all of Western Europe as part of the Central Eurasian Culture Complex" (p. 94) and included “previously non-Romanized Northern, Central and Eastern Europe . . . the formerly Romanized parts of North Africa, the Iberian Peninsula, England, France, Belgium, Switzerland, northern Italy, Germany, and most of the Balkans." (p. 110)

Chapter 5, "The Turk Empire," begins on the Eastern Steppe, in which,

following the dynamics of the Central Eurasian Culture Complex, the Turk people overthrew their overlords, the Avars, and chased their remnants to the ends of Eurasia. In so doing, they linked up all the peripheral civilizations of Eurasia via its urbanized core, Central Asia, which quickly became the commercial-cultural heart of not only Central Asia, but of the Eurasian world as a whole. (p. 112)

Beckwith here makes note of the detailed attention paid to Central Asia in historical sources on the Early Middle Ages — particularly Chinese, Tibetan, Arab sources — and to a lesser extent, as provided in Greek and Latin sources — demonstrating the importance of this central region to all the realms on its periphery.

Beckwith states:

The reason for all this attention is clearly not modern historians’ imaginary threat of a nomad warrior invasion, which is virtually unmentioned in the sources. The reason for the attention seems rather to be the prosperous Silk Road economy and the existence of a shared political ideology across Eurasia that ensured nearly constant warfare . . . [as] each nation believed its own emperor to be the sole rightful ruler of "all under Heaven," and everyone else should be his subjects. 3(p. 137)

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3 But of course! How could it be otherwise?
Interestingly, though the region experienced almost constant warfare during this period, trade on the Silk Road "flourished as never before," (p. 112) at least until a Chinese-Arab alliance was victorious over the Central Asians (p. 113) in the mid-eighth century.

Chapter 6, “The Silk Road, Revolution, and Collapse,” details what the title states, a time when, within a period of 13 years every empire in Eurasia suffered a major rebellion, revolution, or dynastic change (p. 140). Chapter 7, “The Vikings and Cathay” discusses an era of smaller hegemonies, the Khazars, Karakhanids, Ghaznavids, Seljuks, western Hsia, Tanguts, Khitan, Jurchen, among others, as well as advances in education and culture that occurred during this time. Chapter 8 concerns “Chinggis Khan and the Mongol Conquests,” as expansive-world- civilization-enthusiast Chinggis Khan and his uber-Central Eurasian Culture Complex comitatus retinue create the first truly global civilization and, as a side effect, birth the Pax Mongolica.

Subsequent chapters track even more traces of the Central Eurasian Culture Complex over time, up to the present day, its adherents romp westward, ever-westward, doing so in times of economic successes and failures, social and political upheavals, all the way up to the bleak final shut-down of the Silk Road in its entirety, as Central Eurasia loses all autonomy, is divvied up between Imperial Russia and Imperial China to be voraciously devoured. In the end, the energy of the region is annihilated — like the once-vibrant and powerful Uighur Empire, the Tibetan Empire, the Sogdians, et al., et al., et al. Like all phenomena, the civilizations of Central Asia are seen to be impermanent, and indeed, are.

I found this book to be a lasting delight. It is lavishly bejeweled with footnotes and endnotes, some so seductive as to make it hard to proceed forward through the main text because its tangents are so alluring. It made me want to know more and more about Central Eurasia in even more detail. It made me want to learn Proto-Indo-European. No, really, it did.

Perhaps my favorite section was an Epilogue, entitled “THE BARBARIANS,” in which Beckwith corrects a record that surely merits correction, in which the warriors of Central Eurasia were barbarians. Greedy, poor, backward, uncivilized barbarians picking on the jolly friendly sedentary citizens by engaging in indiscriminate slaughter.

Beckwith suggests that Central Eurasians were not poor compared to the nations on their periphery but were wealthier and more liberal and more cosmopolitan and more tolerant of a variety of cultures and more appreciative of invention, intellect, artistry, and spirituality. They were interested in wealth gained through trade. They engaged in warfare with others when access to trade was denied them.
In war, they were not barbarians — or to the extent that they were barbaric, were no more barbaric than anyone else. In fact, Beckwith makes the case that they were arguably less barbaric, pointing out that:

while the bloody victories of Attila, Chinggis or Tamerlane are still deplored, the equally bloody victories of the Graeco-Roman, Persian, and Chinese emperors are related with enthusiasm by historians past and present. Non-Central Eurasian historians from Antiquity to the present have been blind to the savagery and unrelenting aggression of their own ancestors ... [Central Eurasians] cannot begin to be compared, for sheer cruelty and relentless aggression, to the Romans, the Persians, the Chinese, and their successors, right down to modern times (p. 323). [Emphasis mine.]

Modern historians continue to operate under an aspersive spell cast by some historian propagandists from peripheral nations who find the traumatic memory of having been vanquished time and again by un-civilized, un-sedentary, ruthless, couth-less, dirty, smelly victorious Others too painful to acknowledge.

Thus, the victorious Others are to be dismissed, disparaged, their actual glory deleted from official texts and erased from social consciousness. Alternatively, a culture might choose to demonize the victorious Other and thus create a useful larger than life enemy upon which to focus national hatred; one must learn to “Never Forget National Humiliation” in patriotic perpetuity. So it goes, throughout history, as to all the bad barbarians: the Hsiung-nu hordes, the Scythian hordes, the Tibetan hordes, the Parthian hordes, the Turk hordes, the Mongol hordes, et alia.

We are scions of “barbarians.” As Beckwith states: “Central Asians — not the Egyptians, the Sumerians, and so on — are our ancestors. Central Eurasia is our homeland, the place where our civilization started.” (p. 319)

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Reviewed by Ashok Kumar Malhotra

Steven Pinker’s monumental work, *Enlightenment Now, The Case for Reason, Science, Humanism, and Progress* is an impressive volume. He presents his position so vividly that the book reached the New York Times Bestseller List, and received enthusiastic reviews from diverse scholars and readers. Even Bill Gates regards it as: “My new favorite book of all time.”

Pinker describes clearly the essential ideals of Enlightenment. The language is simple and comprehensible to the readers of the present century. He outlines his position as follows: “I will first lay out a framework for understanding the human condition informed by modern science — who we are, where we came from, what our challenges are, and how we can meet them.” The bulk of the book is devoted to defending those ideals in a distinctively 21st-century way: with data. This evidence-based take on the Enlightenment project reveals that it was not a naive hope. The Enlightenment has worked — perhaps the greatest story seldom told. And because this triumph is so unsung, the underlying ideals of reason, science, and humanism are unappreciated as well. Far from being an insipid consensus, these ideals are treated by today’s intellectuals with indifference, skepticism, and sometimes contempt. When properly appreciated, “I will suggest, the ideals of the Enlightenment are in fact stirring, inspiring, noble — a reason to live.” (p. 1)

Pinker criticizes two strong currents — one historical and the other more recent. Under historical, he argues specifically against Catholicism, Christianity in general, and Islam, along with all religions. He shows the way religions have downgraded *reason* by upgrading *faith* in the scriptures and rituals and how through coercion and force they have restrained any opposition.

The other is a more recent movement. It is perpetuated by the intellectuals influenced by Nietzsche, a 19th century philosopher. His ideology reeked of negativity, with utter disdain for the common man and woman. Through promulgating the notion of the *Übermensch* and creation of the pure race, Nietzsche swayed the intellectuals and dictators of the 20th century leading to innumerable atrocities against various groups of people, especially the Jews.

Pinker’s book is divided into three parts. Part 1 deals with the definition of Enlightenment as presented by Immanuel Kant, an 18th century philosopher. This is followed by a quote from David Deutsch, a 21st century scientist describing the positive contributions of Enlightenment.
Part II outlines misgivings of the intellectuals suffering from Progressophobia — the dread of progress. To counter the Progressophobia, Pinker describes the most significant improvements brought by Enlightenment regarding life, health, sustenance, wealth, inequality, environment, peace, safety, terrorism, democracy, equal rights, knowledge, quality of life, happiness, existential threats and future of progress. Part III concludes by highlighting the development of reason, science and humanism, the windfall of Enlightenment for all of us living in the 21st century.

Pinker presents a praiseworthy history of Enlightenment starting with Voltaire, Montesquieu, Rousseau and Diderot as well as Kant during the 17th and 18th centuries and its blossoming in the 21st century. He argues his position convincingly in a language understandable to the reader of the present century. Furthermore, he justifies it through 75 graphs as evidence of progress made by all humanity. He cites convincing data showing an upswing in prosperity, longevity, education, health and political freedom as well as equality of men and women and medical breakthroughs.

Pinker’s book consists of 453 pages. Furthermore, it includes 37 pages of Notes, 31 pages of References, 31 pages of Index and 75 Graphs. This wealth of material on diverse aspects of Enlightenment presented with special elegance makes the book enjoyable to read. Moreover, whether it is reason or science or humanism or progress, he argues his case eloquently by documenting it well and then justifying it through the appropriate data.

Though Pinker makes an excellent case for the positive contributions of Enlightenment; however, he ignores the negative aspects that have caused a great split and rift between the white race and others who are black and brown. In his Genghis Khan and Making of the Modern World, Jack Weatherford delineates some of these harmful aspects of Enlightenment ignored by Pinker in his otherwise well-researched book.

A long time ago, Mark Twain said: “A successful book is not what it contains but what it leaves out.” It is a fitting description of Pinker’s views on Enlightenment.

Weatherford asserts that while Voltaire and Montesquieu powerfully articulated the positive ideals of Enlightenment, they also wrote books that demonized the black and brown races as less developed than the Whites. To add insult to injury, even the scientists of that time wrote works to justify this under-development of the black and brown races. The same scientists went further to use the term “Mongoloid” for the White children born with various deformities.

Guided by this racial bias, the White Europeans used force to capture people from Africa to be sold as slaves to the recently discovered North and South Americas.
As the slave ships were arriving in the Americas, Enlightenment had just begun in Europe. Thousands of black Africans who were shipped to America to cultivate the fields made the USA the biggest producer of cotton and tobacco in the world.

Spain and Portugal were the major players in exploiting the black and brown races in the Americas. France, which produced Voltaire and Montesquieu as the pioneers of Enlightenment, went ahead to colonize Morocco, Algeria, Tunisia and countries in the Pacific and Caribbean regions. This was done under the pretense of civilizing them. In their turn, England took over America (USA) through killing and subduing the Native Americans, and declaring it as its colony. England, France, along with Portugal and Dutch went on a rampage to colonize the countries of Africa, India, South and East Asia, Hong Kong and Macao. Along with occupying India, the British fought a war with the last Mughal emperor in 1857. After defeating him, they declared India as part of the British Empire. They slaughtered the children, grandchildren and great grandchildren of the Mughals so that no traces of Mongol blood would be left anywhere. Furthermore, though the Muslims, Hindus, Rajputs, Jats and others fought against the tyranny of colonization, the victorious British called this war as a mutiny because as victors they were writing the history.

The British not only recruited the young men of India to fight their World Wars 1 and 2, they also financed these wars through the Indian treasury. Following the footsteps of other European countries, the USSR went ahead to colonize Mongolia by capturing and butchering as many Mongols as possible so that no offspring of Genghis Khan or Kublai Khan would be left on the face of the earth.

According to Weatherford, before Enlightenment there was no such racial bias or hatred displayed toward the Mongols and other races. This is clearly evident during the Renaissance. The writers of this period and explorers like Columbus were actually impressed by the ingenuity of the Mongol conquerors. They admired their attempt at unifying the world through breaking barriers among the occupied nations in order to create a global village.

However, all the Western countries, which gave us the ideals of Enlightenment, were themselves the worst offenders. France and England were the biggest colonialists along with the USA. For example, the USA, which proclaimed to be the first country to write a democratic constitution, had more slaves than any other nation. Moreover, the founders of the US constitution were the major wrongdoers. They owned the largest number of Africans as slaves along with capturing the land from the Native Americans, signing treaties with them, and reneging on these agreements.

At an intellectual level, Pinker discredits Nietzsche as being anti-enlightenment, anti-reason and anti-humanism. He asserts that Nietzsche’s negativism rubbed off on the major thinkers of the 19th and 20th centuries.
He includes among them Heidegger, Sartre, George Bernard Shaw, H.G. Wells and other intellectuals making up the backbone of the 20th century. Though he calls them misled intellectuals, he does not discuss how and why they should be branded as such.

Let’s take the case of Sartre, who was influenced by Nietzsche. Pinker brands him as against enlightenment, reason and humanism. However, it was Sartre who wrote his famous book on Existentialism is Humanism. Here he defended his position on humanism, freedom and responsibility. Furthermore, he showed the concrete expression of these concepts in The Flies, Dirty Hands, Respectful Prostitute and a trilogy entitled Roads to Freedom. Moreover, he devoted in excess of 150 pages on freedom and responsibility in his magnum opus Being and Nothingness. Since in his writings Sartre gave prominence to reason and its materializing into humanism, he clearly indicated that he was inspired by the ideals of Enlightenment which became the hallmark of his existentialism.

Interestingly enough, Pinker who devotes half a dozen pages to the rise of Trump, asserts that 136 intellectuals including Steve Bannon and Michael Anton supported him to win his presidency in 2016. Furthermore, he holds these intellectuals culpable because they were influenced by Nietzsche’s philosophy. However, he does not provide any discussion of how these intellectuals used or abused this philosophy toward these destructive ends.

Others, who have read Nietzsche and his works, will disagree with Pinker by arguing that Nietzsche was a philosopher fed by the standards set forth by Enlightenment. Nietzsche’s thinking was rooted in the long philosophical tradition of interpreting and re-interpreting reason, freedom and humanism. Indeed, the ideals of reason and freedom enunciated by Kant got a push from Hegel, whose dialectical logic influenced Schopenhauer, who in turn imparted them to Nietzsche. By openly challenging religion, Nietzsche offered his brand of humanism through the creation of the overman. Similar to the thinkers of Enlightenment, Nietzsche revolted against religion by declaring that God is dead and therefore human fate and destiny are in their own hands.

The biggest weakness of Pinker’s work is that here he is “gung-ho” on the positive contributions of the Enlightenment by excluding its negative hand-outs spilling into racism, colonialism, apartheid, Hitlerism, Mussolinism, Stalinism and other dictatorships. This is clearly exemplified in the elevation of Trump to a cult figure and Trumpism to a cult resulting into the takeover of the US Capitol building on January 6, 2021. The Trump followers who were asserting their “white privilege” could have destroyed the very foundation of a model Democratic Republic. In their opinion, they might have construed this revolting attempt as based on the positive principles of the Enlightenment!
My recommendation to Pinker is to write a sequel to his present volume outlining the negative aspects of the Enlightenment responsible for the numerous political, social, economic and environmental upheavals facing humanity during the 21st century. Here he could synthesize both the positive and negative aspects of the Enlightenment by presenting a more honest and balanced global picture. There is a need for such a book in order to understand the existential predicament of the present-day human being. Hopefully, such a work might help humanity to make progress at a faster pace toward humanism and world peace.
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In October 1961, in Salzburg, Austria, an extraordinary group of scholars gathered to create the International Society for the Comparative Study of Civilizations. Among the 26 founding members from Austria, Germany, France, Switzerland, The Netherlands, Spain, Italy, England, Russia, the United States, China and Japan were such luminaries as Pitirim Sorokin and Arnold Toynbee.

For six days, the participants debated such topics as the definition of “civilization,” problems in the analysis of complex cultures, civilizational encounters in the past, the Orient versus the Occident, problems of universal history, theories of historiography, and the role of the “human sciences” in “globalization.” The meeting was funded by the Austrian government, in cooperation with UNESCO, and received considerable press coverage. Sorokin was elected the Society’s first president.

After several meetings in Europe, the advancing age of its founding members and the declining health of then president, Othmar F. Anderle, were important factors in the decision to transfer the Society to the United States.

Between 1968 and 1970 Roger Williams Wescott of Drew University facilitated that transition. In 1971, the first annual meeting of the ISCSC (US) was held in Philadelphia. Important participants in that meeting and in the Society’s activities during the next years included Benjamin Nelson (the Society’s first American president), Roger Wescott, Vytautas Kavolis, Matthew Melko, David Wilkinson, Rushton Coulborn and C.P. Wolf. In 1974, the Salzburg branch was formally dissolved, and from that year to the present there has been only one International Society for the Comparative Study of Civilizations (ISCSC).

The presidents of the ISCSC are, in order: In Europe, Pitirim Sorokin and Othmar Anderle; in the United States, Benjamin Nelson, Vytautas Kavolis, Matthew Melko, Michael Palencia-Roth, Roger Wescott, Shuntaro Ito (from Japan), Wayne Bledsoe, Lee Daniel Snyder, Andrew Targowski, David Rosner, Toby Huff, and current president Lynn Rhodes. To date, the Society has held annual meetings, most of them in the United States but also in Salzburg, Austria; Santo Domingo, The Dominican Republic; Dublin, Ireland; Chiba, Japan; Frenchman’s Cove, Jamaica; St. Petersburg, Russia; Paris, France; New Brunswick, Canada; Rio de Janeiro, Brazil; Suzhou, China; and Bucharest, Romania.

More than 30 countries are represented in the Society’s membership. Its intellectual dynamism and vibrancy over the years have been maintained and enhanced through its annual meetings, its publications, and the participation of such scholars as Talcott Parsons, Hayden White, Immanuel Wallerstein, Gordon Hewes, André Gunder Frank, Marshall Sahlins, Lynn White Jr., and Jeremy Sabloff.

The Society is committed to the idea that complex civilizational problems can best be approached through multidisciplinary analyses and debate by scholars from a variety of fields. *The Comparative Civilizations Review*, which welcomes submissions from the Society’s members as well as other scholars, has been published continually since its inaugural issue in 1979.

Prof. Michael Palencia-Roth
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