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*“‘You know you never defeated us on the battlefield,’ said the American colonel. The North Vietnamese colonel pondered this remark for a moment. ‘That may be so,’ he replied, ‘but it is also irrelevant.’”*

– Conversation between Col. Harry G. Summers, Jr., Chief, Negotiations Division, U.S. Delegation, and Col. Tu, Chief, North Vietnamese Delegation, on April 25, 1975, as reported by Col. Harry G. Summers, Jr. in [On Strategy: A Critical Analysis of the Vietnam War](#) (1982) <sup>1</sup>

**Dirty Work:** What we had to learn again is that a nation is not well served by treating badly those who do its dirty work – those who are sent to kick the enemy out of this place or that – upon their return should not be scoffed at, humiliated, or shunted aside and forgotten. Nor should a society or its leaders have any illusions about what war means to both sides, the costs both measurable and immeasurable, and to those who happen to be in the way, the generational consequences should not be the cost of political expedient or the need to be right.

**Zero Sum Game:** A zero-sum game is one in which the gains of one side are equaled exactly by the corresponding loss of the other side such that the two come to a sum of zero. Suppose two sides were playing a game where the total number of points in the game is ten and cannot ever be less or more. Both sides start with five points each. If either side gains a point in the game, the other must necessarily lose a point; that is, the point is ‘transferred’ from one side to another.

Zero-sum game theory or thinking is valid in certain contexts.<sup>2</sup> For example, in international affairs, if you started with the premise that there is a finite amount of land on Earth and that *almost* every parcel of land has been claimed by someone or some country (e.g., Rockall); if one gains land, another loses land in equal measure. Bir Tawil is a rare barely ‘habitable’ and uninhabited *terra nullis* between Egypt and Sudan from a political and administrative boundary difference.

- ✓ This is also how discovery of documents is treated in litigation; there is a finite ‘universe of documents’ applicable to any lawsuit and to the extent that one side can deny documents (or any evidence) to the other, that side gains in the struggle and the other side’s chances of prevailing are equally diminished for lack of document evidence. This is not the ideal of justice, but is instead, the practical side of legal practice.

Zero sum is valid in some other contexts, for example, retail sales are zero sum: The customer wants a certain item in a certain amount at a certain time and place, if the customer buys what they need from a competitor, they are not buying it from you.<sup>3</sup> There is a finite demand for product and a finite pool of potential customers at any time; your competitor’s gain is your loss in equal measure. You lose sales if you do not have the right item, at the right price, in the right quantities, at the right time and/or if the potential customer never heard of you or doesn’t want to buy from you for whatever other reasons.

However, zero sum is not always as clear cut as presented here, for example:

- ✓ “Trump’s core supporters tend to regard economic policy as a zero-sum game. Many believe that others must lose for them to win. Most Americans, however, believe that it’s possible to have economic policies that benefit everyone in the country. Six in 10 Market Skeptic Republicans say that pretty much any economic policy will end up benefiting some at the expense of others, much higher than Core Conservatives.” –

James Hohmann, The Washington Post, October 25, 2017, referencing categories in the Pew Research Center report, “Political Typology Reveals Deep Fissures on the Right and Left,” October 24, 2017.

Zero sum thinking is not appropriate in other situations where sides can gain without taking from the other (e.g., information or interstellar colonization) or in situations such as nuclear war (see Michael T. Klare nuclear firebreak feature quote, 1 Combat, bottom p. 945, *supra*), where *both sides lose* equally due to contamination of the land (that is, a lose-lose, everyone loses).

- ✓ In fact, most of the things that civilization has considered important are not zero sum; ethics and social responsibility are never zero sum, nor is knowledge, information, or education in any direct sense, zero sum. These latter three can sometimes seem to be zero sum in the moment when they are filtered through business and power interests, criminal activities, and the interests of the privileged and elite (which tend to merge).

Conflict, and especially war or armed conflict, can be viewed as a seemingly zero-sum generative activity; both the Axis and the Allies could claim paradoxically that WWII was generative activity! Example, compare the real result of WWII to The Man in the High Castle alternate result. The paradox of war – *we are fighting for our children’s future* – collapses when everyone loses. Collapses in the face of war orphans whose parents’ death didn’t make their future better.

- ✓ See also Entropy & Evolution, 1 Order, p. 515, *supra*.

Conversely, after the invention of Stardrive, when the vastness of space is open to colonization, available land and resources are no longer limited to a single planet, everyone can gain by going out to the stars, colonizing, gathering resources in the universe at large without need to forcefully take from others.<sup>4</sup> Unless they want to... (see Why Not Again, 4 Diplomacy, p. 1142, *supra*).

- ✓ **Lancelot to King Arthur:** Your rage has unbalanced you. You sir, would fight to the death against a knight who is not your enemy for a stretch of road you could easily ride around. – Excalibur (1981).

And once a place has been colonized and/or occupied, do not assume that the inhabitants will easily and voluntarily move on; as the colonization of a place represents a claim, an investment of resources, energy, risks taken, and solid ground to call home. Colonized places are therefore, zero sum to the sovereigns and inhabitants, even if they possess stardrive access to endless places and resources. See also discussion of fuel in Unobtainium, 3 Movement, p. 857, *supra*.

- **Interstellar Paleolithic Culture:** The arguments offered above mirror the situation believed to exist in the Paleolithic and Neolithic periods of human civilization, more specifically, arrangements for conflict resolution and resource competition. It’s amazing how the futures we imagine are always identifiable as parodies of past conditions of humanity, even when we don’t specifically discover or become cognizant of those past events or conditions until later.
  - ✓ “According to cultural anthropologist and ethnographer Raymond C. Kelly, the earliest hunter-gatherer societies of *Homo erectus* population density was probably low enough to avoid armed conflict. The development of the throwing-spear, together with ambush hunting techniques, made potential violence between hunting parties very costly, dictating cooperation and maintenance of low population densities to prevent competition for resources. This behavior may have accelerated the migration out of Africa of *H. erectus* some 1.8 million years ago as a natural consequence of conflict avoidance.

Some scholars believe that this period of ‘Paleolithic warlessness’ persisted until well after the appearance of *Homo sapiens* some 315,000 years ago, ending only at the occurrence of economic and social shifts associated with sedentism, when new conditions incentivized organized raiding of settlements.

Of the many cave paintings of the Upper Paleolithic, none depicts people attacking other people explicitly, but there are depictions of human beings pierced with arrows both of the Aurignacian-Périgordian (roughly 30,000 years old) and the early Magdalenian (c. 17,000 years old), possibly representing ‘spontaneous confrontations over game resources’ in which hostile trespassers were killed; however, other interpretations, including capital punishment, human sacrifice, assassination or systemic warfare cannot be ruled out.

Skeletal and artifactual evidence of intergroup violence between Paleolithic nomadic foragers is absent as well.” – from Wikipedia article, “Prehistoric Warfare.”

And there you have interstellar- and far-future post-apocalyptic fiction in a nutshell. Conditions of interstellar space (especially with so many exoplanets already known to exist) offer an infinite Paleolithic population density and social condition, while on the other hand, colonies are established by civilizations that of necessity, must have become settled – as a precondition of technology and cultural development – on their original homeworlds, with attendant expectations of complex organization and infrastructure.

- ✓ “At some point toward the end of the last Ice Age, it appears that human populations were increasing and the option to move around the landscape was being lost. In other words, the landscape was becoming populated with more and more people and so people shifted to reliance more and more on agriculture. And reliance on agriculture seems to be one of the triggers that generates further increase in complexity. Because to be agriculturists, people had to be sedentary. They had to live in more or less the same place every year, and year-round in order to tend their crops. And being sedentary means that they had to live in larger communities.

You know, when you live in large communities, you have disputes between individuals, you have to have rules, you have to have ways of solving disputes. You tend to get people who specialize in certain kinds of things, maybe people who specialize, say, in making pottery or making stone tools or making metal tools. Other people specialize in producing food as farmers. So you get markets emerging and complex economic exchange systems. And so once you have agriculture in sedentary communities that grow in size, then complexities in human societies seem to grow, and that’s been the story for much of – or about the last twelve thousand years.” – Joseph Tainter, podcast interview (transcript) on PeakProsperity.com, by Adam Taggart, June 25, 2017.<sup>5</sup>

Any condition that shifts far future interstellar civilizations from the neo-Paleolithic condition to a widespread settled condition is *purely local*; for example, the interstellar empire of 11,000 worlds is just a teardrop in the ocean of stars, but within its boundaries will exist zones of core worlds, industrialized worlds, farming worlds, and frontier worlds. Sort of like early hegemonic empires centered around a few cities and settled agricultural areas of a large river valley, beyond which lies partially known mountain, forest, Pontic, tribal ranges.

- ✓ Organized warfare, diplomacy and just about everything we know, is thus, an emergent from the triumph of sapience over the environment and the various elements of the Neolithic Revolution.

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*“The only original bit of color to the generic sci-fi setting is dividing species up into two philosophies: ‘little endian’ and ‘big endian.’ This programmer joke (each term refers to a data format) is a reminder that Starships Unlimited is the personal work of one man, Andrew Ewanchyna.... Ultimately, though, Starships Unlimited benefits from having one designer’s focused and uncompromised efforts.”*

– Sam Parker, “Starships Unlimited: Divided Galaxies Review,” Gamespot, January 17, 2002

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**Big Endian, Little Endian:** One possible model of GGDM diplomacy (and diplomacy in general) is based on the game theory of *Homo reciprocans* vs. *Homo economicus*, or cooperative man vs. economic man. Which wolf do you feed?<sup>6</sup>

- ✓ To wit: “The *homo reciprocans* concept states that human being players interact with a propensity to cooperate. They will compromise in order to achieve a balance between what is best for them and what is best for the environment they are a part of. *Homo reciprocans* players, however, also are motivated by justification. If a second player is perceived as having done something wrong or insulting, the first player is willing to ‘take a hit,’ even with no foreseeable benefits, in order for the second player to suffer. A common example of this interaction is the haggler and shopkeeper. If the haggler wants a deal and the shopkeeper wants a sale, the haggler must carefully choose a price for the shopkeeper to consider. The shopkeeper will consider a lower price (or a price in between) based on the benefit of selling a product. If the haggler’s offer is a low-ball, which may be offensive to the shopkeeper, the shopkeeper may refuse simply on the grounds that he is offended, and will knowingly and purposely lose the sale.” – Wikipedia article, “Homo reciprocans,” July 21, 2018.
  - Thus, *H. reciprocans* behavior seems to be related to the gene-culture propensity for fairness and altruistic behavior, see Eric Michael Johnson feature quote, 1 The Sidereal Stage, p. 111, *supra*; see also discussions of Metalaw, Mephisto’s Marriage Counseling, 3 Diplomacy, p. 1135, *infra*.<sup>7</sup>
- ✓ cf. “*Homo economicus* is a term used for an approximation or model of *Homo sapiens* that acts to obtain the highest possible wellbeing for him or herself given available information about opportunities and other constraints, both natural and institutional, on his ability to achieve his predetermined goals. ... *Homo economicus* is seen as ‘rational’ in the sense that wellbeing as defined by the utility function is optimized given perceived opportunities. That is, the individual seeks to attain very specific and predetermined goals to the greatest extent with the least possible cost. Note that this kind of ‘rationality’ does not say that the individual’s actual goals are ‘rational’ in some larger ethical, social, or human sense, only that he tries to attain them at minimal cost. Only naïve applications of the *homo economicus* model assume that this hypothetical individual knows what is best for his long-term physical and mental health and can be relied upon to always make the right decision for himself.” – Wikipedia article, “Homo economicus,” July 21, 2018.

- ✓ ‘Utility’ is satisfaction. For example, suppose you could make \$100 per hour mining ore. Your predetermined goal is to make as much money as possible in the shortest amount of time, and mining the ore is your best available option. According to *H. economicus*, in the most extreme interpretation, you will mine the ore even if doing so is dangerous or adversely affects your health in either the long-term or short-term.
  - This does not mean that *H. economicus* cannot be cooperative if doing so is the most cost effective or efficient means of reaching a predetermined goal (e.g. avoiding unnecessary wars), nor does it mean that *H. reciprocans* cannot be uncooperative, if cooperating is not the best course or is not justified (e.g., the other party is trying to leverage, exploit).
- Super-Rationality: Similarly, compare also game-theoretic rationality to *super-rationality*. In a symmetrical game, the super-rational player – without any knowledge of the other player or what they might do – must begin with the assumption that the other player is also super-rational. The super-rational player in such a game will make the choice that maximizes the reward for both players, believing that the other super-rational player will make the same choice (as there is only one logical choice). Thus, the super-rational players inadvertently cooperate. See also, “magical thinking.” Cf.: In normal game-theoretic rationality each player makes the best choice to maximize their own gain with no knowledge or expectation of what the other player might do, out of the available possibilities and with no assumption as to whether the other player is making a rational or irrational choice.
  - ✓ “[Ludwig von] Mises used the term praxeology to name the deductive science that begins with the premise *that human beings act intentionally*. This premise is often called the ‘axiom’ of praxeology. It is an axiom because, in order to disprove it, you have to engage in what the proposition affirms, i.e., you have to act intentionally to argue against the proposition. An intentional action identifies an *end*, or purpose, to the action, as well as certain means selected to achieve that end.” – Michael Accad, M.D., “An introduction to praxeology and Austrian school economics,” alertando-oriented.com (blog), April 13, 2016 (emphasis in original).
  - ✓ “Note that Austrian theory does not care and makes no claim about the psychological state of mind of the actor, and whether the action is rational or not. This is also in contrast to mainstream neoclassical economics which rely on a ‘rational agent under constraint’ assumption for the economic actor, an assumption which is increasingly being recognized as seriously flawed or limited.” *Id.*

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*“Politics in a constitutional republic is not supposed to be a zero-sum game...”*

– James Hohmann, *Washington Post*, September 27, 2017

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*“E. Pluribus Unum. From many, one.... Humanity is not a zero-sum game.”*

– Sen. Jeff Flake, “I Will Not Be Complicit” speech on the Senate Floor, October 25, 2017

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**Parliamentary Progression:** For most of history, politics has frequently been zero sum, especially at the highest echelons of government; resulting in exile, show trials, purges, *coups de'etat*, estates seized and executions.

One possible argument for the rise of parliamentary government (and the associated judiciary development) is as a buffer or hedge against the excesses of zero-sum politics and factionalism. At first, it was the lower feudal orders trying to protect themselves from the excesses and demands of the crown (e.g., The First and Second Barons' Wars, 1215-1217 and 1264-1267).

The modern break occurred in England when Simon de Montfort (in 1265, the “uncrowned king of England,” see Second Barons' War) invited townspeople into parliament, a trend that was never reversed. The relatively modern idea of a written plan of government (i.e. the constitution and the constitutional republic) continues that development by pre-delineating the powers and limits of each part of the government and their relationships.

- ✓ There is a well-accepted argument that the American Revolution (1775-1781) was the continuation of and radicalization of the Glorious Revolution in England (1688-1689).<sup>8</sup> The uneasy parliamentary seizure of power was completed in America.

The defeat of the Axis Powers in 1945 could be seen as the final triumph of a global parliamentary movement, with the defeated powers finally adopting (real) parliamentary forms of government. This macro-historical process culminated in the League of Nations and later, the United Nations, a non-sovereign, vaguely parliamentary body intended to curb the worst excesses of zero-sum international relations between sovereign states. Note the subsequent parallel development of controversial non-sovereign ‘international’ regulatory and judiciary entities, such as WIPO, W3C and the ICC (and the odd creature, ICANN, which is still controlled by the United States and was an election issue in 2016, see ICANN Understand, 3 Information, p. 1370, *infra*).

- ✓ From the previously identified East-West technological inversion, the Columbian Exchange, the transition of the Roman Republic to Roman Empire, the Great Migration, it seems that 500 years is the minimum natural macro-historical period. The Parliamentary Progression cycle seems to (generally) fit that period as well. But I have wondered, has this always been true? In the prehistoric past was the ‘macro-historical’ period longer, has it slowly accelerated? And if so, what were the ‘causes’ of the acceleration of later macro-historical periods? And yet that roundish 500-years seems to adequately fit so many of the great events or trends identified in our history such that it has become the staple of science-fiction and fantasy-fiction literature.
- **Judgment:** Has the United Nations been successful? Many times – and this is probably the general belief – the United Nations has seemed a useless, expensive waste of funds; the Soviets felt the United Nations was simply an extension of the United States. They weren't entirely wrong on that. Judgment of the United Nations might begin with the biggest items: There have not been any World Wars since the UN was founded and we avoided the global nuclear war that everyone feared (you and I are still here, having this conversation). There is a question of whether any of this can be attributed to the United Nations, or simply to a more responsible or changed idea of national leadership (and aren't the two related?) or to the inefficiency of the Soviet Union; or simply to the economic, military and diplomatic power of the United States in the latter half of the 20<sup>th</sup> Century (*Pax Americana*). And there are still lots of very bad things that go on inside states and between states; so that the United Nations – like any grandiose human instrument – has fallen far short of the ideal.

- **Jury:** One of the major issues that remain unsettled in the world is whether international law applies only to the relationships between nation-states or whether it also applies to the relationship of nation-states to humanity (some hold that there is no international law, only a set of treaties and agreements). For example, whether the leader of a nation can be held accountable for genocide against the inhabitants, citizens or indigenous populations of his or her own nation? While the latter interpretation can be established by treaties, it can also just as easily be cast aside when inconvenient, for example, the nations that drop from the International Criminal Court (ICC) when the Court issues charges against their leaders. See also Jenny S. Martinez quote, *Interstellar Law*, 3 Order, p. 553, *supra*.

*“At this point it will suffice to say that conflict between empires more often leads to expansion of the victor than to the collapse of both.”*

– Joseph Tainter, *The Collapse of Complex Societies* (1988), p. 61

**Alice in One Plane, the Mad Hatter in Another:** Mr. Tainter is correct, except when thermonuclear weapons are involved.

For the first time in history, the combined nuclear weapons arsenals of the powers present a situation where everyone loses and the damage would last for a very long time. The end of WWII, especially the last act, and the Cold War, made it imperative that we figure out how this thing got started, where it began. This consequence of the Cold War cannot be overstated in the development of Western civilization and nascent global civilization. Significant advances were made from 1960 onward in anthropology, conflict theory, understanding technology, and historical re-assessment of civilizations.

Like civil wars and explosions of human fanaticism, nuclear weapons discard conventional rules and are in a category of their own (see Michael T. Klare feature quote, 1 Combat, p. 945, *supra*).

- ✓ “Mohammed had touched off one of those explosions of human energy which transcend ordinary considerations of arms and tactics. Outbursts of this sort, mysterious and dreadful in the new forces they are capable of generating, have never failed to shatter existing military values. Their true origins, like those of electricity or atomic energy, must remain largely in the nature of a cosmic enigma. Their causes and effects are more open to analysis, and it is noteworthy that such explosions have inevitably led to aggression. Defenders, however brave and patriotic they may be, are never charged with quite the same mystical fury. Man, it has been said, is the only animal on earth willing to fight and die for an idea. The distinction offers a further clue to those hurricanes of conquest which have occasionally swept through history, leaving the wreckage of empires behind them. For the most potent weapon of a Mohammed, a Jenghiz Khan or a Hitler is an idea generated into human energy.... Conquerors of this type, it seems, are not restricted at first by the usual laws of tactics and strategy.” – Lynn Montross, *War Through the Ages* (3<sup>rd</sup> Ed., 1960), p. 121.<sup>9</sup>

The error of the Secretary of the Interior turned President of the United States in *By Dawn’s Early Light* (1990) is the idea that one can win a global thermonuclear war or achieve an acceptable outcome; when confronted with the unfolding horror, he fell back upon historical and conventional ideas – the wrong framework – to make the most momentous decision in history.



The largest flaw in the movie is that the hawkish Col. Fargo, the expert on Soviet military capabilities and weapons, does not seem to grasp or understand that thermonuclear weapons are not like conventional weapons, they are in a class of their own as a potential existential threat (i.e. the nuclear firebreak)<sup>10</sup> nor does he understand what Capt. Moreau understood, when he advised the President to “Cut off the head of the Soviet chicken.” It is difficult to imagine that he obtained the rank and the position next to the President lacking such understanding. If this were a standard horror movie, Col. Fargo would be the evil supernatural whisperer, like the ghost of Grady in *The Shining* (1980); there is something almost (or perhaps) unintentionally supernatural about Fargo’s character and influence, sort of an echo of the whisperer in *A Canticle for Leibowitz* (1959),<sup>11</sup> and Alice in the other plane is his ‘saintly’ opposite:

- ✓ **President:** We got Alice in one plane and the mad hatter in another. – By Dawn’s *Early Light* (1990).

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*“When I came back to the United States [from the Paris Peace Conference of 1919], I decided that if you could use propaganda for war, you could certainly use it for peace. And ‘propaganda’ got to be a bad word because of the Germans using it, so what I did was to try and find some other words so we found the words ‘public relations.’”*

– Edward Bernays as quoted by Adam Curtis, *The Century of the Self* (2002)

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**Propaganda by Another Name:** The feature quotes above and below, taken together, expose an unexpected naivety in such an insightful intellect; first that renaming “propaganda” as “public relations” while retaining the same methods and functions, somehow makes it no longer propaganda, and second, that any tool he might invent, for however good a purpose envisioned, could not be and would not be opportunistically appropriated for the detriment of the people, or for no good purpose. We are all susceptible, however, to this fallacy, it is probably the same horror felt by the innovators and practitioners of modern psychiatry when they found out it would be used for suppression of political dissent (e.g., *Aktion T-4* in Nazi Germany) or to advance agendas.

- ✓ “Sound bytes. Catch phrases. Sales pitches. Words. All lexical legitimizing. ‘A rose by any other name...’ he said. In the end it’s all propaganda.” – J.A. Willoughby, “Promised Land” (2014).

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*“Goebbels [...] was using my book *Crystallizing Public Opinion* as a basis for his destructive campaign against the Jews of Germany. This shocked me.”*

– Edward Bernays, *Biography of an Idea: Memoirs of Public Relations Counsel* (1965)<sup>12, 13</sup>

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Endnotes.

<sup>1</sup> **Commentary:** Col. Summers book was my first introduction to Clausewitz’ Ten Principles of War when I was in high school. It is worth reading just for that, and *a lot easier than reading Clausewitz!*

- ✓ In the summer of 2019, I discovered that a full pdf version of Col. Summer’s *On Strategy* is available and free to download from Ike Skelton Combined Arms Research Library, Digital Library.
- ✓ Col. Summer’s comment is sort of like Angmar saying, “No man can kill me.” True, but also irrelevant.

<sup>2</sup> **Commentary:** Ultimately, with a great Freudian reach, one might conclude that zero sum thinking is a natural result of human reproductive psychology and an infantile need to possess mother for safety and survival. If that conclusion is accepted, then what could be said of a technologically advanced, civilized species where the young are

not cared for by the parents (such as sea turtles) and reproductive instinct does not involve transference of infantile possession to the sex partner? Would they develop a zero-sum view?

<sup>3</sup> **Commentary:** Which is something that always puzzles me about Amazon. I go to Amazon and I buy a new pillow. Thereafter, for the next six months, I get spam from Amazon that begins by showing me pillows, has pillow in the subject line. I only needed one pillow. I got what I wanted. I likely will not buy another for ten years, and certainly will not buy another immediately. But Amazon's spam bots simply go off of what you most recently bought, sending spam emails for more of the same.

<sup>4</sup> **Citation:** "Emigration, as we have seen, does not diminish the home population by a single unit; and so, while there are empty lands available for colonisation, it is by far the best method of adding to the numbers of our race." – Dean William Ralph Inge, *Outspoken Essays*, "The Future of the English Race" (The Galton Lecture, 1919), available for free on the Gutenberg Project.

- ✓ Dean Inge is eloquent, intellectual and quotable, but a creature of his time who, between clear, quotable lines, often makes statements – possibly for political purposes – that reflect the beliefs of his time and are offensive to the current worldview (he was a church politician). As the title of the essay suggests, the entire discussion (if historically prescient in some respects, e.g., South Africa, and very realistic, practical) has heavy racial undertones which GGDM does not support, but the general idea of this quote is appropriate to GGDM's Galactic Space. See discussion of the Inge Process, 5 Diplomacy, p. 1161, *supra*.

<sup>5</sup> **Commentary:** The course of a game of GGDM may be considered akin to the evolution of agriculture described by Dr. Tainter. The initial Galactic Space playing area will fill quickly, First Contacts will happen, disputes must be resolved, complexities will arise from the fact that the population in the center is both sedentary and increasing, though some population will move outward as the Galactic Space expands, most of the population will remain in the center and grow into interstellar states. Successive waves of population will settle in bands outward.

<sup>6</sup> **Commentary:** I spent way too much time back then playing Starships Unlimited (commercial release) against the AI on my PC. The three main features that stuck in my mind from the game, over 15 years ago, was 1) the Little Endian/Big Endian diplomacy (I didn't get the in-joke though), 2) reaching the Age of Singularity (which I thought at the time was black-hole powered technology, but now I am not sure if it referred instead to the Technological Singularity), and 3) being annoyed by the ambient background noise that I either turned down or off.

- ✓ I hope that GGDM has benefitted "from having one designer's focused and uncompromised efforts." *Id*. But I cannot really tell... I have no objective view of this issue.

<sup>7</sup> **Commentary:** I was selling games at a convention and a customer asked me the price of a Star Wars X-Wing unit that I had forgotten to tag. Offhandedly, I said, "Probably the same as the others, but let me check." I probably shouldn't have said it that way. I checked the distributor's invoice and saw that the cost of the unit was more than the others, so I calculated the retail markup and applied a price sticker to the unit. The customer came back around and was miffed because it was more than the other X-Wing minis it had been with and because I said it was probably the same price as the others. The guy acted like a real jerk, trying to browbeat me into selling the mini at the same price as the others, and I wouldn't budge because he was being a total jerk. I was selling plenty and since he was being an ass, I didn't care if he bought it or not. I would rather lose the sale, and ultimately, he didn't buy it.

<sup>8</sup> **Citation:** "As far as the government is concerned, we're seeing something pretty interesting. Parliamentary democracy has been around for 350 years, starting in England in 1689 with the so-called Glorious Revolution, when sovereignty was transferred from the royalty to the parliament. The beginnings of parliamentary democracy in the United States [came] about a century later. Parliamentary democracy is not just based on laws and constitutions. In fact, the British constitution is maybe a dozen words. It's based on trust and good faith, the assumption that people will act like human beings." – Noam Chomsky interview by Michael Brooks, "Noam Chomsky: Trump's Inaction on Climate Change Makes Him 'the Worst Criminal in History, Undeniably,'" *Jacobian Magazine*, June 23, 2020.

<sup>9</sup> **Commentary:** This description of the phenomenon by Lynn Montross, which has captivated me since I was in high school, may describe both emergence and a punctuated equilibrium (the two are not inconsistent) in human history and civilizations. See continued discussion, 2 Kairotic Moments, EN 3, p. 1437, *infra*.

- ✓ *Dune* was published about five years after Montross published this work. This is not to suggest that Herbert was aware of Montross or would have even looked at his book, but rather that both are expressing an idea that was circulating in the early 1960s. I read *Dune* at the same time I read Montross, in high school.

<sup>10</sup> **Citation:** "Nuclear weapons made annihilation vastly more efficient. A single bomb could now destroy a target whose elimination had once required thousands of bombs. During an aerial attack, you could shoot down ninety-nine per cent of the enemy's bombers – and the plane that you missed could obliterate an entire city." – Eric Schlosser, "World War Three, by Mistake," *The New Yorker*, December 23, 2016 (free online).

- ✓ Oddly, the Kamikaze attacks in the late war months might be considered a prelude: You could shoot down 99% of them, but the one that gets through could disable or destroy a ship and inflict massive casualties.

<sup>11</sup> **Citation & Commentary:** “‘And so it was in those days,’ said Brother Reader: ‘that the princes of Earth had hardened their hearts against the Law of the Lord, and of their pride there was no end.

And each of them thought within himself that it was better for all to be destroyed than for the will of other princes to prevail over his. For the mighty of the Earth did contend among themselves for supreme power over all; by stealth, treachery, and deceit they did seek to rule, and of war they feared greatly and did tremble; for the Lord God had suffered the wise men of those times to learn the means by which the world itself might be destroyed, and into their hands was given the sword of the Archangel wherewith Lucifer had been cast down, that men and princes might fear God and humble themselves before the Most High. But they were not humbled.

And Satan spoke unto a certain prince, saying: ‘Fear not to use the sword, for the wise men have deceived you in saying that the world would be destroyed thereby. Listen not to the counsel of weaklings, for they fear you exceedingly, and they serve your enemies by staying your hand against them. Strike, and know that you shall be king over all.’

And the prince did heed the word of Satan, and he summoned all of the wise men of that realm and called upon them to give him counsel as to the ways in which the enemy might be destroyed without bringing down the wrath upon his own kingdom. But most of the wise men said, ‘Lord, it is not possible, for your enemies also have the sword which we have given you, and the fieriness of it is as the flame of Hell and as the fury of the sun-star from whence it was kindled.’

‘Then thou shalt make me yet another which is yet seven times hotter than Hell itself,’ commanded the prince, whose arrogance had come to surpass that of Pharaoh.

And many of them said: ‘Nay, Lord, ask not this thing of us; for even the smoke of such a fire, if we were to kindle it for thee, would cause many to perish.’

Now the prince was angry because of their answer, and he suspected them of betraying him, and he sent his spies among them to tempt them and to challenge them; whereupon the wise men became afraid. Some among them changed their answers, that his wrath be not invoked against them. Three times he asked them, and three times they answered: ‘Nay, Lord, even your own people will perish if you do this thing.’ But one of the magi was like unto Judas Iscariot, and his testimony was crafty, and having betrayed his brothers, he lied to all the people, advising them not to fear the demon Fallout. The prince heeded this false wise man, whose name was Backeneth, and he caused spies to accuse many of the magi before the people. Being afraid, the less wise among the magi counseled the prince according to his pleasure, saying: ‘The weapons may be used, only do not exceed such-and-such a limit, or all will surely perish.’” – Walter M. Miller, Jr., *A Canticle for Leibowitz* (1959).

- ✓ This is a fantastic potential movie waiting to be made, but it requires the right hand. There are a pair of trailers on YouTube, one was someone’s school project, both of them somewhat missed the point.

<sup>12</sup> **Citation:** “No one really believed the charge, including the people making it, as archives have subsequently shown. But that didn’t matter. The point of the posters was not to convince people of a falsehood. The point was to demonstrate the party’s power to proclaim and promulgate a falsehood. Sometimes the point isn’t to make people believe a lie – it’s to make people fear the liar.” – Anne Applebaum, “History will Judge the Complicit,” *The Atlantic*, published on the internet as a free article about June 5, 2020, appears in July/August 2020 Issue.

<sup>13</sup> **Citation:** “‘Why, of course, the people don’t want war,’ [Hermann] Goering shrugged. ‘Why would some poor slob on a farm want to risk his life in a war when the best that he can get out of it is to come back to his farm in one piece? Naturally, the common people don’t want war; neither in Russia nor in England nor in America, nor for that matter in Germany. That is understood. But, after all, it is the leaders of the country who determine the policy and it is always a simple matter to drag the people along, whether it is a democracy or a fascist dictatorship or a Parliament or a Communist dictatorship.’

‘There is one difference,’ I pointed out. ‘In a democracy the people have some say in the matter through their elected representatives, and in the United States only Congress can declare wars.’

‘Oh, that is all well and good, but, voice or no voice, the people can always be brought to the bidding of the leaders. That is easy. All you have to do is tell them they are being attacked and denounce the pacifists for lack of patriotism and exposing the country to danger. It works the same way in any country.’” – Hermann Goering, Luftwaffe Commander at the Nuremberg Trials, as reported by psychologist and U.S. Intelligence Officer, Gustave Gilbert from a private conversation in his cell on April 18, 1946.

- ✓ Information from Snopes.com, January 3, 2020. According to Snopes, a similar quote attributed to Julius Caesar is “a latter day fabrication” but the Goering quote is authentic.