



Macro-Social Trends and National Defense Scenarios: Forecasting Crises and Forging Responses using Generation Theory in a Bio-psychosocial Framework

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Abstract

Analytic informatics and vast databases permit modeling of large populations and their economic and political behaviors over decades and centuries. Researchers such as Peter Turchin and Jack Goldstone are demonstrating how such "cliodynamics" can scientifically project large-scale trends into the future. Skepticism about social futurism is well deserved, since specific, risky, and confirmable predictions distinguishes science from pseudo-science. Employing generation theory, William Strauss and Neil Howe predicted that the next world war would occur in or by 2020. In this whitepaper, we recount how cyclical trends in social history theorized by Strauss and Howe align well with the economic and political cycles independently established by cliodynamics. Four archetypal generations (Prophet, Nomad, Hero, Artist) have followed each other in a durable pattern. Every major conflict endured by the United States has occurred when its Prophets (presently, the Boomers) reach elder leadership. Generation theory can also be applied for scenario design and strategic planning, particularly for defense purposes. Predicting actions of small numbers of people is impossible, but understanding the characteristic roles, values, and virtues of today's generations can synergize, and add value to other bio-psychosocial-cultural analyses of group behaviors.

Introduction

A number of events reflective of global trends of volatility to violence are occurring. Resource scarcities, populations migrating, belligerent countries saber-rattling, old hatreds festering, competitions for dominance intensifying. Such trends seem entangled in ever-worsening ways. A key question is why this is happening lately, and why should such trends seem so alarming? The geo-political world seemed pretty unstable in 1970, 1979, 1989, 2001, and again in 2008. In their book Generations, William Strauss and Neil Howe predicted that the next world war would occur in or by 2020. Strauss, a member of the first graduating class from Harvard's John F. Kennedy School of Government, was a Congressional staffer and later chief counsel and staff director of the Subcommittee on Energy, Nuclear Proliferation, and Government Processes. Howe was a DC public policy consultant, advisor to the Blackstone Group, and senior associate for the Global Aging Initiative at the Center for Strategic and International Studies. When Generations was published over twenty-five years ago, no one in government or academia took its most important forecast seriously. In 1987 Strauss and Howe coined the term "millennial" and sagely predicted millennials' notable characteristics, despite the fact that this generation had only begun in 1982. Their repeated use of "X-er" solidified that label for the previous generation (i.e. "generation X"), born between 1961 and 1981, and they shifted demographers away from using 1964 as the last year of Baby Boomers. Their coining of the label "Silent" for the generation before Boomers who came of age during the Korean War also entered the demographics lexicon.

Today, Strauss and Howe's speculation that 2020 would be the year for the next great war no longer seems so implausible. Although they predicted a number many of the social and political trends that

have been recently evidenced in headlines, their prediction of a world war by 2020 was primarily based on a cyclical calculation using their Generation Theory. How long has it been since the last great war for America? For example, think of Lincoln at Gettysburg noting the "four score and seven years" since the Revolution, or the eighty-two years that passed between John Brown's Raid on Harpers Ferry and FDR's declaration of war on "a date which will live in infamy". Or, recall how the deadliest war (per capita) on American soil was the colonial-era King Philip's/King William's War (1675–97), coincident with the Glorious Revolution in England, which peaked around eighty-five years before American Independence. By 2020, eighty-two years will have passed since Germany's annexation of Austria in 1938.

Forecasting has never been a predominant skill of most academic historians, who prefer to take historical events as unique, non-repeatable, and confusingly unpredictable. Academic historians also instinctively tend to reject the type of theorizing espoused by sociology, and express a notable suspicion of general laws of social change. In this light, this whitepaper is not focused upon simply history or sociology, but rather attempts to elucidate empirical trends and patterns that are actually visible when enough macro-level information has been gathered. Theorizing is always involved where patterns are sought, but the modest theories of social dynamics and change applied in this paper are based upon and yoked to data that are evident to, and reflective of bio-psychosocial influences and effects manifest in human development, group dynamics and socio-cultural expressions. For an overview of bio-psychosocial perspectives, influences and approaches to individual, group and culturally nested- and relevant human behavior, see the Introduction by Giordano and Chen (2016) to the SMA Whitepaper titled Assessing and Anticipating Threats to US Security Interests: A Bio-Psycho-Social Science Approach for Understanding the Emergence of and Mitigating Violence and Terrorism).

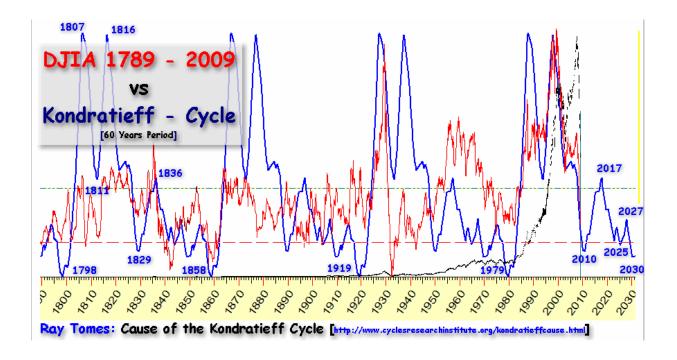
Forecasting Methods

A specific prediction made about the next 5 to 10 years that relies only on the past 10 or 20 years usually projects trends in a linear manner. For example, if factor X has been increasing in the past, it will likely keep increasing in the future. All other things are rarely equal, however. Forecasting a future social condition by projecting several trends together is complicated by the ways that some trends couldn't continue without affecting each other. The field of Economics has long been fascinated by the effort to identify business cycles despite so many interacting trends. The 4-stage Kondratiev cycle of "expansion-recession-plateau-depression" remains the most empirically studied and well-confirmed pattern to economic activity, evident in many large countries including the United States:

Spring (expansion)	Summer (recession)	Autumn (plateau)	Winter (depression)
1784-1800	1800-1816	1816-1835	1835-1844
	(War of 1812)	("Era of Good Feelings")	(Mexican American War)
1845-1858	1859-1864	1864-1874	1875-1896
	(American Civil War)	("Reconstruction)	(Spanish American War)
1896-1907	1907-1920	1920-1929	1929-1949
	(World War 1)	("Roaring 20's")	(World War 2)
1949-1966	1966-1982	1982-2000	2000-?
	(Vietnam War)	("New World Order")	(War on Terror? Or?)

Source: http://www.kwaves.com/kond_overview.htm

The Kondratiev cycle has not only tracked most major economic trends, but it successfully predicted the 2008 downturn and the following economic upswing. It also predicts another dramatic economic downturn and depression during 2018–2030.



Entangled trends are a serious complication for forecasting, but compensating factors are even more difficult to anticipate. Even if a set of trends jointly indicate some future social condition, a society may develop a compensatory factor that emerges to mitigate one or more of those trends. Economics acknowledges and recognizes this troublesome complication. Even the Kondratieff cycle is somewhat distorted by novel financial systems and revolutionary technologies. Anticipating and correcting for compensatory factors is possible, although predicting market conditions, industrial capacities, and technological advances remains very difficult. Forecasting based on interacting trends along with compensatory factors lends itself to dynamic systems modeling.

The new field of cliodynamics seeks trends and cycles in historical and contemporary data and tests theories about the underlying causes to those patterns. Today's computing power combined with analytic informatics and vast databases permits the modeling of large populations and their political and economic behaviors over decades and centuries. The leading scholar of cliodynamics, Peter Turchin, has explained this field:

"The basic idea is to demarcate population growth and decline phases, and to count the instability incidents (such as peasant uprisings and civil wars) that occur during each phase. With my colleagues Sergey Nefedov and Andrey Korotayev, I have collected quantitative data on demographic, social and political variables for several historical societies. Applying the above approach to eight secular cycles in medieval and early modern England, France, the Roman Empire and Russia, we find that the number of instability events per decade is always several times higher when the population was declining than when it was increasing. The probability of this happening by chance is vanishingly small. The same pattern holds for the eight dynasties that unified China, from the Western Han to the Qing, and for Egypt from the Hellenistic to the Ottoman periods." (Turchin 2008: 35)

Turchin initially denied that the purpose of cliodynamics is for forecasting:

"Cliodynamic theories will not be able to predict the future, even after they have passed empirical tests. Accurate forecasts are often impossible because of phenomena such as mathematical chaos, free will and the self-defeating prophecy. But we should be able to use theories in other, perhaps more helpful, ways: to calculate the consequences of our social choices, to encourage the development of social systems in desired directions, and to avoid unintended consequences." (35)

This undue modesty is not the last word. If cliodynamics is empirically detecting real correlations and underlying causes to large population patterns in past years, those actual forces cannot mysteriously evaporate when the year is our own. It is more unscientific to deny that real forces have anything to do with what happens next than it is to think that they do. No other scientific field supposes that natural causes and laws only affected past events while nothing at all shapes tomorrow's events. Highly accurate forecasts aren't realistic, to be sure, but cliodynamics cannot be scientific only about the past. Even Turchin has lately succumbed to forecasting near-term events. In 2016 he announced,

"My model indicated that social instability and political violence would peak in the 2020s. The presidential election which we have experienced, unfortunately, confirms this forecast. We seem to be well on track for the 2020s instability peak. And although the election is over, the deep structural forces that brought us the current political crisis have not gone away. If anything, the negative trends seem to be accelerating." (Turchin 2016)

Other scholars have similarly been applying cliodynamics. For example, a professor associated with cliodynamics from its inauguration has been Jack Goldstone at George Mason University, who participated in the government-funded Political Instability Task Force by tracking and modeling state instabilities (Goldstone et al 2010).

Entangled trends and compensatory factors make trend predictions and forecasting extremely difficult, but they remain inadequate unless civic priorities are also taken into account. The detection of political cycles is not very difficult; many political scientists have developed similar ideas about the patterns to liberal-conservative shifts. The Schlesinger cycle is one of the best known paradigms. Arthur Schlesinger Sr. wrote in *Paths to the Present* (1949) of a pendulum swing between a liberal and conservative "spirit of the times" going back to our nation's birth. It impressively predicted further cycles: conservative from 1947 to 1962, liberal from 1962 to 1978, and conservative from 1978 to 1993 (and carrying on, liberal from 1993 to 2009, and conservative from 2009 to 2025). His son, Arthur Schlesinger Jr., extended and refined this theory in *The Cycles of American History* (1987).

Despite the recognition of socio-political cycles, typical prognosticating remains too bound to linear trends. Consider America's capacity for anxieties over looming social decay and degeneration. By 1992, America was in a state of alarm over bad social trends: violent crime, teen pregnancy, marriage age, divorce, smoking, school dropouts, college achievement, and other negative trends. Anyone predicting swift reversals and optimistic futures back then, such as Howe and Strauss in *Generations* (1991), was completely drowned out. But that is what actually happened. By 2012 almost all of those negative trends were reversing, according to the National Crime Survey, the National Center for Family and Marriage Research, the National Center for Chronic Disease Prevention and Health Promotion, and the Current Population Survey.

Howe and Strauss pointed to generational preferences and priorities. Xers aren't mistaken for thinking that they'll never earn respect from their elders no matter how far the 1990s recede from view. Those judgmental "Boomers" – with their baby years far behind them – can reminiscence about more meaningful days spent with "Silent Generation" gurus and beatniks when they were young. How youthful Boomers rebelled against the "Establishment" of their "G.I. Generation" elders won't be repeated now that Boomers wield the establishment powers (from global finance networks to nuclear weapons) of today. Despite their deserved reputation for anarchical tendencies while young, those Generation Xers have mostly settled into middle-age responsibilities, although their nomadic careerhopping (as computing and the internet transforms the "workplace") does stand out. And Millennials? Apparently the high expectations and strict conformities imposed during the 1990s and 2000s on grade schoolers have produced a young adult generation vastly more concerned for peer inclusion and approval (through their "smart" phones) than any generation since the G.I. generation.

The lesson learned is that American society doesn't have a single static personality. There are multiple personalities, and each generation's priorities have to do with its baseline character and moral psychology managing changing conditions with available technologies from decade to decade through the lifespan. And the interactions between generations resemble the relationships among a cast of

diverse characters. Forecasting based on multiple generational "characters" having their own civic priorities lends itself to relational inference and dramatic modeling. Society can be viewed for forecasting purposes like a theater cast playing out evolving roles on a changing stage.

Generations on Stage in History

Forecasting through generational theatrics could only aspire to predictive power if entangled trends are indebted to generational demographics, compensatory factors are guided by generational priorities, and the dynamism to civic priorities is due to inter-generational relationships. Yet, that is still not enough for reliable forecasting unless there is a grand pattern to the sequence of successive generational characters. In the absence of that grand pattern, pointing to a set of present-day generations amounts to arbitrary and *ex post facto* pseudo-explanation.

Strauss and Howe's *Generations* empirically shows how only four generation archetypes are repeatedly cycled in the same order:

Generation Name	Birth years	Era in which the generation came of age	Generation Archetype
Progressive	1843-1859	Reconstruction & Gilded Age	Artist
Missionary	1860-1882	Third Great Awakening	Prophet
Lost	1883–1900	World War I & Prohibition	Nomad
G.I.	1901–1924	Depression & World War II	Hero
Silent	1925–1942	Economic Growth	Artist
Boomer	1943-1960	Consciousness Revolution	Prophet
Generation X	1961–1981	Long Boom & Culture Wars	Nomad
Millennial	1982–2004	Global Financial Crisis	Hero
Homelanders	2005- ?		Artist

Source: adapted from http://www.lifecourse.com/about/method/timelines/generations.html

Strauss and Howe additionally point out how this generational cycle is tightly geared with the sequence of religious awakenings and the sequence of secular crises in Anglo-American history.

RELIGIOUS AWAKENING	CLIMAX OF AWAKENING TO CLIMAX OF CRISIS	SECULAR CRISIS (FULL ERA)	DURATION BETWEEN CRISIS CLIMAXES
Protestant Reformation (1517–1542)	52 years	Armada Crisis (1569–1594)	103 years
Puritan Awakening (1621–1649)	49 years	Glorious Revolution (1675–1704)	101 Years
Great Awakening (1727–1746)	40 years	American Revolution (1773–1794)	92 years
Transcendental Awaker (1822–1844)	ning 32 years	Civil War (1860–1865)	82 years
Third Great Awakening (1886–1908)	48 Years	Great Depression and World War II	81 years
Consciousness Revolution (1964–1984)	on 51 years	Global Financial Crisis (2008–2029?)	81 years?

Source: adapted from http://www.lifecourse.com/about/method/the-four-turnings.html

Generation Theory tracks each generation's life cycle from youth to elderhood as that generation passes through four phases to a "saeculum" – a complete cycle of around 90 to 95 years. A saeculum has four phases – or "turnings" – with a dominant social mood to each turning. During a High (the first turning), civic and economic institutions are strong and individualism is weak, and the economy is growing. During an Awakening, young adults turn inward for spiritual insights while elders are condemned for amoral material accomplishments. During an Unraveling, adults are inner-driven and embrace pluralism, but they worry about faltering social institutions and cultural degeneracy. During a Crisis (the fourth turning), the social order unravels and the nation enters either a civil war or an international war.

Turning	Senior Generations	Young Adult Generation	Dominant Attribute of Adults	Paradigm (politics)	Spirituality (culture)	Parental Nurture Cycle
1 st turning:	Nomad,		Objective ->	Progress	Low ->	Loosening
High	Hero	Artist	Communitarian	(political unity)	High	
2 nd turning:	Hero,		Communitarian -	Progress ->	Spiritual	Min.
Awakening	Artist	Prophet	> Subjective	Freedom		protective/
						Empowering
3 rd turning:	Artist,		Subjective ->	Freedom	High ->	Tightening
Unraveling	Prophet	Nomad	Individualist	(political	Low	
				disunity)		
4 th turning:	Prophet,		Individualist ->	Freedom->	Secular	Max.
Crisis	Nomad	Hero	Objective	Progress		protective/
						Repressive

Source: adapted from https://mikebert.neocities.org/Generational-model.htm

Several scholars have independently confirmed that Generation Theory accords with business and political cycles. These three cyclical theories of history align tightly, to a far closer degree than just chance would expect.

Schlesinger eras	Economic cycle	Political-economic (PE) cycle	Generational Turnings
	1720-1747	1720-1747	1727-1746 (Awake)
	1747-1772	1747-1774	1746-1773 (Unravel)
1776-1788 (L)	1772-1792	1774-1792	1773-1794 (Crisis)
1788-1801 (C)			
1801-1812 (L)	1792-1819	1792-1824	1794-1822 (High)
1812-1829 (C)			
1829-1841 (L)	1819-1842	1824-1842	1822-1844 (Awake)
1841-1861 (C)	1842-1857	1842-1859	1844-1860 (Unravel)
1861-1869 (L)	1857-1877	1859-1873	1860-1865 (Crisis)
1869-1901 (C)	1877-1896	1873-1896	1865-1886 (High)
1901-1919 (L)	1896-1920	1896-1919	1886-1908 (Awake)
1919-1931 (C)	1920-1929	1919-1930	1908-1929 (Unravel)
1931-1947 (L)	1929-1946	1930-1946	1929-1946 (Crisis)
1947-1962 (C)	1946-1966	1946-1964	1946-1964 (High)
1962-1978 (L)	1966-1981	1964-1981	1964-1984 (Awake)
not forecast	1981-2008	1981-2008	1984-2008 (Unravel)
not forecast	2008- ?	2008- ?	2008- ? (Crisis)

Source: https://mikebert.neocities.org/Cycles4.htm

Because Generation Theory encompasses the patterns described by economic and political theorizing, hereafter we shall refer to Generation Theory as shorthand for the aggregated theorizing from system and cyclical dynamics. Generation Theory ultimately appeals to a 4-stroke cycle of generations to account for large-scale patterns to social behavior, but it incorporates lower-level theories treating a society like a machine, an organism, and a personality. Generation Theory fulfills that the fourth and culminating level for forecasting a society's behaviors based on multiple generational "characters" pursuing distinctive civic priorities.

Meta-psychology of Generations

For Generational Theory, the relationship between great social events and generations is not mechanistic cause and effect. Generations shape the form of crises through which they live, and those crises simultaneously shape the character of generations. Generations that are young are largely shaped by the then-dominant crisis. So, for example, a war shapes a Hero generation in young adulthood; that same war shapes an Artist generation in youth; an awakening shapes a Prophet generation in young adulthood; and the cultural aftermath of an awakening shapes a Nomad generation in youth.

Another constant feature to this cyclicality is that each generation has a modest impact on the first generation that follows it, and a heavy impact on the second following generation. The civic climate and institutions most affecting the young Boomer generation (the Cold War, the Vietnam War, the draft) were steered by the G.I. generation. The climate of adult self-absorption and mid-life liberties pursued by the Silent generation (lax parenting, easier divorce, the swinging '70s) left Generation X feeling abandoned. Mid-life Boomers rediscovered children, the Millennials, to impose over-protective insulation (finding every missing child, police guarding schools) during the 1980s and 90s. Mid-life Xers sustained that overprotection after 9/11 (such as" helicopter parenting").

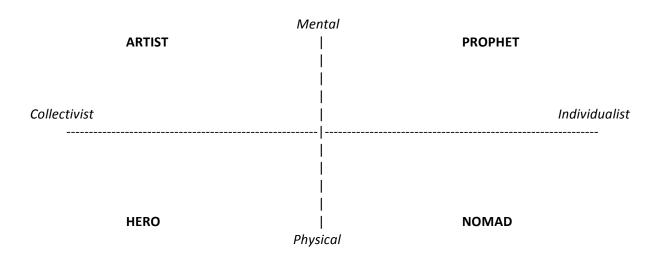
The next table, from *The Fourth Turning*, displays the core characters of each of the four Generations.

	ARCHETYPE			
	Hero	Artist	Prophet	Nomad
GENERATIONS	Republican — G.I. Millennial	Compromise Progressive Silent Homeland	Transcendental Missionary Boom	Gilded Lost Generation X
HOW IT IS NURTURED	tightening	overprotective	relaxing	underprotective
TRANSITION IN MIDLIFE	energetic to hubristic	conformist to experimental	detached to judgmental	frenetic to exhausted
LEADERSHIP STYLE ENTERING ELDERHOOD	collegial, expansive	pluralistic, indecisive	righteous, austere	solitary, pragmatic
HOW IT NURTURES	relaxing	underprotective	tightening	overprotective
POSITIVE REPUTATION	selfless, rational, competent	caring, open-minded, expert	principled, resolute, creative	savvy, practical, perceptive
NEGATIVE REPUTATION	unreflective, mechanistic, overbold	sentimental, complicating, indecisive	narcissistic, presumptuous, ruthless	unfeeling, uncultured, amoral

Viewed from a macro-social perspective, the four generations display distinctive peer personalities during the four phases of life:

Peer Personality	Youth	Rising Adult	Maturity	Elder	Archetype
Idealist	indulged	narcissistic	moralistic	visionary	PROPHET
Reactive	criticized	alienated	pragmatic	reclusive	NOMAD
Civic	protected	heroic	powerful	busy	HERO
Adaptive	suffocated	conformist	indecisive	sensitive	ARTIST

The four archetypal generations can be arrayed around a grid depicted by two axes: the spectrum from mental to physical, and the spectrum from collectivist to individualist:



In this context, it may be important to consider generational trends in technology development and use. If we examine telecommunications, the first mode of telecommunications to become widely accessible was radio. In 1921 there were five broadcasting towers in the US, but by 1924 there were over 500 stations, and many thousands of licensed and unlicensed stations during the 1930s. The technology was enthusiastically adopted by a Nomad generation, the Lost, who reveled in the seeming *anarchy* of broadcasting about anything and everything. By the 1950s, the GI generation wanted television, and they found that three broadcasting networks for the *entire country* was perfectly sensible. However, the Silent generation brought diversity and pluralism to the airwaves. The Public Broadcasting Service (with

the emphasis on *public*) was founded in 1970, followed by further market diversification in city after city during the 1970s. The Silent also delivered greater diversity and discussion about social issues to nightly programming.

Boomers loved television, but when their turn came to invent the next communication technology, it was the personal computer (with the emphasis on *personal*). Xers wanted more than one computer – their beloved video arcades and gaming consoles proliferated with Xer spending power. But what Xers loved most was the next leap in telecommunications, the internet. If you worked in an office during the mid-1990s, it usually was people under the age of 35 who were building all the websites. By the mid 2000s, there were one hundred million websites and Xers reveled in their *individuality* and anonymity. Millennials (like the GIs before them) had no use for that galaxy of options, or for privacy, mainly using just a dozen or so *social* sites and apps (*Facebook, Instagram, Pinterest*, etc.) on their smartphones. As for gaming, multi-player games attract Millennial attention spans.

It is commonly thought that technological innovation and adoption must be inherently unpredictable, and hence independent from other social trends and cultural folkways. Karl Popper's *The Poverty of Historicism* (1957) ridiculed the idea of historical prediction by first premising, without any evidence, that technological change is highly independent from all other social conditions. That presumption cannot be confirmed by the facts of actual history. Innovation requires investment and dedication, and the adoption of new technology requires a felt need in the population. Generations accordingly develop their preferred technologies, or at least radically adapt them from the previous generation. And each generation will apply a new technology to purposes in accord with its own priorities. Technological novelty and social values are not independent variables.

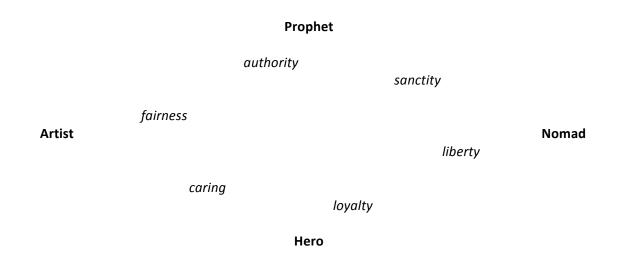
Values Matter: Macro-social Perspectives on Generations and Social/Moral Psychology

Jonathan Haidt's psychological inquiries into humanity's moral foundations have revealed at least six core human capacities and how each person's character typically has two or three predominant foundations which characterize one's understanding of morality. The six foundations are (from www.moralfoundations.org):

- 1) Care/harm: This foundation is related to our long evolution as mammals with attachment systems and an ability to feel (and dislike) the pain of others. It underlies virtues of kindness, gentleness, and nurturance.
- 2) Fairness/cheating: This foundation is related to the evolutionary process of reciprocal altruism. It generates ideas of justice, rights, and autonomy.
- 3) Loyalty/betrayal: This foundation is related to our long history as tribal creatures able to form shifting coalitions. It underlies virtues of patriotism and self-sacrifice for the group. It is active anytime people feel that it's "one for all, and all for one."

- 4) Authority/subversion: This foundation was shaped by our long primate history of hierarchical social interactions. It underlies virtues of leadership and followership, including deference to legitimate authority and respect for traditions.
- 5) Sanctity/degradation: This foundation was shaped by the psychology of disgust and contamination. It underlies religious notions of striving to live in an elevated, less carnal, more noble way.
- 6) Liberty/oppression: This foundation is about the feelings of reactance and resentment people feel toward those who dominate them and restrict their liberty.

Combining the meta-psychologies of Generation Theory and Moral Foundations is quite straightforward. Each Generation, as a whole, regards one or two of the moral foundations as closer to the essence of morality, taking those few foundation as both moral guidance and moral justification.



Generation Theory is in accord with Moral Foundations theory: the most reliable motivation to social conduct on a large scale is not selfishness, vanity or fear – it is, in fact, morality. Not morality as we fondly wish it to be, but all-too-human morality as it really is in the real world: Namely, that what a group sincerely believes is rightly justifiable to themselves and others, in the long run and in large numbers, tends to control group behavior and shape the large patterns of social life. One of the most characteristic group behaviors of *Homo sapiens* is the ample capacity for war.

The Next World War (?)

The most striking prediction made repeatedly in *Generations* (in 1991) was to identify 2020 as the most likely year for the start of the next great secular crisis: at the least, a trough of a vast financial convulsion, and at the worst, the depths of the next world war. A highly specific prediction, made about a dramatic event occurring thirty years in the future, is surely a forecast that puts it all on the line.

Generations attempted to predict "World War III". Generations also made dozens of other specific datable predictions, all of them quite falsifiable, about demographics, social forces, institutional changes, cultural climates, and so on. Most of them have largely turned out to be correct. It was Generations that predicted the reversal of so many negative trends among youth; and that the political atmosphere after 2000 would be extremely polarizing and partisan as the Baby Boomers reached their full voting power and dominated Congress (NB: voting-eligible Baby Boomers peaked at 72.9 million by 2004 and still maintain higher turnout rates than Generation Xers).

Among the specific predictions made by Strauss and Howe in 1991, one other has already come true: no member of the Silent Generation (born 1925–1942) would ever win the Presidency. Since Barack Obama (born 1961, Generation X) held the office for eight years, to be succeeded by Boomer Donald Trump (born 1946), there is an effective guarantee that the Silent Generation (Dukakis, Jackson, Perot, McCain, Sanders) will be completely shut out. It is likely that there will not be a Chief Justice of the Supreme Court from that generation, either.

But the next world war by 2020? *Generations* was unable, of course, to predict exactly how this crisis would be precipitated, what form(s) this conflict would take, how the civilian population would suffer, and which political and military strategies would be required. Geopolitical tensions, economic problems, and technological advances are very difficult to predict 30 years in advance, or even 5 years in advance. Nevertheless, with enough background information, scientific psychology, sound modeling, and generational insight, there may be enough time to form near-term predictions about many variables to public attitudes, actions, and mobilizations. Demographic and social data plus new technologies plus moral psychology plus generational characters, all properly staged in the prevailing cultural climate of the times, would permit the assembly of forecasts about social dynamics, technological innovations, public actions, and civic transformations.

The last book presenting the entire Generation Theory was *The Fourth Turning* in 1997, which maintained Strauss and Howe's dire predictions about the 2020 crisis. But some things have changed. More data have been gathered about every aspect of individual and social life in the last five years than all previous years combined. Moral psychology has been dramatically advanced by sophisticated studies of the neurobiological, psychological and social foundations of moral cognition and judgment. An additional ten years of information about the generational lineup of Boomer–Xer–Millennial has accumulated. Practically anything that anyone could possibly want to know about the resource management of every region on the planet is already accessible on the internet. And much of today's economic/religious/geopolitical scene is available in full view for anyone to peruse.

Generational Dramas and Global Theatrics

In accordance with Generational Theory predictions, the next world war will take place roughly between 2020 and 2026 (plus or minus a couple of years). Generation Theory cannot be directly applied to "model" the contours of geo-political instabilities or forecast specific events, such as whether a world war will be initiated by a conventional regional war, a territorial clash between two superpowers, or a

cyberwar. Generation Theory can, however, help to predict how US leadership and the American public will react to various scenarios, how they will choose among countermeasures, and how they will compensate domestically to wartime hardships. Generation Theory can also provide insights into the Generation Dramas occurring in other countries, in order to predict how antagonisms and alliances between the US and other countries may proceed.

The Generational clock of a country is largely controlled by the last major conflict and/or domestic upheaval it has endured. Most northern hemispheric countries and some countries of the southern hemisphere are now all on the same generational "clock".

Japan	1937–1945	Sino-Japanese War, Japan-USA World War II
Korea	1939–1945	Japanese occupation, forced labor
China	1937–1949	Sino-Japanese War, War of Liberation
Philippines	1941–1945	Japanese invasion, World War II
India	1940-1947	World War II, independence movement, Pakistan partition
Pakistan	1940-1947	World War II, independence movement, Pakistan partition
Russia	1941–1945	Eastern Front of World War II
Iran	1941–1946	Occupation by UK and USSR, Iran-Azerbaijan Crisis
Turkey	1919–1938	War of Independence, Greek exodus, Atatürk reforms
Eastern Europe	1939–1945	World War II
Western Europe	1940–1945	World War II
North Africa	1939–1945	World War II
Brazil	1935–1945	Communist & Fascist uprisings, military coup d'états
Argentina	1930–1946	"Infamous Decade" of coups, 1943 military coup d'état
United States	1941–1945	World War II

At present, in 2017, the senior political, military, and institutional leadership of these countries, who are around 60 to 72 years of age, are almost all members of a Prophet Generation. Senior leadership is usually past the age of 60 anywhere, but many of today's national leaders, with few exceptions, were all born during the 10 years following the end of their country's last great upheaval.

Principled, righteous, and decisive – and loathe to cede power – Prophets steer their countries into climatic confrontations with perceived threats in the name of noble causes. Prophets declare existential threats requiring severe remedies with high costs, and use the tone of moral and religious righteousness to rally national commitment. Prophets demand authority and expect loyalty, enforce discipline and conformity, and punish selfish or renegade conduct.

COUNTRY	LEADER	<u>AGE</u>	NOTABLE GOALS
Japan	Shinzō Abe	62	A long-serving P-M, "Abenomics 2.0" for civic responsibility, promote indigenous religion, enlarge military scope.
China	Xi Jinping	63	Prolong power past 10 years, pursue anti-corruption campaign, restore respect for Confucianism, named 'commander in chief'.
Philippines	R. Duterte	71	Oldest President in national history, fight drugs and crime with murder, ultratraditionalist social views, realignments with allies.
India	Narendra Modi	66	Conservative neo-liberalism, curb counterfeiting and corruption, encourage Hindu nationalism, shift to first-use nuclear posture.
Pakistan	Nawaz Sharif	68	Constitutional change permits his third PM term, only gradual liberalization of society, joins Islamic Military Alliance v. Iran.
Russia	Vladimir Putin	64	Prolong power, pursue anti-corruption campaign, ally with Russian Orthodox Church, use military for territorial expansion.
Iran	H. Rouhani	68	Collaborate with older Ayatollahs, permit censorship and human rights violations, let military take aggressive postures.
Turkey	Recep Erdoğan	63	Enlarge and extend power, conservative social agenda, restore Islamic and Ottoman traditions, apply military force liberally.
Germany	Angela Merkel	62	One of Germany's longest-serving Chancellors, seeking a fourth term, more liberal and less nationalistic than rising rivals.
United States	Donald Trump	70	Sustain conservative values, shame corporations betraying America, empower the religious right, flaunt military power.

This Global Theater of generational alignments will only exacerbate cross-cultural tensions and worsen geopolitical volatilities.

Every Prophet generation in each country will eagerly detect catastrophic problems and describe root causes to those problems in strongly moralistic terms. Institutions are decayed; competitors are immoral; rivals are unjust; enemies are demonic and sub-human. And enemies are everywhere. Paradigmatic Prophets like to erect absolute in-group/out-group dichotomies and view outsiders with xenophobia. Their next younger cohorts, the early-wave Nomads, are just as capable of group-think and they are even more xenophobic.

The next level of leadership in legislative, military, and bureaucratic bodies around the world has a median age of around 52 years, placing most of them in a Nomad Generation. During a next world war,

in most major countries, Prophet leaders will be asking Nomad commanders to lead Hero fighters into battle. And every country will believe that it can be victorious. Prophet leadership will have to look to their younger Nomad commanders for the bold and pragmatic execution of mission goals, which they will aggressively pursue. Prophets may not admire those methods, but they will respect the results. By contrast, Prophets looking around the world will tend not to respect heads of state in that Nomad generation, who will seem amoral and untrustworthy at best, and dangerously unstable at worst.

COUNTRY	<u>LEADER</u>	<u>AGE</u>	NOTORIOUS AGENDAS
Syria	Bashar al-Assa	d 51	Maintain grip on undemocratic authority, use military to win civil war, be a client state of Russia, commit war crimes
North Korea	Kim Jong-un	35	Maintain grip on undemocratic authority, keep military on aggressive posture, exploit China's tolerance, oppress populace
Venezuela	Nicolás Maduro	o 54	Extend undemocratic authority, rely on military for food distribution, use Cuba's help, persecute political opposition
Ukraine	P. Poroshenko	51	Accused of stifling opposition, under suspicion for oligarchical loyalties, have journalists intimidated, ineptly fighting civil war

As elder Prophets engage principled stand-offs against each other, and make condescending ultimatums to younger Nomads, the geo-political world will trend toward becoming increasingly unstable.

Yet, it could be argued that global stability has never been that "healthy". Why, then do these times feel even more unstable, and what will really be at stake in coming years? Today's pundits at best manage to describe matters already evident in the headlines. In 1997, Strauss and Howe's *The Fourth Turning* again looked 20 to 25 years into the future, and foretold for many countries around the world, including the US:

Economic distress, with public debt in default, entitlement trust funds in bankruptcy, mounting poverty and unemployment, trade wars, collapsing financial markets, and hyperinflation (or deflation)

Social distress, with violence fueled by class, race, nativism, or religion and abetted by armed gangs, underground militias, and mercenaries hired by walled communities

Cultural distress, with the media plunging into a dizzying decay, and a decency backlash in favor of state censorship

Technological distress, with crypto-anarchy, high-tech oligarchy, and biogenetic chaos

Ecological distress, with atmospheric damage, energy or water shortages, and new diseases

Political distress, with institutional collapse, open tax revolts, one-party hegemony, major constitutional change, secessionism, authoritarianism, and altered national borders

Military distress, with war against terrorists or foreign regimes equipped with weapons of mass destruction (Howe and Strauss 1997: 277)

All of these trends are increasingly evident around the world, and have been growing at an alarming pace.

So what? Separately, any one of these trends might not seem too alarming – it may not have reached crisis proportions, or reached America yet. Individually, each darkening trend might even seem familiar and somewhat manageable. Many countries have managed to survive despite suffering from one or another of these problems for a while. However, what prognosticators are now waking up to is what Strauss and Howe already predicted: these trends are getting intertwined and exacerbating each other; each one instigating or worsening the next. And the compensatory factors are weak, and weakening further. Combating any one of these issues is daunting enough; expecting many of them to be resolved soon is fantasy.

Bracing for Impact

The reality is that global societies and politics are lurching into the climax phase of their collective Fourth Turning. Problematic trends are congealing and deepening a collective channel inducing the momentum and gravitas of a pending crisis. Entertain the most pessimistic prognostications for the next twenty years: more instability in the Middle East, Central Asia, and South Asia,, more shortages of resources, more migrating populations, more financial disruptions, more trade confrontations, more political schisms, more nuclear weaponization, and more religious hatreds. Then accept – or at least acknowledge the Generation Theory forecast: these trends will crescendo, but within the next three to six years, not over the course of the next twenty years.

The generations of major countries are all their Fourth Turning generational line-up: Prophet, Nomad, Hero. Prophet-style leaders are already in place, with their capacity for provocations and ultimatums well identified, and often displayed. The question is not whether the US will be able to pursue compromises and postpone conflicts, for it is likely that the US will not be able to exert effect in such ways. Compromise and prevarication will no longer be the primary policy of foreign powers, and responding to challenges with conciliation and appearement may no longer be the most viable and effective policy of US leadership.

Rather, the true question today concerns how the US will choose to (swiftly) react to each crisis as it erupts. Generation Theory can provide insight into the wiser ways that US leadership can mobilize national resources, motivate public compromises and sacrifices, mobilize each generation's characteristic strengths, and protect valued civic institutions.

Preparation is always vital, but time is of the essence. Thus, a primary question is what factors can be most effectively adjusted in a short time frame, in terms of both materials and mentalities, without having to first learn from hard failure. We begin with some general observations.

The US military should swiftly prepare for multi-theater war scenarios, on the scope and scale of World War II, but with added internet and space theaters. Infrastructure must be strengthened and hardened, especially cyber and satellite platforms. Production lines must be simplified for mass production of essential weapon systems and common front-line equipment. Strategic decisions must be made about devoting warfighters to entrenched battlefields that entail both symmetrical and asymmetrical, and conventional and unconventional domains. Accelerating missile and drone deployments may prove crucial in these regards, as well.

As for warfighter capabilities, neuro-cyber-prosthetic optimizations should be accelerated for operational deployment by 2020, if not sooner. In the near-term, the enablements of powered exoskeletons, refined communications, and sharable data-enhanced visuals will make immediate sense to Millennials. Team-work Millennials will implicitly trust FDR-like visionaries, but will somewhat doggedly follow officers exhibiting Nomad virtues, executing command goals with inventive pragmatic means. Prophet chiefs hampering Nomad commanders with regimentation will only weaken them, as Lincoln (born 1809) discovered until he found Grant (born 1822) and Sherman (born 1820).

More specific priorities can be modeled closer to real time, e.g. during budget negotiations between the President and Congress, during a Presidential appeal to the nation for patriotic fervor, or during the ramping-up to a military response to a fresh provocation.

Defense Scenarios

Modeling possible scenarios that focus on the defense sector can be conducted by applying Generation Theory. Per the Institute for Defense Analysis's recent publication *Scenarios – International Best Practice*, useful scenarios must be:

Relevant: based on projected force structure and likely military missions;

Reasonable: plausible and feasible;

Robust: free from bias towards a particular service or viewpoint;

Reusable: applicable over a variety of studies; and

Responsive: meet analytical and decision-making needs. (Neill et al. 2016: 6)

Generation Theory won't duplicate military scenarios in details, however. The War Theater is about geographical locales and strategic timelines. Generation Theory is not principally applicable to operations deployable in war theaters that are designed to cripple the enemy. The ongoing exigencies of war will dictate tactical plans, as they must, although defense decisions about intelligence analysis, resource management, personnel preparedness, and communications all involve socio-cultural factors amenable to generational analysis. Crafting smart defense strategies, we argue, may frequently call for preparatory staging on the Generation Theater.

What can be reasonably predicted by Generation Theater is that the three adult generations witnessing a next world war will supply its most memorable leaders who will shape its most momentous events.

<u>Prediction One</u>. The self-appointed visionaries who vindicate the war's purposes and chart the war's primary goals will come from the Prophet Generation, the Boomers. Eager to proclaim the US's coming triumph of destiny and just as capable of appealing to religion, Boomers will advocate the righteous cause and point out the true enemies. Just as Sam Adams and Benjamin Franklin (Awakeners, Prophet archetype) lent their elderly moralistic stature to the Revolution's legitimacy, and Abraham Lincoln and Jefferson Davis (Transcendentals, Prophet archetype) led their respective crusades, so too did Franklin Delano Roosevelt (Missionary, Prophet archetype) by the proverbial fireside during World War II.

<u>Prediction Two.</u> The war's cagiest, most dangerous, and extraordinarily destructive agents, who deviate far beyond the bounds of whatever "regular wartime tactics" may mean, will come from the Nomad Generation, the Xers. George Washington (Liberty, Nomad archetype) confounded and appalled military minds with his recourse to guerilla-style tactics. Late in the Civil War, as news of Sherman and Grant's (Gilded, Nomad archetype) execution of the "March to the Sea" swath of destruction reached European capitals, the phrase "total war" came into use to express the horrified reaction. And the first use of the atomic bomb, was ordered by Harry Truman (Lost, Nomad archetype).

<u>Prediction Three</u>. Warfighters on the front line and in the front row of every theater of a next world war will mostly come from the Hero generation, the Millennials. A wartime draft may not be necessary as young people line up and compete for the honor of serving. The civilian side will supply the young minds who will invent amazing technologies for the war effort before they reach the age of forty. We remember his "sideburns" but Ambrose Burnside (Gilded, Nomad archetype) invented his popular Civil War Burnside Carbine with gain twist rifling for the U.S. Army. Another Gilded on the Union side, Jonathan Letterman, invented the ambulance. And it was J. Robert Oppenheimer (G.I., Hero archetype) who successfully designed the atomic bomb.

These are the three generational Characters. What shall soon appear on their stage? Any defense scenario-planning for Generation Theater forecasts involving a next world war should include these basic features:

A scenario that will assume that the President–Secretaries–Joint Chiefs command structure remains intact and functions properly. The defense sector will not have to assume primary responsibility for representing its objectives to the nation, or maintaining the confidence of the public.

A scenario that will limit challenges for the armed forces to anticipating and interpreting command objectives, analyzing war theater situations, seeking resources commensurate with missions, communicating with allies and enemies, deploying the best military systems and armaments, managing operational and combat personnel, and tailoring enemy losses towards expeditious surrender.

A scenario that should present severe challenges to the forces anticipated to be in place and the alliances as they are expected to exist. Challenges will strain expected missions, potentially fracture alliances, lack a definite timeline for unfolding, and surprise projected capabilities.

A scenario that presents unusual challenges in near-realistic geographical and geo-political contexts. Challenges may involve low-probability situations and seemingly erratic agents, but both military capacities and the political leadership of allies and opponents should be represented and characterized as accurately as possible.

A scenario that can/should include novel technological capabilities emerging before and during wartime. Challenges confronting defense/security sectors and branches will encompass the opportunities of recognizing and prioritizing the potential technologies that deserve development, the tasks of expeditiously implementing new tech/systems, and the problems of matching deployable tech/systems with personnel who are well-trained for implementing those capabilities.

Examples of Hypothetical Defense Scenarios Amenable to Generational Analysis

For illustration, consider the following putative (yet possible) scenarios:

North Korea's worsening famines by 2019 has pressured its Supreme Leader to accede to the military's scheme to start skirmishes with South Korea and land an ICBM near the California coast, to gain concessions from the West. The shrill rhetoric in the Supreme Leader's speeches is convincing the Defense Secretaries, who are also attuned to the President's own (Boomer) righteous condemnations of North Korea, that nothing less than regime change in Pyongyang is now justified. DoD analyses are yielding mixed predictions about the extent of China's efforts to save this regime by confronting a US invasion. Are China's leaders (all Boomer-aged) now equally exasperated by the appallingly roguish behavior of the Supreme Leader (of Xer age), or are they more focused on repelling what they may view as hubristic American pretensions to rearrange affairs for Korea? Intelligence bureaus monitoring Beijing's pronouncements and domestic propaganda do not yet hear the characteristic moralistic justifications that typically

have accompanied past decisions to go to war. How should DoD and Intelligence chiefs assemble their recommendations?

As the hacking "war" intensifies between Russia and China vs US during 2019–20, defense recruitment of cyber expertise is complicated by offers from would-be "white hat" hackers and cybercriminals (mostly Xers). The intransigence of defense/NSA officials towards using their services (rampant drug use is especially distasteful to Boomer chiefs) has compelled a defense contractor's head (an Xer) to utilize such disreputable expertise anyways. After DoD chiefs (Boomers) become aware of this operation's radical yet impressive successes, they disagree over shutting it down on principle. They are well aware that this operation exposes the US to betrayal by one of these hackers who might turn out to the greatest traitor since Benedict Arnold (Liberty, Nomad archetype).

In three to five years, next-generation specialized visual augmentation systems are reaching tactical testing phases in the field, as the deployment of special forces has begun in the western Ukraine and northern Kashmir. The negative feedback from Special Forces' operators (average age 34, mostly Xers) operating in urban areas and the positive feedback from Marine MSOTs (average age 25, Millennials) in wilderness areas are in striking disagreement. How should these varying results be analyzed, explained, and interpreted?

Four years from now, early into the second year of a limited conventional war started over the Spratly Islands, DoD chiefs (Boomers) get distracted by the general court martial of a destroyer captain, characteristically an O-4 or O-5 (an Xer), for what appear to those DoD Boomers as egregiously independent actions. The matter had become intensely political after Congress hears loud public admiration for this captain's daring but unorthodox successes. A US Senator then leaks the psychological testing prior to this captain's promotions, along with a buried study which controversially concluded that outdated profiling from the Vietnam era still prioritizes officer compliance and conformity. Defense chiefs feel reluctant to revise promotion evaluations in order to reduce the weight of seniority and commanding officer recommendations and increase the weight of capacities for logistics, pragmatic judgment, and decisiveness.

Venezuela's worsening economic and political woes has reduced it by 2019 to the status of a failed state. The military effectively rules major urban areas and plunders industrial resources while many regions have reverted to self-rule. China enters into an agreement to prop up this military rule with aid and armaments, mostly useful against civilian unrest, in return for becoming the exclusive foreign investor and buyer of Venezuela's oil. The border between Columbia and Venezuela dissolves as FARC and other insurrection groups take advantage of defenseless regions. US intelligence on this new gray zone observes how China is enlarging its destabilizing manipulation of the region. CIA analysts (all Xers) recommend that a high-ranking Venezuelan general (also an Xer) appears amenable to turning his loyalty towards the US as a client autocrat. DoD chiefs (Boomers) distrust a general of such shifty loyalties, preferring a large invasion to liberate Caracas so an election can be promptly held.

Analytic Tools for Defense Scenarios

Defense scenarios highlight to varying degrees the analysis of communiques from governments and non-state actors, the impacts of media information and mass dis-information, and the reactions of demographic segments to opportunities and surprises. Individual identities and group psychologies are mutually influential, exemplifying the complexities to bio-psychosocial relationships. Social groups are also dynamically affected by new technological capabilities, which are simultaneously developed to meet group needs and in turn alter how social groups internally function. Those mutual influences will be potent in defense sectors and military units, especially where cognitive augmentations and neurotechnologies are concerned (Giordano 2017a, 2017b).

Despite these bio-psychosocial complexities, the right analytic and predictive tools, conjoined according to sound theories about trend lines, cyclical patterns, and cultural tides, can yield estimates and forecasts about the unfolding and management of aggressions, crises, and conflicts (Giordano and Chen 2016). Those tools can also reveal how to design preventative measures to forestall, circumvent, mitigate, or even prevent situations where tough choices or adverse outcomes would be encountered.

Given the bio-psychosocial bases of individual and group identities, attitudes and values, it becomes paramount to:

- (1) **evaluate** the potential role that these factors play in human thought and actions in particular settings and circumstances, and
- (2) **re-frame** national security, intelligence, and defense initiatives of conflict negotiation and resolution to more effectively target—and affect—salient bio-psychosocial variables. (Giordano and Chen 2016)

Are the variables to group dynamics too non-linear and numerous to anticipate behaviors? It seems not. "[S]eemingly incomprehensible decision making actually arises from predictable responses to neural, psychological, stress-related and other factors at the individual level; and to interpersonal psychology and group dynamics, as well as power-relations and other conditions at the group, organizational and state levels." (Wright and Astorino-Courtois 2015: 4) Human responses may be somewhat predictable, but not because they are indicants of reliable rational actors. People are mainly character actors, not rational actors. That is to say, people tend to act according to character: they rely on character strengths and play expected roles within the social groups to which they feel the greatest bonds and loyalties.

In any forecasting, it will be essential to discriminate powerful "bottom up" factors energizing distinct sectors of society from equally powerful "top down" trends that ecologically define the society-wide context. Above all, its capacities must not be misunderstood or overestimated. Generation Theory is ultimately statistical in nature; only large numbers reveal population traits. The interactions among small groups, or the daily news of events, are mostly noise until broader and longer-term patterns

emerge. However, when those patterns do come into the foreground, they are very real and extremely powerful. The behavior of even a single corporation, government agency, or military division is amenable to Generation analysis and prediction so long as the prevailing psychological motivations, social trends, cultural conditions, and national moods are taken into account.

Neil Howe continues to comment on unfolding events during America's Fourth Turning, that climactic turning predicted by *Generations* over a generation ago. In February, he repeated its forecast with these sobering words:

"Despite a new tilt toward isolationism, the United States could find itself at war. I certainly do not hope for war. I simply make a sobering observation: Every total war in U.S. history has occurred during a Fourth Turning, and no Fourth Turning has yet unfolded without one." (Howe 2017)

We can only concur with Howe's sage sense of history, without sensationalism or sentimentality. Like the seasons of the year, the generations are born in succession to live out their own times in their own way. No one could precisely predict that dramas that they will enact. Each new season is full of unexpected weather events. Last year's spring floods do not predict this year's April rainfall, and the winters of grandmother's days only resemble this year's snowfalls in fond memory. Nevertheless, everyone knows that spring always comes, and no one doubts that preparations for winter are just common sense.

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