Abstract

The foundational philosophy that provides the context in which sustainability operates in any given period in history would seem to be key to determining success or failure. In order to have the greatest chance of success, reasonable openness to a wide array of potentially useful ideas would logically appear to be essential. Progress needs context, ignoring neither the truths nor the errors of the past. However, certain blind spots exist that may cause useful ideas of the past to be ignored. This study focuses on the situation of the United States and considers one potential deterrent to long-run effectiveness of sustainability – the routine shunning by Americans of “noble tradition” stemming from the aristocracy and feudalism and its derivatives as anathema to the principles of American democracy. That tradition, though not without its flaws or abuses (no society is free from that), was built arguably on precepts of sustainability – even before the term really existed as it is known today. It is argued that the principles from medieval agrarian society that persisted in one form or another until republican revolutions, the Great War, and finally in the mid-to-late-20th century (depending on the country) are beneficial to consider, and learning from them can benefit modern industry in terms of promoting sustainable practices in systems of production and labour, as well as social responsibility. In order to create a conceptual framework that can be used to consider the potential impact on sustainability programmes of blind spots, a multipoint gravitational model is proposed. The model demonstrates mechanisms by which sustainability efforts may be harmed due to blind spots. Also, the potential for society to impose a cost on firms or individuals that attempt to consider unpopular tradition is considered via payoff analysis of strategic behaviour. That demonstrates the difficulty in breaking through the wall imposed by a blind spot.

Introduction

Sustainability – the art of doing now without compromising our ability to do in the future. Is sustainability itself, however, actually sustainable (Bonevac, 2010)? It would seem that the foundational philosophy that provides the context in which sustainability operates in any given period in history are key to determining its success or failure. In order to have the greatest chance of success, reasonable openness to a wide array of potentially useful ideas would logically appear to be essential. Society’s action towards a sustainable future must have a foundational philosophy to be successful, or else it will float aimlessly, with attitude being directed by action instead of the other way around.¹

Earlier society managed to survive to the present, yet there is a widespread belief in some societies that whatever is modern and new is inherently superior to older methods, and that our collective ancestors were primarily flawed in their approach (Bernstein, 1971). Certainly, assuming no cataclysmic event, knowledge is expected to grow and evolve, progressing over time. Yet, it seems myopic and even arrogant to focus on that which is newly-discovered and concentrate on the philosophy of the modern era without a deep, non-partisan understanding of all that went before that focuses on fact rather than agenda. If the clock is reset with every new discovery, we risk throwing the proverbial baby out with the bathwater. The famous saying of Sir Isaac Newton, “If I have seen further than others, it is by standing upon the shoulders of giants,” illustrates the necessity for progress without ignoring either the truths or the errors of the past. Nevertheless, in some instances that doctrine is not necessarily held. That is, it is quite possible that certain blind spots exist that may cause good ideas of the past to be ignored. Furthermore, as

¹ Bl. Fulton J. Sheen. “If you don’t behave as you believe, you will end by believing as you behave.”
the good is ignored, negative aspects of the past may stand out even more and be exploited to promote the ideas of the modern idea – without any authentic context in which to judge them (Matson et al., 2016).

Sustainability has been around awhile, but has only relatively recently become a modern buzzword. The general public is not altogether sure what it is as a discipline, and part of the reason is that it is a vast and diverse concept touching on many different fields. Perhaps the best-known image of sustainability is environmental-related – what most would likely jump into the “green movement.” (Society seems to be sure it is supposed to be “green” these days, but is not quite so sure why.) Sustainability is found in general business practices, for example, to reduce costs through eliminating wasteful protocol. It is also found in industry and tourism. Creating a sustainable pool of labour in a company is arguably as much a form of sustainability as anything else (Daily and Huang, 2001). It would be patently difficult to find much of anything to which one or another principle of sustainability could not be applied.

It is quickly becoming ubiquitous and has extended well beyond the shell of environmental science for which it is best known (Wilkinson, 2005).

Yet, sustainability is not a universally-accepted concept. It is not necessarily clear that all companies that have sustainable policies of one sort or another actually subscribe to the philosophies that they promote or if they simply treat it as just another marketing tool to pander to consumer whims. On one hand, it is easy enough to follow the Machiavellian principle of exitus acta provat and say that the end result is all that matters (Machiavelli, 1532). However, such a set of results would logically only continue as long as the stimulus promoting it lasts. That smacks of a “green flash in the pan” rather than a long run sustainable system. An internal philosophical paradigm shift, on the other hand, is more likely to result in “sustainable sustainability.”

Philosophies regarding sustainability vary by country (de Groot and Steg, 2007). Some social philosophies and trends may “sustain sustainability,” while others may work against it (Docherty et al., 2008). If the social environment is not ripe for environmental protection, the environment will not be protected. This study focuses on the situation of the United States and considers one potential deterrent to long-run effectiveness of sustainability – the routine shunning by Americans of “noble tradition”2 stemming from the aristocracy and feudalism and its derivatives as anathema to the principles of American democracy. That tradition, though not without its flaws or abuses (no society is free from that), was built arguably on precepts of sustainability – even before the term really existed as it is known today. Effectively restarting the clock not even two hundred fifty years ago in 1776 creates an immense blind spot, which could result in modern American society refusing to learn from the merits of their collective ancestors. That is not to say that earlier feudal society or its derivatives should necessarily be recreated in the modern United States. Neither is it the purpose of this study to argue for or against any particular form of government. That is an entirely different question. Furthermore, it is not the intent to ignore problems that occurred under feudalism in terms of sustainability (Moore, 2002). Rather, the purpose is to learn from what can be argued to be a sustainability-based philosophical system of the past, applying the lessons of both what worked and what did not to the modern era, rather than shunning it simply as a “backward way of the past” or antithetical to the concepts of the Enlightenment and democracy. That is, noble tradition should not become the whipping boy of progress as society seeks better, more sustainable approaches to the endeavours of individuals, business, and government. Those same principles of the past should be considered in a broad or total sense in modern society. Sustainable practices are needed today in industry, agriculture, and human systems (Pretty, 2008; Ehnert et al., 2015; Rajala et al., 2016). And, the concept of managing human capital on a farm in the middle ages is arguably not that different from business or farming and resource management today. Even with more and more automation, human capital has to be managed properly, but in terms of quality and quantity. Not all companies do so in a sustainable way (Ehnert et al., 2015). For example, do companies have a sense of obligation to their employees, cultivating them for the future benefit of both the company and the employees themselves? Both the modern era and the pre-Enlightenment have abuses of workers. Serfdom of the middle ages may be set against the squalid factory and living conditions many endured during the Industrial Revolution. Which society in fact had or has the better underlying philosophies regarding the care of workers as a valuable part of systems? Could the modern learn from the ancient? This study argues that the principles from medieval agrarian society that persisted in one form or another until republican revolutions, the Great War, and finally in the mid-to-late-20th century (depending on the country) are beneficial to consider, and learning from them can benefit modern industry in terms of promoting sustainable practices in systems of production and labour, as well as social responsibility. This then is used to create a proposed conceptual framework that can be used to consider the potential impact on sustainability programmes of blind spots. For purposes of example, a multipoint gravitational model is used. The model demonstrates mechanisms by which sustainability efforts may be harmed due

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2 In reference to nobility, broadly defined as a social structure and philosophy including religion (typically, but not exclusively Roman Catholicism or the Church of England), a monarch of some form, and a defined social order including a nobility/aristocracy such that all three such aspects relate definitively to one another.
to blind spots. Also, the potential for society to impose a cost on firms or individuals that attempt to consider unpopular tradition is considered via payoff analysis of strategic behaviour. That demonstrates the difficulty in breaking through the wall imposed by a blind spot.

**Historical Context of Noble Tradition**

Tradition in the context of this study is centred on either side of the events in the British American Colonies in 1776, i.e., the American Revolution and that which led to them. The shift from Noble Tradition to Republican\(^3\) Tradition was not a binary one that happened dramatically overnight. The philosophies that led to a minority movement issuing a Declaration of Independence, launching a revolutionary war, and eventually creating a new nation had been brewing for years. From the post-Roman era, most Western nations were monarchies. There were a few republics, such as San Marino (the world’s oldest continuous republic – so respected that even Napoleon left it intact), the Dutch Republic, and the Polish-Lithuanian Commonwealth (Oresko et al., 2006). However, such republics tended to be either directly in some way under a monarch or else have distinct trappings similar to monarchy. In the 1600s, the Puritan anti-royalist movement began in the United Kingdom against the Roman Catholic House of Stuart that had earlier unified Great Britain. It sought and succeeded in imposing popular rule through parliament. Charles I was murdered after a “trial.” Far from simply seeking evolution to a new form of government, all that which was of the old regime was shunned in favour of the new, and the royalists fled – some of them ending up in the Americas. Indeed, one can scarcely get more final in shifting political and social philosophy than killing the living, visible symbol of that which is replaced. With the death of Charles I, the old regime was to have been likewise sent to its metaphorical grave, and the new was to be born out of it. The Parliamentary movement, however, was not ultimately successful. It was short lived, and the old regime proved to be merely suppressed into smoldering embers that once again burst into flame. Charles II, the son of Charles I, returned from exile and re-established the Stuart British monarchy (Worden, 2010). However, it was not only foreshadowing, but could be said to have been somewhat of a trial run for what was to come in the Americas, for it was a form of parliamentary, non-royal rule that the colonial revolutionaries claimed to seek and ultimately established (Brynner, 1994).

While Cromwell’s Parliamentarian revolution was based largely on Puritan doctrine, the Age of Enlightenment in the 1700s provided new fuel for republicanism. There is no absolute date of founding of the Enlightenment era. Scholars disagree, though it is widely considered to have begun in its most full form with the death of the Sun King, Louis XIV (Rothkrug, 1965). Enlightenment philosophy was characterised by a focus on reason, rationality, and scientific enquiry. It favoured constitutional government over monarchy, and where monarchy, even in its absolute form, existed, it held that such a monarch must be “enlightened” (Outram, 2006). It promoted a new order that was directly opposed to the Catholic Church and the noble traditions of the old order. Indeed, it set itself up as thoroughly antipapistical, the very antithesis of Catholicism and prior philosophy, directly painting the Roman Church as the enemy (Gay, 1995). A movement needs an enemy (Jackson, 2007). Rome and the past were the enemies of the Enlightenment, despite the fact that the Church was not actually guilty as charged (Lehner, 2016). The Catholic Church actively promoted scientific enquiry, even prior to the Enlightenment and founded the university system. Many prominent churchmen were also prominent scientists. Examples include Blessed Nicholas Steno, a Bishop counted as the founder of Geology who also made contributions in anthropology, paleontology, and geography (Miniati, 2009). Copernicus, Mendel, Bacon, LeMâtre, Cassegrain, Liszt, Venturi, among many others, are names well known in scientific circles if not to the public at large, and they were all Catholic clerics. Benedetto Castelli was a Benedictine mathematician, a student of Galileo Galilei, and the teacher of Galileo’s son (Priests, 2014). St. Thomas Aquinas elegantly demonstrated that theology is the Queen of Sciences (Mourant, 1956).

The Enlightenment preached religious tolerance, which it primarily intended for Protestantism, Deism, and the like, but it sought the dissolution of the bonds between church and state, viewing church and religious interests as different and often opposed to state interests (Hume, 1758). So, the Church was named the enemy to knowledge and progress, portrayed as the purveyor of ignorance and the protector of the futile. The sacred esteem in which the church had been held was, in the most pure realisation of Enlightenment philosophy, to be transferred to the state (Ozouf, 1991). Even where the accomplishments of Catholic luminaries of the past were lauded, their ties to the Church were necessarily severed in their portrayal by the Enlightenment. Thus the valuable notion of the context of that knowledge was lost. Even where context was promoted, it was in such a way as to mock it rather than sustain it.

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\(^3\) In reference to republicanism, i.e., the preference of republics, not in reference to the U.S. Grand Old Party, commonly known as the Republican Party.
Yet, to try to understand the works of our ancestors without an open-minded and free understanding of the context in which those works were done renders them virtually impossible to understand. To attempt to understand the past purely from the ideas and the experience of the present is a fool’s errand (Thompson, 1972). Yet, the philosophical shift that underlay the Enlightenment caused just that result.

Sustainability Concepts in Noble Tradition

Traditional society was not a utopia, but then neither is modern society. No system, society, or government is perfect. Nevertheless, there are certain traits of pre-Enlightenment society that are worthy of study, remembrance, and even application in modern society. That the vehicle of the culture of those societies clash with modern Western society, which is shaped largely by the Enlightenment, may lead to the good of the past being overshadowed by the problems of the past – to the detriment of society now and in the future. When the leaders of a society and those who shape the telling of its history discuss the past in a certain way through their own lens, the members of society are more likely to reject outright anything associated with differing points of view (Moussaid et al., 2013).

The noble traditions of society prior to the Enlightenment varied from culture to culture, yet had certain similarities. From the time of the Protestant Reformation, two vastly divergent beliefs quarreled, even to the point of bloodshed. Yet, with respect to the systems that influence the environment, production, and human life, there was at least some significant common ground. The Protestant work ethic, like Catholicism, promoted responsibility and the role of religion in both work and wealth accumulation. However, the new philosophy’s elements with regard to capitalism underscored a key difference between Protestantism and Catholicism regarding wealth, viz., that, in Protestantism, wealth is seen as an intrinsically valid goal by itself, while Catholicism views wealth as a means to worthy ends rather than an end unto itself (Bell et al., 2012).

In the ancien régime, land was a chief source of wealth, so the noble tradition in the past in the context of this study necessarily relates generally to land management. Society was structured largely according to Catholic doctrine, and though that was modified in regions due to the Protestant Reformation, it is primarily the influence of Catholicism that will be discussed here. Religion and the Church were at the centre of life.

In the early feudal era, a common-enough archetype for social structure is a king with several lords who are his vassals. The lords owned land and held serfs, who work the land. The king needed the lords for revenue and organisation of the territory, and the lords needed the king for authority and top-level structure. The unity provided defence against outside forces and also helped to grow community by pooling resources. The lords needed the serfs to work the land, and the serfs needed to lord to provide for needs (O’Brien and Shannon, 1977). The lord was required to take care of the serfs. The king, the lords, and the serfs, though distinct in their roles in the rigid hierarchy of society, were all considered to be stewards of the land. Such an organisation is one potential result of the inherent inequality in nature – even in modern times in which debt-slavery is seen (Hobhouse, 1922). Niggardliness, which sought gain as a means to an end with no real respect towards the person and property of others, was considered to be no real virtue whatsoever in noble tradition. Those in great offices and positions of authority and rule had benefits that were not merely for them, but in reality for the whole of the people whose care had been entrusted to them. Rulers, leaders, and officers were expected to be competent and qualified, contrary to later propaganda.

Even after serfdom declined, and tenant farmers were the norm, a system of mutual inter-dependence between the vassals and lords persisted. Tenancy remained a much-needed source of agricultural labour, just as it had been earlier in the Roman Empire (Foxhall, 1990). Positive economic effects were realised from the abolition of serfdom. Increased agricultural productivity went hand-in-hand with an increase in the standard of living of vassal peasants (Markevich and Zhuravskaya, 2018). Society progressed, building on what went before.

Despite the interdependence and the power differential, noble tradition said that those in power were not to be tyrants. St. Thomas Aquinas was so strong in his condemnation of such leaders that he said that they make no valid law whatsoever under Christ. People of all ranks of society were expected to help each other, and the social

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4 St. Thomas Aquinas, Summa Theologica, II-II, Q23.
5 St. Thomas Aquinas, Summa Theologica, II-II, Q32, Art. 5; and Part I-II, Q66.
6 St. Augustine, Contra Julian, iv, 3.
7 St. Gregory I, Regulae Pastoralis Liber.
8 St. Thomas Aquinas, Summa Theologica, II-I, Q105.
9 St. Thomas Aquinas, Summa Theologica, II-I, Q95, Art. 4.
order was to help facilitate that mutual support.\textsuperscript{10} History shows that it did not always work perfectly – and neither does it work perfectly in the modern era. The chasing of money as a means to itself today can lead to a weakening of social responsibility (Johnson, 2009; Hawtrey and Johnson, 2010; Johnson, 2013). That society in that era was not always perfect does not invalidate the legitimacy and the merit of the ideal philosophies of the time (Johnson, 2011). Charity, stemming from the recognition of the dignity of all human beings, was the expectation in the era of noble tradition. Even in the exercise of justice, there was an expectation to have compassion and charity towards all (Johnson, 2011). The nobility were to profess a sense of noblesse oblige that reminded them that their position and the wealth that often came with it were to be used not simply for self-aggrandizement, but for the common good.

In summary, the social order within noble tradition was, at least in its ideal, one that promoted duty not just to one’s self, but to others, both up and down the social ladder. Unlike the industrial era, in which lives were put to work in factories with minimal safety standards and were quite easy to replace without compensation if they died or were no longer able to work, the traditions of the old era had an expectation of care, even if not perfectly carried out. Social organisations such as the Church played a major role in that, but the nobility was also expected to be generous benefactors. Those engaged in commerce of whatever kind were expected to do so in a manner that took into account the well-being of others – and this idea persists in traditional Catholic thought in the modern era.\textsuperscript{11} All of this was under responsibility to God, which is a quite different concept philosophically from mere responsibility to the people, such as in democracy.\textsuperscript{12} Self-centredness was disdained.\textsuperscript{13} Greed was considered the root of evil.\textsuperscript{14} Stewardship was promoted – an early form of rather effective sustainability (Pascua Echegaray, 2011). The social structure helped keep land tracts intact instead of potentially breaking them up at the death of its owner (Coberly, 2014). Such an approach, in that larger tracts of land could be managed as a single unit rather than multiple, subdivided competing units, could have contributed to better ecological sustainability in the long run, a necessary condition for long run economic viability (Lowrance et al., 1986).

Sustainability efforts in the old era were not without problems, of course. Deforestation for shipbuilding in Spain is one such example of unsustainable practice (Thirgood, 1981). Society can also be a victim of its own success, creating potentially unsustainable situations. The mass killing of wild animals in the era of the Roman Empire, for example, allowed the expansion of European agriculture by reducing the threat of attack from wild animals. Although agriculture expanded, the animal population decreased, both from direct killing and from habitat disruption. Whether one justifies the other is now a matter of debate (de Vries, 2013). Nevertheless, despite its imperfections, the underlying foundational philosophy of what is here termed noble tradition is one that supports the notion of sustainability, mutual support, and social responsibility. Europe learned from its history and built on its history, with governments concerned with public good (Jones, 2003). Despite the imperfections that are a staple of humanity, its multi-layered construction built upon history coupled with a concern for public goods was a recipe for sustainability long before that term entered the mainstream of scientific thought.

Philosophical Shifts in the Enlightenment

The Enlightenment of the 1700s had its roots in part in the natural philosophers of the two preceding centuries. Ironically, a good number of those philosophers were of the school of thought and the traditions of the Catholic Church, the Enlightenment’s self-created mortal enemy. Philosophy of such Catholic scientists was often kept and promoted, but its Catholic foundation and context was whitewashed (REFERENCE).

There were in fact multiple “enlightenments,” much in the same way that there were several “renaissances.” The new awakening of human knowledge known as the Renaissance began in Florence and launched the modern world (Coberly, 2013). The Renaissance, however, was essentially in harmony with the Catholic Church and built upon it. It saw itself as a re-birth, building on history, not tearing it down and starting anew. One exception, of

\textsuperscript{10} St. John XXIII, \textit{Mater et Magistra}.

\textsuperscript{11} \textit{Idem}. “No Christian education can be considered complete unless it covers every kind of obligation. It must therefore aim at implanting and fostering among the faithful an awareness of their duty to carry on their economic and social activities in a Christian manner.”

\textsuperscript{12} Benedict XV, \textit{Maximum Illud}. “We hope too that they will hold fast to the conviction that the usefulness of their work will increase in proportion to the care they give to their own spiritual perfection.” Also, “And whatsoever ye do in word or deed, do all in the Name of the Lord Jesus, giving thanks to God and the Father by him.” Col. 3.17

\textsuperscript{13} Bl. Fulton J. Sheen. “The egocentric is always frustrated, simply because the condition of self-perfection is self surrender.”

\textsuperscript{14} Pius XI, \textit{Ad Catholici Sacerdotii}.
course, was the Protestant Reformation that took place during the same general time. The rapid expansion of the temporal power of the Papacy was contrasted with the contemporaneous development of Protestantism (Coberly, 2014). Some countries became Protestant, in whole or in part, while some were torn apart by theological dispute. France was arguably the epicentre of struggle between Catholic thought and Protestant thought, each side vying for control of the government. The Wars of Religion even involved Protestant members of the House of Bourbon, relatives of the Catholic King, fighting the staunch supporter of Rome and the Catholic Bourbons, the Duke de Guise (Coberly, 2018). That there was much bloodshed meant that there was much less chance of reconciliation – a conflict that still persists, though much more peacefully, to this day. The two philosophies, old Catholicism and new Protestantism, were squared off in an epic struggle.

Meanwhile, as the Enlightenment continued to develop, no doubt emboldened by the Protestant gains against their mutual enemy, the Roman Church, secularist philosophies began to develop. Voltaire, Rousseau, Jefferson, and other philosophers argued for the reason of man above God and above the traditions that had been held sacred in the Western world. Some monarchs even followed some of the ideas of the Enlightenment, though certainly not to the point of embracing republicanism. Frederick the Great, the famed King of Prussia whose brilliance was praised by Carl von Clausewitz in his treatise On War, was both a Protestant and noted for being an enlightened, absolute rulers. Holy Roman Emperor Josef II, the great patron of Mozart, was a Catholic and a proponent of “enlightened absolutism” in which traditional absolute monarchy adopted some of the ideas of the Enlightenment (Beale, 2009). Yet, though such monarchs were willing to be open-minded, the Enlightenment ultimately wanted more. It ultimately wanted secularism and democracy, and to do that, it had to sever ties with the old order (Israel, 2011).

Democracies tend towards a secular character (Coberly, 2014). That nature instills a block against considering noble tradition for two reasons: First, nobility and royalism are considered anathema to democracy, and remembering royalty and nobility in a positive light (other than as general celebrities, as is so popular today) may easily be viewed as a threat to the modern regime, much in the same way as republicanist thought can be viewed as a threat to a monarchy. Second, since noble tradition derives ultimately from Catholic theology and tradition, secularism further presents a block to considering anything from noble tradition as positive. This further widened the gap between the Enlightenment and their old foe, the Church, which was clearly against any form of government that was deemed to be against the Church.15

In England, the crown went back and forth for a time between Catholics and Protestants after the political split from Rome under Henry VIII. The Church of England, founded by St. Augustine of Canterbury, was originally as Catholic as the Church of France and the Church of Rome. However, particularly after Elizabeth I, Protestant doctrine gained a thorough foothold, and Enlightenment theory with it. Yet, by the time of the height of the American Colonies, the Church of England still possessed many of the historical trappings of the Catholic Church and was a bastion of tradition, albeit in a somewhat different manner from the Roman Church.

American Revolution

Much of what played out in Europe happened in a like manner in the British American colonies. Wars such as the War of Spanish Succession and the Nine Years War had their North American counterparts, Queen Anne’s War and King William’s War respectively. The battle for the minds of the colonials and for the direction and very nature of government raged on between traditionalists and followers of the Enlightenment. Of course, the British American colonies were not contiguous with the modern United States. France and Spain controlled most of North America. Until the Seven Years War, the British colonies were split and at greater risk from Spain and especially France, and therefore needed Britain for protection. Afterwards, the territorial unification that resulted from the Treaty of Paris put the British colonies in a stronger position and conceivably made possible the eventual American Revolution (Carrell, 2018).

Enlightenment and accompanying Deist philosophy gradually gained a significant voice in the colonies, despite being a minority. As the Revolution took place, the world order was being turned upside down. The new ideal of popular rule in the American republic was wholly incompatible with the old order, even that of parliamentary monarchies, and so began a public relations campaign to establish the new and eradicate the old (Hume, 2013).

In the modern United States, that legacy remains. In looking forward, the wisdom of the past was left behind with the problems of the past. The clock was reset in 1776. History was written, as it always is, by the victors, and even though it could be said that Great Britain did not lose the Revolutionary War, but simply chose to withdraw

15 Pius XI, Quadragesimo Anno.
without actually being defeated, Britain was no longer in governance south of the Canadas. Even the history of colonial titles of nobility were whitewashed, for the fact that such titles existed in the British American colonies clashed with the very founding principles of the American Republic. Ironically, a nation today obsessed with British royalty (to the virtual exclusion of all other reigning families of the world), not to mention things closer to home such as Prom Kings and Queens, Oil Barons, and even officials curiously called “Tsars” in the federal government, simultaneously lambast any politician or business leader they dislike as “trying to be a King/Queen.” There exists massive celebrity worship on one hand, with sardonic comments such as “Who does he think he is, royalty?” on the other. It all seems a bit cognitively dissonant and thoroughly unwilling to admit anything from noble tradition might be of use today since it is not, after all, democratic.

What is perhaps most troubling about this apparent blind spot in the modern US is that many of the problems of the past continue to exist, while mechanisms of corporate and public responsibility are often suppressed – though not for lack of trying on the part of those with a social conscience. Political leaders appear to have limited concern over the plight of those in poverty (Kraus and Callaghan, 2014). Earlier, during the so-called “land boom” of the nineteenth century, distributist methods of land allocation that were allegedly to help create more economic independence actually often led to tenancy situations and agricultural monopoly (Atack, 1988). That such concepts persisted even after the philosophical shift that was supposed to bring freedom suggests that there are certain commonalities to human nature (Hobhouse, 1922). If the fact that they continued is a facet of human nature, then society would be better served by not allowing its philosophy du jour to shut itself off from the wisdom of its collective ancestors.

**Human Behaviour and Strategic Interaction in Industry and Agriculture**

In order to assess the possible effects of a blind spot in the modern United States to elements of noble tradition that may benefit modern efforts in sustainability, a multipoint gravitational model is used. The multipoint gravitational model accounts for the possible influence between each and every actor in the system, weighting the net effect according to the relative strength of each influence and its effective distance (Johnson, 2015). Effective distance is not necessarily merely physical, as an individual may, for example, be influenced more by someone on the other side of the world than by a neighbour due to something such as the internet. Considering first supply-side decisions by firms regarding sustainable vs non-sustainable practices, the profit-maximising decision may be expressed as the profit maximising problem in Eqn. 1.

\[
(1) \quad \text{Max } \pi(x, N) = q(x_{NS}, x_s) \quad \text{s.t. } c\left(x_{NS}, x_s, \frac{F_{net}}{n}, G\right)
\]

In Eqn. 1, the firm seeks to maximise profit, which is a function of total output, \(x\), and the effect of influence, \(N\). The production function, \(q\), is solved subject to the constraint, which is cost, \(c\). The production function, \(q\), is a function of \(x\), which is the sum of \(x_{NS}\) and \(x_s\), non-sustainable output choices and sustainable output choices respectively. Firms may choose a product mix of \(x_{NS}\) and \(x_s\) according to their own decision strategy, which is a function of the firm’s philosophy regarding sustainability. For a firm engaged in sustainable practices, \(x_s > x_{NS}\), with the difference increasing as more and more sustainable practices are adopted. For a firm engaged in fewer sustainable practices than non-sustainable ones, \(x_s < x_{NS}\), with the difference increasing with an increasing number of non-sustainable practices.

The cost term is a function of output, \(x\), and the net effect of sustainability-related influence, expressed as the vector \(\text{F}_{net}\) divided by the strength of the firm’s own influence, and the influence of government policy, \(G\) (Johnson, 2015). The sustainability-related influence term, hereafter termed S-influence, assumes the net effect of all other forms of influence is held constant. If the influence of government regarding sustainability is purely of a form that is subject to normal gravitational interaction, then the remainder of \(G\) may be assumed to be constant and therefore eliminated from the equation, for it is included in \(\text{F}_{net}\). However, often government policy is prescriptive rather than influential, and so \(G\) has been explicitly included in Eqn. 1. The mix of \(x_{NS}\) and \(x_s\) is also subject to S-influence, according to the constraint/cost function, \(c\).
What, then, is included in \( F_{\text{net}} \)? Anything that influences the firm’s decision strategy regarding the adoption of sustainable practices may be included. This can include consumer pressure, scientific studies, media pressure, or activism. For example, activism, media pressure, and consumer preference resulted in lost market share in the tuna industry because of fishing practices that were not dolphin-safe. That combined to induce firms to improve technology and adopt dolphin-safe practices in order to regain lost market share (Teisl et al., 2002).

Note also that the firm need not have any particular internal desire to adopt a given sustainable practice. If the S-influence is sufficiently strong, since that term is contained within the constraint function of the profit maximisation problem, it will necessarily result in a change in the output decision, i.e., a change in the mixture of \( x_{\text{NS}} \) and \( x_{\text{S}} \). When the S-influence exists, it is included in the constraint term, but ignored when the S-influence is removed. That is, the firm responds to the force of S-influence, but such a response, though it is a shift in decision strategy of indeterminate persistence, does not necessarily reflect a true change in internal operational philosophy. Such a change is only sustainable as long as the S-influence remains – or if a paradigm shift occurs.

A firm’s decision strategy can be represented by a Choice Wave, which is a probabilistic representation of all utility-maximising output decision, each with a probability of occurring at a given decision point, and no probability of an output decision that would not maximise utility. Choice Waves are mathematically orthogonal and non-interacting in an \( n \)-dimensional Hilbert space, so that each Choice Wave represents an individual firm or a statistically similar collection of firms that follows a statistically distinct decision strategy (Johnson and Walker, 2018).

A firm’s utility may be derived from profit as well as other potential motivations. A representation of a Choice Wave for a firm is given in Eqn. 2.

\[
\psi(x) = \begin{cases} 
P(U(x|t)) = q(x_{\text{NS}}, x_{\text{S}}) \text{ s.t. } c \left( x_{\text{NS}}, x_{\text{S}}, \frac{F_{\text{net}}}{n}, G \right) \text{ at the decision point;} \\
F
\end{cases}
\]

In Eqn. 2, the firm makes sustainable and non-sustainable choices \( x_{\text{NS}} \) and \( x_{\text{S}} \) in order to maximise utility, subject to the influence constraint (Johnson, 2017). Unlike Eqn. 1, the goal of the firm now is to maximise utility rather than simply maximise profit. This permits the firm to make choices that it deems valuable, even at a loss of profit, whether those choices come as a result of internal organisational belief or of outside influence. Since the Choice Wave, \( \psi \), is a function of the constraint, which contains the effect of the S-influence term, any S-influence sufficient to cause a statistically significant change in decision strategy will necessarily cause the firm to shift from one Choice Wave to another. The same outcome could result from an internal philosophy shift, which itself could also be due to a permanent effect of an S-influence, whether the S-influence itself is permanent or transitory. The S-influence serves as a bridge between the two economic worlds – the world of the firm and the world of the S-influencing force (Johnson and Walker, 2018). If the firm and the S-influencing force were in the same world, there would be no S-influence, for the firm would already be statistically similar to the decision strategy of the S-influencing force.

If \( \lambda \psi(x) \) represents the firm’s initial decision strategy, and an S-influence is applied such that a statistically significant change in output is observed, but no internal change results, that new strategy in response to the S-influence may be represented by \( b \psi(x) \). Then, if an internal change does occur, that decision strategy may be represented by \( c \psi(x) \). The expectation value of firm output in case C is \( \langle x \rangle_{\text{C}} \), and since it is, in this example, assumed to be due to a permanent shift resulting from an initial stimulus of an S-influence, \( \langle x \rangle_{\text{C}} \) must be more or less equal to the expectation value in case B, \( \langle x \rangle_{\text{B}} \). The term "more or less" is admittedly vague, for a firm may change its output decision strategy in one manner simply under an outside S-influence and in a different manner if
that S-influence causes an external shift. The Choice Waves are, after all, distinct. However, it is not an unreasonable assumption that they will be at least somewhat similar.

Once a permanent shift has occurred, since the S-influencing force and the firm are no longer in separate economic worlds (vide supra), the firm’s profit maximising problem may be stated as in Eqn. 3.

$$\text{Max } \pi(x) = q_s(x_{NS}, x_S) \text{ s.t. } c(x_{NS}, x_S)$$

In Eqn. 3, the production function has changed as a means of internalizing the preceding influence. The S-influence factor is therefore removed, since all other influence is assumed to be held constant, and the change is permanent. Likewise, the firm’s utility maximisation strategy is logically contained within the new production function, and so in Eqn. 3, profit maximisation is assumed to be equivalent to utility maximisation— as long as all other factors in the system continue to remain constant. The process can potentially start again once a new S-influence is applied.

In agriculture and natural resources management, the process as given for industrial firms is essentially the same. A farm faces a production function with an S-influence term in the constraint, as in Eqn. 1. The farm’s decision strategy may change due to S-influence, and so too might its output decision permanently change, as in Eqn. 3. In public natural resource management, the decision is not only “output,” i.e., resource usage, but resource conservation. That adds additional terms into the production function, which could be given as

$$q(x_{NS}, x_S, Cons_{NS}, Cons_S)$$

where the two terms are conservation decisions using non-sustainable and sustainable methods respectively. Both farming and natural resource management require proper land use, which then can result in an additional term, $L$, representing a set of land use acreage choices (Johnson and Walker, 2018).

**Demand Side Human Behaviour and Strategic Interaction**

On the demand side, a consumer’s decision regarding sustainable vs non-sustainable choices could be S-influenced, holding all other influence constant, by what has been defined in this study as noble tradition. That sets up a possibility for two types of consumer in the market: one that is open to S-influence from tradition, and one that is not. Each may be represented by a Choice Wave, $\psi_T(x_{NS}, x_S)$ and $\psi_{NT}(x_{NS}, x_S)$ respectively. There exists a further possibility of one or more additional types that have varying degrees of openness, and so are represented by a Choice Wave that is some linear combination of $\psi_T$ and $\psi_{NT}$ since they exist in the space of both of those Choice Waves. A consumer, then, similar to a firm’s output decision in the presence of potential S-influence, faces a utility maximising choice decision as in Eqn. 4.

$$\text{Max } U(x, S(N)) = k(x_{NS}, x_S) \text{ s.t. } f(Y, F_{net})$$

In Eqn. 4, $U$ is a function of consumption choice and subconscious component, $S$, which is a function in part of S-influence, $N$; $k$ is some general demand function of sustainably-oriented and non-sustainably-oriented choices $x_S$ and $x_{NS}$ respectively; and $f$ is the budget constraint, which is a function of income, $Y$, and the S-influence term. A noble tradition S-influencer may encounter a consumer of type $T$ (open to tradition) or $NT$ (ignores tradition). At each such transaction, there is a probability that the consumer will be of one type or another. For type $NT$, the consumer’s own strength of influence, $n_{NT}$, is strong enough that it overwhelms $F_{net}$, creating a blind spot.

Each consumer type, represented by a distinct Choice Wave, yields an expectation value of consumer expenditure $\langle e_T \rangle$ and $\langle e_{NT} \rangle$ respectively, where $e$ in each case represents expenditure on a bundle comprised of some combination of $x_S$ and $x_{NS}$. The probability of an interaction between a consumer of type $T$ and a traditional S-influence is expressed in Eqn. 5 (Johnson, 2017).

$$\text{Prob}(T|N_{Trad}) = \frac{l(\eta_T, \eta_{Trad}, \eta_{Total})}{m(\eta_{T-Trad}, \eta_{T-Other})}$$

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Eqn. 5 states that the probability of an open-minded consumer (type $T$) interacting with an influence of noble tradition ($N_{Trad}$) is some function $l$ of the total number ($\eta$) of consumers of type $T$, S-influences of type $Trad$, and the total number of all consumers and influences; and some function $m$ of the effective distance, $r$, between consumers of type $T$ and influences of type $Trad$ and between consumers of type $T$ and other influencers. Logically, as the effective distance between $T$ and $Trad$ decreases, the probability is likely to increase. Similarly, as the effective distance between $T$ and Other increases, the probability of interaction is likely to decrease. Also, as the number of consumer of type $T$ and the number of S-influencers of type $Trad$ both increase, the probability of interaction is likely to increase. A simple form of this, then, can be given in Eqn. 6.

$$\text{Prob}(T \parallel N_{Trad}) = \frac{\left(\frac{\eta_T + \eta_{Trad}}{\eta_{Total}}\right)}{\left(r_{T-Trad}\right)^2 + \left(\frac{1}{(r_{T-Other})^2}\right)}$$

The same procedure may be repeated for the probability of interaction $NT-Trad$. As the number of type $T$ decreases related to the population, the number of type $NT$ increases, and the number of S-influencers of type $Trad$ decrease in society, the more of a blind spot there is within the system.

**A Blind Spot Analysis**

In the causal loop diagram in Fig. 1, there is depicted a possible outcome of the presence of blind spots regarding both sustainability efforts and consumption. For a given stock, consumption reduces the level of the stock, and an increase in the size of the stock generally means more consumption, depending on demand. That constitutes a balancing loop. Also, a sustainability programme is expected to increase the stock, while an increase in the stock is likely to increase interest and efforts in the sustainability programme. It is possible, on the other hand, that there is no effect or that an increase in the stock will reduce sustainability interest, but it is assumed that it is most likely to be a reinforcing loop.
The sustainability programme can also be modified by S-influence. Useful historical knowledge can contribute to sustainability programmes, but may be tempered or overwhelmed by blind spots, which combine with useful historical knowledge (tradition) to generate a net S-influence. Useful historical knowledge and blind spots can influence consumption, and the effect can be positive or negative, depending on the specific nature of the system.

Without the blind spot, S-influence is positive. With a blind spot, S-influence is either positive with a lower magnitude or negative. The effect of a blind spot is to reduce the strength of the reinforcing loop. If that effect is such that the balancing loop overwhelms the reinforcing loop, then the stock eventually will deplete.

If a blind spot regarding openness to consideration of noble tradition in terms of output decision, consumer decision, or conservation decision exists in a system, it implies n is strong enough to resist the S-influence. There is, in those cases, no permanent shift to a new production or demand function. In the case of the US, the net strength of its own influence, n, due to resetting the clock at 1776 appears sufficiently strong to overwhelm the S-influence term of noble tradition in many if not most cases. More than that, firms or individuals who follow the S-influencers of type Trad may find that they incur a social cost – that is, in this case, a cost imposed on them by society for breaking societal norms. The payoff matrix in Fig. 2 provides general payoffs for a firm that faces a decision to adopt or ignore a principle from noble tradition that will benefit their operations in terms of improving sustainable practices.

Society faces the choice of accepting that decision or denying it. If the practice is adopted and society accepts it, then the payoff to both is given as \( \theta \). If the firm adopts the sustainable practice, but society denies its validity due to its source being incompatible with the principles of that society, then the firm still gets the payoff \( \theta \) for having adopted the practice, but it is offset by a socially-imposed loss, \( \alpha \). Society has upheld its principles in the face of a direct challenge to those principles, so it incurs additional utility benefit, \( \beta \). Now, if the firm chooses to ignore the sustainability-related practice, its payoff is \( \theta - \lambda \), where \( \lambda \) is the gain that would have been realised by adopting the practice. In that case, society, whether it accepts or denies the choice of the firm, its payoff is also \( \theta - \lambda \), since the practice has not been adopted. If the firm adopts the practice of traditional origin, then society realises more gains.
by denying the use and imposing a social cost on the firm for having adopted it. If the firm ignores the practice, then society is indifferent between accepting and denying, and in reality need not make a choice since there is no stimulus to which to respond. The firm’s best outcome is to adopt the practice if society chooses to accept it. If society chooses to deny, then the firm’s best choice depends on the relative value of $\lambda$ and $\alpha$. If the social cost to the firm is too great, then the practice will not be adopted. If the gain from adopting the sustainable practice is sufficiently large, then the firm may be willing to incur the social cost. In that case, assuming further than the societal trend is strongly tilted towards denying, then the Nash equilibrium is for the firm to adopt and society to deny. If the social cost is too high, then, under those same assumptions, the Nash equilibrium is Ignore-Deny. The win-win scenario is Adopt-Accept, but that is not an equilibrium outcome. This demonstrates the significant role of social pressure based on engrained social belief. In the case of this study, that engrained belief is a rejection of what has been termed noble tradition as incompatible with American democracy such that attempts to learn from the past may be viewed as infected by that which is considered anathema.

<table>
<thead>
<tr>
<th>Firm:</th>
<th>Society:</th>
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<tr>
<td></td>
<td>Accept:</td>
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<tr>
<td>Adopt:</td>
<td>$\theta / \theta$</td>
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<tr>
<td>Ignore:</td>
<td>$\theta - \lambda / \theta - \lambda$</td>
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Figure 2 – Payoff Matrix for interaction between a firm and society

Conclusions and Policy Recommendations

This study has considered the possible impact of a blind spot in society on the choice to adopt certain sustainable practices or philosophies, where those practices or philosophies are at odds with the outlook of society. Specifically, this study has considered blind spots in the United States resulting from a resetting of the historical clock in 1776 and the consideration of that which derives from previous noble tradition to be anathema to American democracy. That philosophical shift was primarily a result of the Enlightenment and Deist thought, with some influence from diverse branches of Protestantism. Certain traits of the pre-Enlightenment society that have teaching merit for sustainability today may be ignored due to their origin.

Ultimately this study was conceptual in nature rather than empirical. A multipoint gravitational model was employed to demonstrate the possible effects of S-influence — specifically that derived from noble tradition — on firms, farmers, natural resource managers, and consumers. Strategic interaction results between two or more actors with statistically independent decisions strategies. The relative strength of influence of social belief vs the influence of society’s ancestral past both play a large part in determining whether or not a practice or principle from noble tradition is adopted. If a given influence is strong enough or persistent enough, it may cause a permanent change in decision strategy.

The potential for a cost to be imposed by society on a firm or individual for choosing to adopt a practice or principle not in line with the norms of society also exists. The petulcous derision with which pre-Enlightenment antiquity is treated by American society is such that the social cost is likely to be very high indeed. Some are
dedicated enough to be willing to absorb the cost imposed by society. However, in the case of a firm, such a social cost might be too much to bear, for it may result in loss of revenue, loss of customer base, or even bankruptcy.

Society benefits when blind spots are identified and removed. That is not to say that everything that has been ignored by the presence of a blind spot is inherently positive, but merely that it should be considered logically and rationally, not dismissed outright due to bias. Also, it is not the purpose of this study to debate the benefits or problems with American democracy. That the United States is a democratic republic is taken as a given. What has been considered, though, is that the Enlightenment, Deist, and Protestant thought that sparked the American Revolution and shaped the founding of the new republic and transformed its society was and remains thoroughly antagonistic to the philosophies and principles that it replaced. Any given system of government is neither all good nor all bad, and that is a condition of humanity. To look only to one’s self in this case is to have less than two hundred fifty years the draw from rather than a well of knowledge and experience of two thousand years or more.

Policymakers would be well-advised to consider that the ease with which relative strength of influence and social costs imposed upon actors may not only result in those who are willing to consider rediscovering old, but useful and applicable viewpoints being beaten into submission, but that such contentious petulicity on the part of society and government may very well be preventing meaningful progress. A policy of open-mindedness on this issue on the part of politicians would go a long way to help, though elected officials can only go so far if they are to be re-elected. In due course what is needed is a policy of opening the gates of history to the American republic so that it may freely and unapologetically learn from the wisdom of its ancestors. The situation would be helped by support on the part of at least a segment of the U.S. government to offset the social costs imposed on firms and individuals who choose to adopt sustainability methods or concepts deriving from noble traditions or consider said traditions. In other words, that would create a financial incentive by removing the disincentive to open-mindedness in a specific direction. To impose such a policy requires a strong force of influence and may take significant time. It also requires a willingness on the part of firms and individuals. Ultimately the lesson here is less about the message of any particular time in history or of any particular philosophy, but that meaningful, legitimate progress requires both an open mind and a thorough foundation. Otherwise it is not progress, but merely floating without true direction. If sustainability is to be sustainable into the future and impact more and more aspects of life in positive ways, its innovation must be grounded thoroughly upon a strong foundation that recognises our common inheritance.

REFERENCES


“Priests who were (and are) scientists.” (2014, 21 May). Old Roman Catholic News Service. Retrieved from http://theorcns.blogspot.com/2014/05/priests-who-were-and-are-scientists.html


