

The Owl of Athena

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The Natural Law Theory of Human Progress Website

EXCURSUS #27

One of a series of monographs that expands the discussion of important topics examined in *The Natural State of Medical Practice*.¹

What if?

Summary: The essential role of natural law and the emancipation of natural rights for the common man and woman in human progress as the consequence of the early 16th C Reformation in the West is revealed in *The Natural State* of Medical Practice. This excursus, in turn, proposes the social consequences had that Reformation never occurred. It depicts the inevitable continuation of autocratic governance around the globe and its restriction of human progress in the immediately succeeding centuries. Briefly, there would be a continuation of 15th C autocratic governance, the type of social management that has afflicted virtually every human society since its creation. From the 16th C on, the great secular militant powers, in alliances with Christianity, Islam, and the Chinese indigenous creeds, would have expanded their territorial control. Like the monuments of ancient Egypt, things would get bigger but not better. Global governance would, however, be impossible because of their competing interests, and border conflicts would be continual, although without nuclear weapons or airplanes. Importantly, without emancipation of the unprivileged populations and natural rights protection, human progress would be nonexistent, life expectancy for the common man and woman would remain about thirty-five years, traditional slavery would be a permanent social fixture, and bureaucratic enslavement would encompass everyone else. And yet, underneath all this, immutable human nature and the individual conscience with its foundation in natural law would foment perpetual torment against establishment tyranny.

¹ Volume, chapter and page number of otherwise unreferenced statements in this monograph refer to the version of the four volumes of *The Natural State of Medical Practice* as published by Liberty Hill Press:

Vol. 1 – The Natural State of Medical Practice: An Isagorial Theory of Human Progress

Vol. 2 – *The Natural State of Medical Practice*: Hippocratic Evidence

Vol. 3 - The Natural State of Medical Practice: Escape from Egalitarianism

Vol. 4 – *The Natural State of Medical Practice*: Implications

2

A. Introduction

The 16th C schism in the Catholic Church that led to the Protestant Reformation was gradually followed by a sequence of political changes in northern Europe and Great Britain that recognized the equivalence before God of the leader and the led. From this gradually emerged the concept of natural rights of all individuals, a concept implemented to varying degrees in legislation as best expressed in the Declaration of Independence and the Constitution of the United States. Philosophical and religious changes quickly evolved in northern Europe, and although the Church promptly and successfully responded elsewhere, the political implications of the Reformation had found an interested public. This, and the decreasing alliance between the Church and political governance in some areas brought an increasing degree of personal freedom to their unprivileged populations. As a result, the release of ingenuity and motivation throughout those societies brought prosperity, and within three centuries human life expectancy for the average man and woman more than doubled and slavery was abolished on moral grounds.

But a critic of the preceding might argue that the stage for human progress was already set, that humanity had been edging higher and higher over the millennia, and that modernity and its blessings were inevitable and would have occurred with or without the Reformation. This excursus explores such a possibility and provides a prediction on the nature of future earthly societies had the Reformation never occurred.

B. The Fictitious Debt of Modernity to Past Civilizations, the Renaissance, and Globalization

Before imagining a future of humanity devoid of the Reformation in the Wesdt, it is reasonable to question the causal role of the Reformation in the dramatic events just described, that for the first time in human history the unprivileged population of a civilization had become the source of human progress, indeed, had become the original expositor of the concept of progress.² Two other major events were occurring simultaneously in the West, the Age of Discovery and the Renaissance. It seems logical, therefore, that the progress of subsequent centuries could instead be explained by either a global awakening to historical events that represented merely a general building on the progress of past civilizations or were the combined effects in the West of the Renaissance, the Age of Discovery, and the Reformation.

(1) Standing on the shoulders of past generations

The Natural State of Medical Practice, using medical practice as a gauge of human progress because of its universal importance, has clearly demonstrated that today's medical progress is in no way the product of prior civilizations. Basic medical and botanical observations frequently

² J. B. Bury, in his *The Idea of Progress: An Inquiry into Its Origin and Growth* (New York, 1932), makes clear his conclusion that the intellectual concept of "progress" is a recent human development that can be traced back only to the 17th C AD. One of the messages of *The Natural State of Medical Practice* is that progress has being repeatedly attempted in all societies since mankind's origin, but that its absence from the prehistorical and historical record has been the consequence of its inhibition rather than want of its initiation. Also see Excursus #15, *Progress: Our Most Important Product*.

occur in any society, and any society, given baseline demographics and a degree of personal freedom, will develop a medical profession. This was determined from study of ancient medical writings of Mesopotamia, Egypt, India, China, and Greece, as well as modern medical discovery in our Western civilization. Furthermore, it was shown that the same or equivalent discoveries occurred in ancient Greece, the Renaissance era, and in the modern West, mostly with no knowledge of the earlier discoveries. Unfortunately, as the following graph depicts, medical progress not only stops, but recedes, as autocratic governance dominates the entirety of a society.

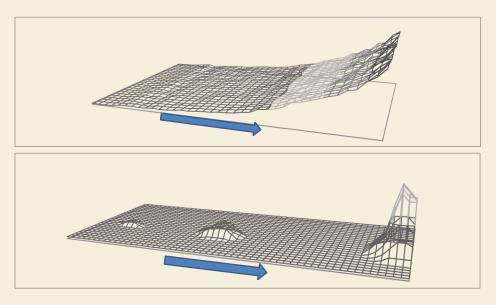


Fig. 1: Three-dimensional hypothetical and nonquantitative representations of medical progress over 5000 years. X axis (arrow) = time; Y axis = progress. Top: Representation of the traditional view of human progress, in which advances, while global, sporadic, and either isolated or in clusters, are somehow cumulative, resulting in a gradual upward progress of mankind irrespective of social conditions. There are innumerable tiny peaks in an irregular global distribution, each representing some significant new discovery or invention that improves medical knowledge and contributes to medical progress of all mankind. Bottom: Here the peaks are few, large, and focused, each peak representing documented periods of a rational and increasingly scientific medical practice on a regional societal level, with the baseline representing steady-state empirical knowledge that perpetually waxes and wanes as local discoveries are made and then forgotten. The first small peak on the left coincides with the postulated appearance of rational medicine in Sumerian city-states, in predynastic Egypt, during the early Vedic era of India, and in ancient China, followed by the peak for Hellas of the Hippocratics and then the large peak on the right side of the graph associated with modern Western medicine. An increasing global population over the millennia invalidates any effort to semiquantify the intensity and diffusion of medical discovery for the three periods.

As a more detailed example, Hippocratic medicine was often insightful and scientific, being based on observations of many practitioners who shared their experiences and knowledge with colleagues to the benefit of society. But during the European Dark Ages there were no physicians available to build on Hippocratic knowledge. The feudal system of medieval times not only lost historical Hippocratic knowledge. It also guaranteed there would be no new knowledge. Even when ancient Hippocratic treatises were recovered and studied in the Renaissance, the medieval universities merely parroted Hippocratic pronouncements rather than questioning and improving them. Except for a limited shadow of Hippocratic thought in the Middle East, modern medicine in the West began *de novo* in the 17th and 18th centuries to build

its own profession. Modern medicine owes nothing whatever to Hippocratic medicine except admiration for its brave but brief attempt at modernity.

(2) The Age of Discovery (1418-1620)

Exploration is a normal expression of curiosity for most species, and for humans it is certainly one reason for their global dispersion since the first human society, presently dated to about 50,000 BC. Maritime discovery and trade is detectable over thousands of years. But global geography and the curiosity about other societies and civilizations became a cause for discovery in its own right in the 15th C with the exploration of the Americas by western European nations. This was expedited by a desire for wealth and colonization. New knowledge in geography, biology, and sociology accrued, as did wealth From this the Age of Discovery might be considered a major factor in the rise of the West.

In response, *The Natural State of Medical Practice* provides proof that it has been the emancipation of natural rights that has been the source of Western predominance and human progress. The Age of Discovery and its monarchical gluttony, in contrast, is surely not noted for its appreciation of natural rights, especially in those regions and societies it exploited. Instead, it is because of its autocratic vassalage of indigenous populations that it has received much condemnation rather than praise, regardless of the autocratic history of the colonized. Ensuing Western prosperity was the product of exploitation rather than human ingenuity, although sometimes techniques new to the West were found useful. The conclusion is that the Age of Discovery was but an extension of authoritarian European domains already in existence and in itself irrelevant to human progress, a mere magnification of existing mercantile capitalism.

For additional evidence of an objective nature regarding its limited significance to modernity and human progress, the extent of its global economic significance is shown in Fig. 2.

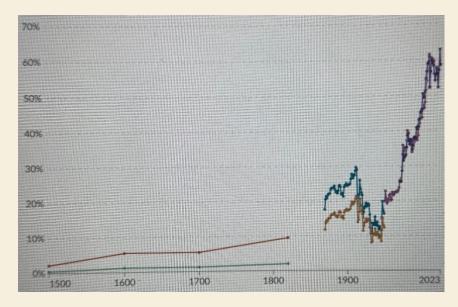


Fig. 2: Globalization over 5 centuries is seen in the "trade openness index" and as presented by *Our World in Data*, based on: Estevadeordal, Frantz, and Taylor (2003) – processed by *Our World in Data*. The European contribution to world trade would have dominated in the earlier centuries, but the average of the earlier upper and lower bounds representing its proportion of global Gross Domestic Product between 1500-1600 was only about 3%. The contribution of Spain, Portugal, France and Great Britain was minor at the time of the Reformation.

Despite limited data, the small contribution of global trade to estimated global gross domestic product during the Age of Discovery was minimal.

(3) The Renaissance (14th - 16th C)

The transition from medieval to modern culture in the West has been attributed to the Renaissance. But this attribution is based primarily on the rediscovery of academically revered ancient writings and contemporary artistic magnificence. Evidence of true progress from the Renaissance in terms of improving the lives of all in society is slim indeed. The shining exception was invention of the printing press, but there was nothing else to match it, and even its value was in the dispersion of knowledge rather than the source of invention and knowledge itself. The drawings of da Vinci, Galileo, and Vesalius are admired but were mainly of scholarly interest or were ignored at the time of their productions. In medicine, even John Locke (1632-1704), a physician, would state that anatomists provided merely "more superficies...to stare at." And the observational science of astronomy and intricacies of mathematics at this time were of little value to the average person, above and beyond any Papal push-back. Isaac Newton, born into a yeoman farmer family near the hamlet of Colsterworth, would be associated with events of the Reformation, a 16th C phenomenon, rather than the Renaissance, the latter in England being characterized by its music and literature, not its new knowledge, of which there was little.

The Renaissance, while affecting European culture, did little to affect the daily lives of the unprivileged, and elsewhere it has been described as the reemergence of the tyrant. Henry VIII, retaining the divine right of kings, merely usurped for the throne the power of the Church. To do this Parliament was used to justify his actions, but there was no recognition of natural rights, although if the wealthy and powerful favored a particular talented individual, the freedom of self-expression could be a gift of a patron to the fortunate recipient. It is, in fact, patronage that can be credited for most of the great names of the Renaissance, not individual freedom of expression. Even when the Republics of Italy were carefully reviewed by John Adams, who described their deficiencies and the extent to which noble classes dominated in their legislative systems, that information was not copied but was used to better formulate the need for separate branches of government in the writing of the Constitution of the United States.

There was, however, an appreciation of natural rights that over time came to be recognized as incorporated into English common law in the sense that the human reason, over time and in specific common law decisions, was an expression of natural rights. This avoids relativistic legal decisions for similar cases, but does not provide for the vast range of contestable rights we have, the latter restricting government power in the enumerated and unenumerated rights of the Constitution of the United States. And even the formal dating of English common

³ Locke, J., *Anatomie*, 1668. John Locke (1632-1704), the English philosopher, was a physician with a special interest in pediatrics. In the midst of his political writings he retained an active interest in medicine, as this particular reference shows. It has even been suggested that Locke's legacy in individualism and government can be traced to his interest in Hippocratic principles, although more commonly it is suggested that Spinoza was its source. But I would argue that Locke was one of many in northwest Europe and British Isles who would intellectually expand the freedoms proceeding from the Reformation. See Coleman, W. O., *The Significance of John Locke's Medical Studies for his Economic Thought*, in *History of Political Economy*, 32:711-731, 2000. And when encomiums are raised to the great anatomist, Andreas Vesalius (1514-1564) and his masterpiece, *De Humani Corporis Fabrica*, considered one of the "greatest treasures of Western civilization," it should be noted that he was in no way an accomplished clinician, despite the high offices he was given.

6

law begins in the 12th C shortly before Magna Carta, both long before the Reformation and therefore of little relevance to human progress based on natural rights.

(4) Evidence that modern human progress emanates from the West

Socially beneficial invention and discovery of modernity can be targeted to recent centuries, as shown over the past thousand years in Fig. 3. The source of its data is Wikipedia because it is based on 556 references and because of Wikipedia's global accessibility and openness to alterations by knowledgeable interested parties. Because inventiveness is a universal human characteristic that appears frequently in every society it is important to note the phrase "socially beneficial." The "Needham puzzle" was stated long ago.⁴ It is one of the mysteries of Chinese inventions that rarely did one succeed in becoming socially beneficial. And Dr. Joseph Needham identified some 271 inventions that followed this pattern, one being the Great Wall of China, but the concept of a wall cannot be considered a unique invention.

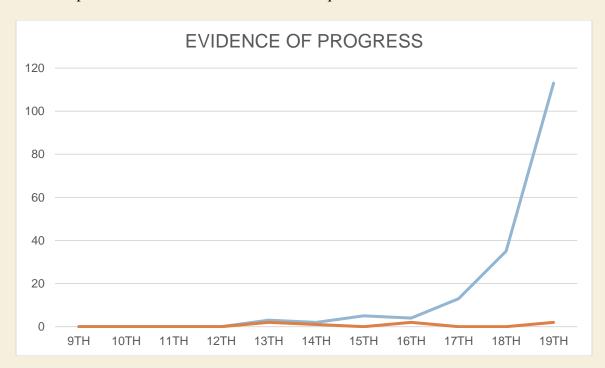


Fig. 3: The blue line represents European socially beneficial inventions, the orange line representing the remaining global inventiveness, both beginning in the 9th C. Obtained from data in the Wikipedia entry "Timeline of historic inventions," I have excluded those discoveries invented for the purpose of war, for all societies and governments of societies, autocratic or liberal, have had the motivation to seek weapons to defend or dominate, and these are, for purposes herein, not considered to be "socially beneficial." Thus, gunpowder in its many manifestations is not included.

⁴ For the reasons, see: Lowrey, Y. and Baumol, W. J., *Rapid Invention, Slow Industrialization, and the Absent Innovative Entrepreneur in Medieval China*, a paper read at a meeting of the American Economic Association, Atlanta, Jan. 3-5, 2010, and for "the Needham puzzle" see Lin, J. Y., *The Needham Puzzle: Why the Industrial Revolution did not originate in China*, in *Economic Development and Cultural Change*, 43:269-292, 1995.

C. Global Progress without the Reformation

From the preceding examples it is clear that the progress of free people over the past three centuries cannot be explained by prior civilizations, the Age of Discovery, or the Renaissance. To this list some might add the Age of Enlightenment. But as an intellectual movement it was very much affected by the Reformation. Its herald, Descartes (1596-1650), worked for years in the Netherlands and, at age 26, was a combatant in the Thirty Years War of 1618-1648 that safeguarded the Habsburg Empire against "reformed" governments. The Enlightenment can be considered more a consequence of the Reformation rather than a separate phenomenon. In contrast to the preceding, The Natural State of Medical Practice claims human progress to be the consequence of the released ingenuity and motivation of free people as they exercise their natural right of self-betterment, such as occurred in the West in the centuries following the Reformation. But what would have transpired had the Reformation never occurred? There are some who think Luther was ready to agree to forego his objections to Church practices if the Pope would but stop practices Luther considered immoral. Others argue that the Pope seriously considered Luther's actions as worthy of serious attention rather than excommunication. He could, therefore, have been politically astute and assuaged all parties, thereby avoiding a religious schism. But, as the consequences of the Reformation have been global, the following brief political scenarios are proposed as reasonable global history over the subsequent 16th-19th centuries had there been no Reformation.

(1) Chinese civilization

The Ming Dynasty (1368-1644) in its later years was a failing dynasty because of military and bureaucratic unrest by its Mongolian population and bureaucratic eunuchs. But despite economic weakness, bureaucratic instability, and famines it was able to endure because of increased Western trade after the Reformation. Had there been no Reformation in the West, the Ming dynasty would have been replaced a century earlier by the Mongol people (the preceding Yuan and succeeding Manchu dynasties were Mongolian). As a result, without the Reformation in the west, Han Chinese would have promptly diminished in importance and a cooperative Mongol dynasty would have assumed management of the Han Chinese system of government. Once in place, the Mongol-Chinese influence would have spread and Muslim influence would have decreased. Being so distant from Western and Islamic lands (there would have been no trains or automobiles), unrestricted Mongol-Chinese expansion would readily control the western Pacific: Austronesia, Australia, New Guinea, New Zealand, and Japan.

(2) Indian civilization

The Mughal Empire (1526-1857), encompassing virtually the entirety of the Indian subcontinent and present-day Afghanistan, was preceded by the Delhi Sultanate, and both were Muslim, the former supported by the Ottoman Empire. A persistent threat to the Mughal Empire instead came from the Safavid Empire on its western border. But the decline of the Mughal Dynasty was caused internally, not by the arrival of Europeans, and once under way Hindu influence increased with the help of the British. Therefore, without the economic intervention of the enterprising British that followed the Reformation, all India and most of Indochina and would have remained controlled by Muslim leadership with a diminishing of Hinduism. Specifically, it would have extended the Mughal Empire to the east to include Indonesia and Indochina.

(3) Western hemisphere

Columbus with his discovery of the New World (1492), put the Caribbean region under the control of Catholic Spain, the Incan Empire (1438-1532) was subsumed for Spain by Pizarro (1532), Mexico and western North America were declared for Spain by Cortez (1519), and Florida by Ponce de Leon (1513). All this occurred contemporaneously with and was unaffected by the early Reformation. The wealth of Spain and Portugal was the product of their foreign acquisitions. At the same time, the significance of Islam decreased with Muslims being expelled from Spain, for the Ottoman empire was considered a threat. These factors guaranteed a Catholic Christian western hemisphere. This would then spread, because post-Reformation religious sects would not have developed in England and western Europe. As a result, colonization by sects from those regions would not have occurred, leaving the entirety of the western hemisphere in hands of Catholic nations in Europe. Subsequent control of Spain and its new territories was by the grandson of Ferdinand I, who became Charles V of the Holy Roman Empire. The forceful implementation of Catholicism and political control over indigenous populations would have spread, with the assistance of a Catholic France, throughout the hemisphere, with its political and economic beneficence extending to the greatly enlarged and empowered Holy Roman Empire.

(4) Tsarist Russia

The uniting of Russia (1453) under Ivan III with the collapsing Byzantine Empire and its Eastern Orthodox religion brought about the Russian Empire. There were unrelenting wars. Consequences of the Reformation in the West were unimportant for the region until the time of Peter the Great (1689-1725), although there was a limited intellectual exchange of their differences. Had the Reformation never occurred there would have been little change in that segment of Russian history. But in the bigger picture, the spread of the Ottoman Empire from the south was, and would remain, the ultimate threat, with the military focus of Russia directed by the collision of Eastern Orthodoxy with Islam. Ultimately, Russia would disappear and its territories would be Orthodox in the West, Islamic in the South, and Mongol-Chinese in the North and East.

(5) Ottoman Empire –

The Ottoman Empire (1299-1922) defeated the Byzantine Empire in 1453. It would grow in power and come into conflict with Eastern Orthodox Christianity under Tsarist Russia to the north and with continental Christianity under the Holy Roman Empire and its Catholicism in the west. Without the Reformation, the growing pan-European power and western hemisphere riches of the Holy Roman Empire under Charles V (1500-1558) would more effectively have confronted the Ottoman Empire, the limited exception to this being French policies. Also, the Safavid Empire was increasingly powerful and had support from the Holy Roman Empire. Overall the Ottoman Empire would have diminished in the north and west but, being unopposed in the south, would expand its control to much of Africa and the peri-Mediterranean region.

(6) Aztec Empire

The Aztec Empire (1427-1521) was a confederation of provinces giving tributes to a central government. It had expanded for a century before the arrival of Cortez, was cruel, and captured warriors for sacrificial purposes. Cortez' incursion led to Spanish control of much of South America. This was unrelated to Reformation and would introduce Catholic Christianity into the region. See (10) and (11) below.

(7) Safavid Empire

This Shia Muslim dynasty (1501-1736) arose shortly before onset of the Reformation as a product of internal dissention among regional Muslim tribes and provinces in the Middle East. It was in contact with Reformation era politics in that it had political agreements with the Holy Roman Empire to prevent expansion of the Ottoman Empire in the region. It also was a point of contact of trade between East and West via Russia during Ottoman blockades. The Ottoman – Safavid wars recurred over two centuries. Shia-Sunni differences guaranteed their continuance. Had there been no Reformation, Charles V, with his Vatican alliance, could have more strongly resisted the Ottomans as he would have acquired the wealth of the New World and would not have the Reformation schism to divide his interests. This would have aided the Safavid Empire as it resisted the Ottomans and could now expand north into Russia and western Asia.

(8) Songhai Empire

Arising from the region of the former "civilization" of Djenne-Djenno that was subsumed by proximal Muslim expansion in the 12th C, this was a Muslim kingdom (1464-1591) in the south Sahara that spanned the period of the Reformation but was unaffected by it. Its demise by Morocco (which sought slaves) in 1591 was because it had no gunpowder component. It was but one region in a chain of expanding Muslim interests in Africa. The entrance of Christianity in West Africa was due to Portuguese trading interests, and the Pope assigned Africa as a Portuguese territory. All this was probably unaffected by the Reformation in its early years. If the Reformation had not occurred, the power of the Holy Roman Empire, once it had access to the entirety of the western hemisphere, would have been preoccupied there, the Ottoman Empire would control the Songhai region and expand further south into Africa.

(9) Indigenous Australians (40,000 BC to present)

With no Reformation and its resulting economic interests in the West it is uncertain when Australia would have been discovered, but probably it would have been discovered by the Mongol-Chinese. It is likely that the status of the indigenous population would have remained unchanged because of the wide expanse of the continent, the dispersed nature of its tribes, and its vast arid areas with limited opportunity for development. But once under Mongol-Chinese control, the indigenous population, so intimately tribal and primitive, would have been promptly enslaved and disappear.

(10) France

Francis I (1494-1547) found his country virtually encircled by the Holy Roman Empire of Charles V. Despite this threat he attempted to obtain France's portion of the New World. Some of his negotiations included Reformation advocates who supported his efforts against Charles V. Had there been no Reformation, that aid would not have been forthcoming. As a result his effort to colonize North America would not have materialized, or at least would not have been of significant value. Thus, the Catholicism of the Holy Roman Empire would have had no serious competitor in the New World, and France would be added to the Holy Roman Empire.

(11) Holy Roman Empire

Had there been no Reformation, the Holy Roman Empire (800-1806) would have ensured the dominance of Catholicism and the Vatican influence not only throughout Europe and into western Russia but also in the territorial acquisitions of Catholic Spain and Portugal in the New World. This would have gradually included the entirety of the western hemisphere. Its sun never setting, its full power could then have been directed against the Ottoman Empire.

C. Conclusions

Had there been no Reformation in the West, the course of human events in subsequent centuries would have mirrored that of preceding centuries. Our universe would continue to unfold as it shouldn't. There would be no United States of America. Two generalizations can be made:

- (1) Over several centuries some autocracies would not only have continued to rule the day, they would have expanded regionally, getting bigger but not better. The alliance of the Holy Roman Empire and the Vatican would promptly have encompassed the entirety of the New World of the western hemisphere, the Ottoman Empire and its Islamic campaigns would reign over the Mediterranean and Africa, the Shia Islamic Safavid Empire would control the Middle East and Central Asia, the Mughal Empire would control the subcontinent, Indonesia and Indochina, and Mongolian Dynasties of China would control the western Pacific, Austronesia, Australia, New Guinea and New Zealand. To this generalization can be added the disappearance of the Aztecs, the Iroquois, the Aboriginal Australians, the Maoris, the Incas, most African tribes, and other major and minor ethnic groups that did not share social conveniences acceptable to their autocratic masters. And, of course, Quakers, Mormons, Objectivists, and Libertarians would have never existed.
- (2) Civilizational progress would have ceased. The lives of the unprivileged, who would compose the vast majority of the global population, would not have been prolonged or improved. Stagnation, the absolute hallmark of autocratic governance, and armed conflicts, the classic expression of autocratic morality, would have globally prevailed. Discovery and invention would apply only to territorial expansion or population control. There would be no airplanes, trains, steamships, telephones, radios, X-rays, electricity, or aspirin. Universities would be used to propagate autocratic-religious alliances. There would have been no Enlightenment.

In a word, the beneficence of emancipated natural rights in the West that has globalized would have never occurred. Over the past four centuries no population has been without

11

exposure to the material and political benefits of the West over the past four centuries, and many have thereby improved the status of the unprivileged in their own societies and nations. But without the Reformation, the barrage of inventions and discoveries of the West represented in Fig. 2 would not have occurred, although those related to war and weaponry would have been improved. The number of books on topics involving human freedom and free will, especially those of a philosophical nature, would be tiny indeed and depend on academic interests in classical Greco-Roman texts. History books would canonize traditional history favorable to the contemporary autocracy. To strengthen their hold, the expanding autocratic governments would attempt to homogenize the thinking of their diverse subpopulations, and religious intolerance would be common.

But not only would the modern productivity of the West be lacking. Because of ongoing autocratic political bondage of the unprivileged populations, knowledge of alternative political policies that could allow individuals in authoritarian states to utilize their own ingenuity and motivation to make their own contributions to their society would remain unknown to them, just as it had been unknown to them for thousands of years.

History has shown that autocratic dominion and its minions, the privileged segments of society, can prevail for even thousands of years. But the inherent morality of the individual conscience, our natural law, would continue to sporadically appear and conflict would result. And its most succinct expression, the *Ten Commandments*, would be openly preserved in the Judeo-Christian West.⁵ At some point another Thomas Aquinas would appear and begin a reshaping of the existing Western autocracy, for, like the Newtons, Einsteins, and Mozarts, Aquinases abound in all civilizations, just awaiting the moment.

⁵ See Excursus #6, *Natural Law*, the Ten Commandments and the Golden Rule Compared, for the association between natural law and the Ten Commandments. I have altered one statement in Excursus #6 in that I have now realized that natural law is, in fact, embedded in the human conscience, *i.e.*, it is indeed written on our hearts.