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## A theory of the pre-modern British aristocracy

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### ABSTRACT

Between c. 1550 –c. 1880, a small group of individuals ruled England and oversaw her transformation from a small country to the British Empire—and in the process they became exceedingly wealthy. Known as aristocrats, their unusual lifestyles were the antithesis of modern secular values. Today aristocrats are often viewed as a hindrance to pre-modern growth and development because they appeared to operate so inefficiently. This paper argues that the aristocrats efficiently provided the valuable service of “trustworthy servant”, by investing their wealth in hostage capital. This theory explains terms of entry and exit out of the aristocracy, the strict family settlement, their education patterns, extravagant lifestyle, and their ultimate voluntary retreat from power.

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### 1. Introduction

*The Crown and the Executive found in this system guarantees of fidelity and good conduct, and no one troubled himself about the obstacles placed in the path of unpropertied ability.*

[Winston Churchill, p. 409, 2002]

Perhaps it was Churchill's patrician pedigree which allowed him to view favorably on the system of aristocratic patronage that dominated British public administration for so long, but insightful or not, his opinion stands almost alone. For the past 200 years the British aristocracy has been frowned upon by academics, social advocates, the poor, the middle class, and the non-included wealthy. George Orwell, writing almost at the same time as Churchill noted that the “bandits” were “simply parasites, less useful to society than his fleas are to a dog”.<sup>1</sup>

The negative consideration given the aristocracy permeates modern culture so completely that their ultimate fall from power and privilege in the late nineteenth century is considered a move towards a better society. For many historians the pre-modern era before 1800 is referred to as the “old corruption” where a few landed interests controlled the provision of public service through ancient venal office holdings, sinecures, reversions, patronage, private access to the Crown, church estates and bishoprics, birth rights to parliamentary seats, and hereditary titles.<sup>2</sup> Reformers in the nineteenth century mocked the lavish and ostentatious aristocratic lifestyle, railed against the waste and pomp which seemed to come at the expense of the

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<sup>1</sup> Orwell (p. 70, 1968). His view was that “For long past there had been in England an entirely functionless class, living on money that were invested they hardly knew where, the ‘idle rich’.... The existence of these people was by any standard unjustifiable.” (p. 70, 1968).

<sup>2</sup> Many of these terms are no longer familiar, or are now considered pejorative. Venality was the practice of purchasing an office, a sinecure was an office that paid but required little work, a reversion was an act of possession for a limited time which reverted back to the owner at the end of the interest, and a bishopric is a territory governed by a bishop.

rest of society, and scoffed at the idea that birth should trump talent. So dissipating was the aristocratic life that some historians have claimed they were “prestige maximizers” driven to a dissipating lifestyle.<sup>3</sup>

For the most part the critiques are well taken. The aristocratic system was laced with inter-marriage, nepotism, and public school networks. These combined to form an income distribution in which literally a few dozen families controlled a lion’s share of the nation’s wealth. Although entry was possible at the bottom of the gentry pool, the reality was that connections were almost always necessary and that the social elite was a stable and tight group for over three centuries. As Churchill mentioned above, no one bothered to worry about the merits of those without property, and when this landless group made up almost the entire population, the aristocratic system cannot help but appear both ridiculous and unfair.

Yet there must be another side to the story. As a governing elite, the pre-modern aristocrats ruled for almost 300 years with the general consent of the people.<sup>4</sup> They not only survived two revolutions (granted the revolutionaries were themselves aristocrats), demographic failure through high death rates in the early eighteenth century, various financial upheavals, and anti-aristocratic sentiments in the rest of Europe, they actually prospered until the very end in terms of wealth and power, when they voluntarily created new institutions for governance. Their stability and durability alone suggest an economic efficiency justification in the Darwinian struggle between institutions, but their reign also coincides with England’s transformation from a marginal European country enmeshed with internal struggles to the greatest power on earth. They oversaw the transition to religious tolerance, the union with Scotland, the moderation of royal power, victories over France and other European powers, the creation of an empire that never saw the sun set, and the Industrial Revolution. It hardly seems possible that England could have created the United Kingdom, let alone the British Empire, had its ruling elite dissipated its wealth over 300 years of tea parties.<sup>5</sup>

The puzzle of the aristocracy, however, is deeper still than the instrumental role they played in the rise of Britain. Emerging out of the Tudor reign, the pre-modern aristocracy quickly established a set of constraints that defined them: constraints on land holdings, titles, entry, education, inheritance, lifestyle, marriage, and social behavior that are alien to the modern world and form the basis of modern criticisms. The details of the aristocratic system are beyond the reach of any preference based theory. Although there is no accounting for tastes, the complicated and wide scope of aristocratic customs calls out for a richer theory. Based on observable factors, this paper seeks to explain how these constraints were necessary for the aristocracy to succeed in the environment they faced. Understanding why and how the aristocracy arose the way it did also explains why they were unsuccessful in surviving the Industrial Revolution.

The focus of this paper is on the social elite which developed after Henry VIII’s confiscation of monastery lands, and which began to break up towards the end of the nineteenth century. The English aristocracy is often thought of as a continuous institution from 1066 AD until the present day. Although a few noble families, including the royal one, have titles and genealogies dating back to the 1066 conquest, they are few in number. More importantly, the institutional constraints, or the set of “aristocratic property rights” varied significantly over time, and for the purpose of this paper it is better to view the aristocracy as having three different institutional eras. These are the feudal lords (c. 1066–c. 1550), the pre-modern aristocrats (c. 1550–c. 1880), and the modern aristocrats (c. 1880–present). Like all such classifications, this provides only a useful guideline to two significant breaks in the nature of the aristocracy over time. The differences over time depended on the rules under which the aristocrats operated, their ability to provide military force, and the role they played in civil administration.

## 2. The pre-modern aristocracy: 1550–1880

At the time of William’s conquest, England had a well established Anglo-Saxon nobility. This was replaced and amended by King William who claimed all English land. In order to administer the country he established several powerful “magnates” who ruled large territories under a system of tenancy for life at the King’s pleasure. These magnates were mostly William’s kin, and they ruled the country through a small feudal system grounded in force. Over the course of the next few centuries land and power was transferred from the King to nobles and lesser gentry, but even by the time of the War of Roses (1455–1489) a small number of large magnates had a strong military presence and control.<sup>6</sup> Feudal services, obligations, and benefits

<sup>3</sup> Indeed, faced with the question “why did aristocrats behave the way they did?” the general academic response has been that they must have gotten utility out of the status, class, and position. For example, Stone and Stone state:

If men strove to enlarge the size of their estates and to use the income to build larger and more elegant seats, it was because at the bottom they were prestige-maximizers rather than profit-maximizers. [p. 15, 1984]

Of course, being a prestige maximizer requires one to be a profit maximizer if prestige comes at a cost. However, the real question is, why did the prestige and status take the form that it did?

<sup>4</sup> For much of the period the Crown had no standing army or police to enforce the peace, and yet there was no populace revolt. Even when Bonnie Prince Charlie led the Jacobite rebellion in 1745, he was unable to muster opposition among commoners against the elite *status quo*.

<sup>5</sup> I am not suggesting that the rise of the British Empire rested on the aristocratic class. The relative importance of the British aristocracy to economic growth would require a detailed study, which would at the very least, include a cross country comparison of the different aristocratic systems. Such a study is beyond the scope of this paper. The point is that had the aristocracy been as bad as is commonly portrayed, it is unlikely Britain could have accomplished so much.

<sup>6</sup> It is beyond the scope of this paper to elaborate on this transfer; however, it plays an important role in the creation of the pre-modern aristocracy. One plausible explanation is Barzel’s (2000) hypothesis that it was in the Crown’s interest to “exchange” power for larger tax revenues. Under such conditions the eventual transfer of power to the pre-modern aristocrats amounts to a social contract, and it was within the Crown’s interest not to opportunistically capture aristocratic wealth by renegeing.

continued to fade, and by the mid sixteenth century, after Henry VIII created relatively large numbers of smaller estates, the pre-modern aristocrats began to emerge.<sup>7</sup> Still, some feudal traditions lingered on until the Restoration in 1660.

Unlike earlier lords who lived in fortified homes and whose power was grounded in military force, the distinguishing feature of the new social elite was a power based on membership within a group supported by the Crown, the general population, and the wealthy merchants and professionals.<sup>8</sup> They were an aristocracy by social contract, they lived in a country house, not behind a castle wall, and as a result, the new aristocracy were not fundamentally soldiers, but rather a group that provided service to the Crown from the highest to the lower offices of the state.<sup>9</sup> This group remained in power until replaced by bureaucratic and professional commoners beginning in the last quarter of the nineteenth century.

The term “aristocracy” is used here to describe a wide range of social rankings, that can be placed in two tiers. At the top were the peers. The peerage titles included dukes, marquess’, earls, viscounts, and barons. This group, though extremely wealthy and powerful, was always extremely small. At the beginning of Henry VIII’s reign they were at an all time minimum of 40. By 1658 there were 119 members, and by 1830 they had grown to just 300.<sup>10</sup> Peerage remains an honor created by the king (who was excluded from the peerage), and it is still hereditary through the eldest son.

The “gentry,” a sub-class of smaller land holders beneath the peers, formed the second tier of the aristocracy.<sup>11</sup> Within the gentry there were further social rankings. At the top were more title holders (baronettes and knights), who often only held title for life. Beneath these were esquires, and finally “gentlemen” which although a formal title in the thirteenth century, had become an important informal title during the pre-modern period. The movement down the social ladder corresponded to increased numbers. In the seventeenth century Beckett estimates there were approximately 7000–9000 esquires, and perhaps 16,000 gentlemen.<sup>12</sup> Thus the aristocracy was never a significant part of the population in terms of numbers.<sup>13</sup> By 1800 there were only 9458 families with coats of arms, and by 1900 only 1 in 3200 people were considered aristocrats in Britain.<sup>14</sup> If we think of the aristocracy as a pyramid, the top was very well defined and tiny, while the bottom was considerably larger, less well defined, and more fluid in terms of movement in and out.

It was costly and restrictive to be an aristocrat, but there were many privileges. A peer could not be arrested for a civil action, imprisoned for debt, or required to make an oath; a peer could be tried by peers and not commoners, and had the right to decapitation over hanging if convicted of a capital offense. At various periods of time an aristocrat had rights to cross-bows, guns, and hunting, although these were short lived. There were rights to titles, such as “lord” and “Mr.” However, by far the most important privilege was the right to serve in the King’s household and to be a member of Parliament either through the House of Lords or the Commons. Access to these seats of power meant better access to the vast set of lesser offices through grants of patronage.

It is hard to exaggerate the extent to which the aristocracy ruled Britain through its control over what we now call public offices.<sup>15</sup> Both houses of Parliament were controlled by them until the turn of the twentieth century. The King’s household, which evolved into the executive arm of the government, was the domain of the aristocracy, as were the great offices and tenures of state. The army and navy officers were drawn from the aristocracy, as were the judges, justices of the peace, and other local administrators. It is also hard to exaggerate the success of the aristocracy in generating wealth from these offices and from their vast estates. And therein lies the puzzle. On the surface, the self imposed constraints raised the cost of living, yet the aristocracy generated wealth under these restrictions. What economic problem were they solving?

<sup>7</sup> Henry VIII’s confiscation of monastery land, which accounted for up to 25% of England’s area, allowed him to create a new group of smaller estates. The differences between feudal and pre-modern aristocrats can be seen in two nobles contemporary with Henry VIII: Edward Stafford, 3rd Duke of Buckingham (1478–1521); and Charles Brandon, 1st Duke of Suffolk (1484–1545). Buckingham was a feudal magnate. He was descended from Edward III, connected to several significant nobles through marriage, and considered the largest private land owner in England (Harris, p. 103, 1986). His wealth, power, and lineage gave him some independence from the Crown, and Henry VIII considered him with suspicion. Suffolk, on the other hand, is an early example of a pre-modern aristocrat. He was a lowly esquire with a short pedigree who befriended Henry VIII and within five years became a Duke. His wealth and influence were minor compared to the Crown, and depended upon his good service to his patron (Gunn, pp. 2–7, 1988).

<sup>8</sup> This is not to say that the older feudal lords were exterminated. Many of the great families continued. The peerage was at its smallest in 1509 (approximately 40), and so many of the pre-modern aristocrats were new creations. Also, the strength of individual magnates decreased relative to whole class.

<sup>9</sup> There were, hundreds of offices. Every branch of the administration would have a major office at the top, and below would be a host of lesser offices. At the highest level these included the great offices of the state: Lord High Steward; Lord High Chancellor; Lord High Treasurer; Lord President of the Council; Lord Privy Seal; Lord Great Chamberlain; Lord High Constable; Earl Marshal; and Lord High Admiral.

<sup>10</sup> Beckett (p. 27, 1986). Ironically, the largest growth in the peerage came after they lost their power. In 1900 there were 520 peers and the number grew even higher by the mid twentieth century. This rise in numbers is symptomatic of the changing role of the aristocracy. In modern times it has become possible to “purchase” titles and they are now given to members of all social standing. Most new peerages are for life only.

<sup>11</sup> Beckett (p. 21, 1986). Among historians there is a long debate over who should be counted as aristocratic. Some count the gentry in, while others acknowledge that the gulf between the two could be very wide. The gentry are included in the aristocracy here because they were expected to invest in hostage capital, and were expected to act as a trustworthy servant in the same manner as peers. This is not to say that the form of investments were the same or that the gentry were involved in the same levels of civil administration. The marginal gentry engaged mostly in social capital investments rather than large physical ones. See Allen and Reed (2006) who argue that the aristocratic duel of honor was mostly designed around the gentry.

<sup>12</sup> Beckett (p. 35, 1986).

<sup>13</sup> Bush (p.35, 1984), using a very broad definition of aristocracy, claimed they never comprised more than 2% of the population.

<sup>14</sup> Contrasting with about 1 in 100 on the continent. Beckett (pp. 35–40, 1986).

<sup>15</sup> These offices ranged from the very local to the high offices of the state. See Brewer (pp. 404–406, 1988).

### 3. A theory of aristocracy<sup>16</sup>

The pre-modern aristocracy was an institution—a set of constraints, or property rights, that were devised to control the behavior of a group of individuals. These constraints were designed, mostly by the aristocrats themselves, to fit the circumstances of the pre-modern world—the world before the Industrial Revolution. These institutional constraints not only defined the aristocracy, but more importantly they allowed them to credibly commit to being honest in their dealings with the Crown and other aristocrats.<sup>17</sup>

#### 3.1. Patronage and public service

The provision of what we now call “public service” from the fifteenth to nineteenth century included judicial courts, public finance, sheriffs, state offices, notaries public, local administration, port management, and military services. Today, all are provided by various levels of government through a professional bureaucracy, with payments made through salaries. Until the nineteenth century, however, public offices were either sold outright (by the Crown initially or the subsequent holder) or granted through acts of patronage, and the office was often a form of personal private property.<sup>18</sup> In addition to public offices, positions of power within what today would be called a “Crown corporation” were also given as patronage appointments. These might include customs farms, trade privileges and economic regulations, monopolies, or recusant grants.<sup>19</sup> Almost all major office holdings were controlled or initially held by members of the aristocracy.

Under patronage an appointment was made to an office based on the desires of the patron, and the appointee was expected to act in the interests of the patron. The most important cases of patronage were to members of the nobility. These offices were the most restricted in terms of private property rights, often not including rights to sale of office. However, the right to a great office of the Crown often included the right to sell lesser offices. These lesser offices would generally be hereditary, and were either owned outright or were domainial—held as a lease from the Crown. Although offices usually sold could be given as patronage appointments, there were many offices *only* given as patronage. Income from a patronage appointment came from many sources: a salary, fees, or the right to sell other offices. Often with patronage the appointee could be removed without compensation. In fact, removal from a patronage office often resulted in social ostracism, and the threat of removal was the critical tool in policing patronage appointments.<sup>20</sup>

A patronage appointment was ultimately rooted in the power of the Crown. The king granted a degree of ownership over an office to a servant in exchange for loyal service. It was a system with no examinations, no required skills, and little direct monitoring.<sup>21</sup> Any discovery of a breach of this trust was a serious offense, and the punishment was swift and large. Often even a negative outcome, with no direct evidence of malfeasance would lead to dismissal. Trust was considered a valuable attribute because directly monitoring inputs and outputs in performance of duty was generally unreliable prior to the Industrial Revolution, especially in the performance of service duties.

#### 3.2. The large role of nature

It is difficult to imagine the information problem faced by the Crown prior to the nineteenth century. The Industrial Revolution changed more than just the levels of production; it introduced radical new methods of monitoring. This monitoring ability stemmed from the culmination of several critical innovations that dramatically increased levels of standardization that were unknown beforehand.<sup>22</sup> The final outcome of any service or product prior to 1850, was characterized by large variability. To take a single example, consider a ship due at port on a certain date. Its actual arrival time could be weeks off on either side given the uncertainties of transport by sail. The cargo on the ship would arrive in various qualities, much of which might

<sup>16</sup> This theory draws on Allen and Reed (2006). In that paper the duel of honor is analyzed as a method to screen for unobservable social capital investment made by aristocrats during this era. Here I examine the general institution of aristocracy, not just the dueling feature. As a result I'm interested in the observable investments the aristocracy made in hostage capital.

<sup>17</sup> One feature of pre-modern England, certainly after 1688, was that the Crown was not in the position of an absolute sovereign and was generally bound by the law and Parliament. This prevented blatant confiscation and renegeing on contracts by the Crown. Hence, the constraints imposed on the aristocracy are generally considered here binding, and any bilateral moral hazard with the Crown is ignored.

<sup>18</sup> See Allen (2005) for a discussion of the details of the purchase and patronage systems. As a general rule, the higher and more important the office, the more likely it was granted through patronage, rather than sale. Hence, many small offices at the local level were held by commoners through purchase. The focus of this paper is on the offices held by aristocrats, and the majority of those were given out through patronage.

<sup>19</sup> Recusants were Catholics, and aristocrats were given grants to enforce laws and penalties against them. They would then keep a share of the takings.

<sup>20</sup> Cannon's Chapter 5 (1984) goes through an enormous list of examples of peerage and gentry patronage appointments and their respective incomes. Most of these positions have no meaning today and their titles are foreign (e.g., “The Clerk of the Estreats”), but could have incomes of £3000 per year. Of the eighteenth century peers, 49 of them had at least eight offices, and some had over 30 (Cannon, p. 64, 1984).

<sup>21</sup> See Aylmer (1961 and 1973) for detailed discussions on the role of patronage in the seventeenth century.

<sup>22</sup> Technical progress in measurement had been on-going for centuries, but the years c. 1750–c. 1850 saw several thresholds reached which caused a discrete jump in the quality of measures. These innovations included the pendulum clock, which provided the first reliable mechanical measure of time; the marine chronometer, which allowed knowledge of position and the development of accurate measures; the Imperial system of weights and measures; standard Greenwich time and standard time zones; steam power; screw propulsion; telegraphs, and a host of hundreds of instruments for precise measure in manufacture.

have depended on the length of voyage and the conditions at sea.<sup>23</sup> The natural elements at sea meant that it was extremely difficult to impute inputs from observing outputs. This impacted everyone employed with some relationship to the cargo, from the ship's captain and lighthouse operator to the port authority and tax collector. Measuring anyone's performance based on the quantity or quality of the cargo would have been unreliable. With the development of chronometers, steam power, turn-screw propellers, refrigeration, and iron clad ships, merchant vessels were able to overcome many of the vagaries of nature, and this allowed for fine tuned scheduling and monitoring, and once again the effect was felt along the entire chain of related occupations. Prior to the Industrial Revolution, just about everything in life involved a large natural component—variance was everywhere, and this led to high variability in product and service quality. After the Industrial Revolution, the role of nature was reduced and meaningful measurement was possible.<sup>24</sup>

Large roles played by variability meant there were large opportunities for capture. If the taxes collected could be lost to highway robbers or reduced by poor weather conditions in a region, they could easily be lost to opportunistic servants. And so a tax collector supervising agents was never certain as to the accuracy of the tax collected, and could hardly hold the agent responsible for every low collection. However, when an agent is not liable for bad outcomes, those outcomes become more likely. Public administration was laced with measurement problems due to the large role of nature in life, and this led to the system of trust through patronage.

### 3.3. The role of trust

In a trust system the patron trusts his servant because the servant stands to lose more from cheating the patron than from cooperating.<sup>25</sup> During the pre-modern era two mechanisms were used to encourage trust: efficiency wages and hostage capital. Because I want to explain the odd behavior of aristocrats, the focus here is on hostage capital, where the servant was required to invest enough in several sunk assets such that the value of the investment was at least as great as the value from cheating the patron.<sup>26</sup> This investment may be called hostage capital because it acts as a bond for good service. If there are a small number of patient players, and if there are strong information flows and signals of actions, then an equilibrium can be sustained where good trustworthy performance results.

The hypothesis proposed here is that the group of servants used to staff what we now call the public administration, were the aristocrats. Aristocrats made excellent servants to their patrons because they invested in sunk capital that was effectively held hostage by the society at large. As long as aristocrats cooperated with the rules laid down by the elite and Crown they were allowed to participate in society and government. Any failure of character, breach of trust, or outright noncooperation was met with a series of punishments ranging from social ostracization to death. All forms of punishment meant a loss of the aristocratic capital investment. The more an aristocrat invested in hostage capital, the more he could be trusted. Given that the rate of return to trust prior to the Industrial Revolution was so high, this most often meant that if it was worthwhile investing in hostage capital, then everything was invested. Aristocrats essentially devoted every major component of their life as a sunk investment to guarantee performance.

## 4. The aristocratic model

Consider a situation where a potential aristocrat is playing a repeated prisoner's dilemma-like game against a continuum of other aristocrats (which may include the royal family). The games are ones of imperfect public monitoring, meaning everyone observes the same noisy signals of play. That is, everyone observes whether an outcome is good or bad, and everyone knows that good outcomes are more likely if cooperative actions are taken.<sup>27</sup> The noisy signal exists because nature plays a role in determining the final outcome.

<sup>23</sup> These conditions held even more true for a captain of a man-of-war. Allen (2002) goes into great detail over the information and incentive problems within the Navy during the age of sail.

<sup>24</sup> This is not to say that there were never pre-modern markets where individuals could not get a handle on risk. Many ordinary business transactions involved cases where decent measures could be made to separate out human from natural variability. In these areas contracts, courts, and insurance markets functioned in the pre-modern era much the way they do now.

<sup>25</sup> Models based on trust have been well worked out. Early papers included Klein and Leffler (1981), Camerer (1988), Iannaccone (1992), and Berman (2000). Models of trust are essentially variations of sustaining cooperation in repeated game settings. See Mailath and Samuelson (2006) for a summary of game-theoretic results.

<sup>26</sup> The major evidence for efficiency wages comes from the fact that there were always more aristocrats than high offices available (Stone, pp. 465–468, 1965, estimates there were between 2 and 3 times as many peers as major offices). Bush notes that

...throughout its history, many of its respected members failed to hold public office simply because the numbers of aristocrats exceeded the available posts. [Bush, p. 54, 1984]

Even Lord Macaulay, writing to his sister in 1833, complained about the excess supply of "gentlemen".

The curse of England is the obstinate determination of the middle classes to make their sons what they call gentlemen. So we are overrun by clergymen without livings; lawyers without briefs; physicians without patients; authors without readers; clerks soliciting employment, who might have thriven, and been above the world, as bakers, watchmakers, or innkeepers. [Trevelyan, 1878, p. 339]

These observations raise a number of interesting questions. Why police behavior with only hostage capital or only efficiency wages? Why use patronage at all, why not sell all positions and capture the rents up front? These issues are not addressed in this paper.

<sup>27</sup> See Green and Porter (1984) for the details of public monitoring games.



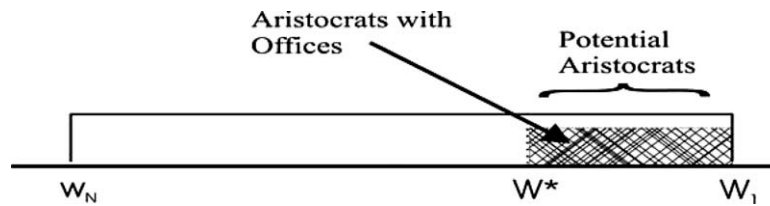


Fig. 1. Distribution of wealth and aristocrats.

One reasonable strategy in such a game is for everyone to cooperate and punish when a bad signal is observed. This strategy is an equilibrium when several conditions are met: the set of players must be reasonably small, they must be relatively patient and not discount too heavily; and the signal must be reasonably strong. Generally speaking, a repeated game with imperfect monitoring is characterized by two features: punishments will happen since eventually bad outcomes (signals) occur; the punishment may happen even if there is no direct evidence of noncooperation.<sup>28</sup>

Consider now the stage game in order to demonstrate the role of hostage capital. Start by assuming three separate employment markets. The first market is an elite, aristocratic, market where self-enforced, long term political trades take place. The second market is a merchant market where physical goods and services are produced and traded. The final market is a quasi Robinson Crusoe farm market where an individual is isolated on an estate and produces agricultural products.

Let there be  $N$  individuals in the population, each born with a different level of wealth,  $w_i^0$ , distributed with an *ex ante* cumulative density function  $F(w)$ , and ranked from highest to lowest (i.e.,  $w_1^0 > w_2^0 > \dots > w_N^0$ ). The level of wealth at birth is *observable*, and is completely liquid. The wealth of any individual may be converted to hostage capital by removing its liquidity and making it sunk. The conversion to hostage capital is also observable, and is given by  $h_i = f(w_i)$ . When wealth is converted to hostage capital it *cannot* be used in the merchant market and its average product is reduced in the farm market.

In the elite market there are  $J$  office positions available, ranked in value to the aristocrat from most to least valuable (i.e.,  $p_1 > p_2 > \dots > p_J$ ), where  $J < N$ . In an elite exchange individuals will be honest or dishonest, depending on whether or not they have the *reservation* level of hostage capital for that position, defined as  $h_i^R$ . For simplicity it is assumed  $h_i^R$  is just sufficient to police elite exchange for office  $p_i$ . The more valuable the office, the higher the hostage capital required to ensure trust and honesty. Thus,

$$\text{if } \begin{cases} h_i \geq h_i^R & \text{individual } i \text{ is honest in office } p_i \dots p_J; \\ h_i < h_i^R & \text{individual } i \text{ is dishonest in office } p_1 \dots p_{i-1}. \end{cases}$$

There is a wealth level  $w^*$ , which is determined by the marginal individual who has just enough wealth to convert to the level of hostage capital required for the last position available  $p_J$ . Since one individual may hold multiple offices, however, this person may or may not actually have a position. This marginal level of capital investment determines the size of the aristocracy, namely the pool of individuals with enough wealth to potentially be trusted in office.

There is a cost to converting wealth into hostage capital, namely the foregone gains that could be obtained in the merchant market. Each individual with wealth above  $w^*$  decides whether or not to convert their wealth to hostage capital. Every individual is a price taker in every market and has no bearing on the *net* returns to capital, which are  $M_i$  for individual  $i$  in the merchant market and  $A_i$  for individual  $i$  in the aristocratic market. This leads to the following corner solution:

$$\text{if } \begin{cases} M_i > 0 & \text{then } h_i = 0, \forall h_i \geq f(w^*); \\ A_i > 0 & \text{then } h_i = w_i, \forall h_i \geq f(w^*). \end{cases}$$

As long as the net rate of return to holding offices is greater than the alternative investments, an aristocrat invests all of his wealth in hostage capital.<sup>29</sup> If the net returns to hostage capital investment are low for the aristocrat, then he invests none of his wealth and stays in the merchant market. Fig. 1 shows the outcome of the stage game. If an individual had wealth lower than  $w^*$ , then no investment in hostage capital is made, since the wealth level is too low to generate trustworthy behavior. These individuals are commoners. Of those who have wealth above  $w^*$ , some invest in hostage capital, become aristocrats, and may hold an office. The cross hatched area shows the fraction of potential aristocrats who actually make the investment in hostage capital and become aristocrats. The remaining area above  $w^*$  are those wealthy individuals who prefer not to make the investment in hostage capital; that is,  $M_i > 0$  and  $A_i < 0$  for them. Hence, this simple model generates three classes of people: aristocratic; middle class; and common.

This stage game may be sustained as an equilibrium in a repeated game with imperfect monitoring because the hostage capital provides an incentive for good behavior on the part of aristocrats. Any aristocrat caught cheating or acting in a way considered not trustworthy is punished and suffers the loss of aristocratic investment. In games of imperfect monitoring

<sup>28</sup> See Mailath and Samuelson, chapter 18 (2006). Punishment also happens when a player is noncooperative, and a player changes behavior to this strategy if something happens which makes cooperation no longer incentive compatible.

<sup>29</sup> Since  $M_i$  and  $A_i$  are the gross returns net of the foregone gains in the other market, they cannot both be positive.

punishment happens when bad outcomes happen, even though there may be no direct evidence of bad behavior. This was the case with the pre-modern aristocrats.<sup>30</sup>

## 5. Explaining the aristocracy<sup>31</sup>

To be a member of the pre-modern aristocracy meant several things. First, a family required a coat of arms, confirmed by royal heralds.<sup>32</sup> Second, a significant land holding was necessary. Aristocratic estates were usually a minimum 5000–10,000 acres, with the largest spanning up to 180,000 acres.<sup>33</sup> Third, the land was contractually restricted across generations. That is, the current aristocrat was only a tenant for life, and the ability to exploit the land through alienation was seriously hindered. Fourth, the land must have been held within the family for more than one generation, and preferably longer. Fifth, the aristocrat was expected to maintain a certain lifestyle that by modern standards would be considered dissipating. Sixth, loyalty to the class was paramount and demonstrated through social contacts, intermarriage, and service to the Crown. And finally, any slight to one's honor was to be met with a dueling challenge. In this section I go through the specifics of these various constraints in order to show how they are all consistent with the hostage capital theory.

### 5.1. Entry and exit

The English aristocracy was not exclusively defined by a blood line, and in principle was an “open elite”. Although entry to the peerage was possible with the Crown's permission, in practice it was not very open at all, and almost all of the new positions were filled by lower ranked peers. These entrants were mostly in the form of promotion in ranks, or the elevation of younger sons and other relatives. Exceptionally few commoners with no aristocratic connections made the social leap to the peerage.<sup>34</sup> Things were different at the bottom of the gentry pool. Wealthy commoners or commoners who had provided some exceptional service were able to enter the gentry through the purchase of an estate and begin the process of social recognition. Movement up came through a series of investments ranging from marriage, investment in estates, good service, and education. The process of moving through the lower gentry generally took two–three generations, and movement into a peerage could take over a century.<sup>35</sup> In addition, the gentry was constantly being fed by the younger sons of peers who did not qualify for peerage based on the system of primogeniture. Some of these made it back to the peerage, others remained as gentry or left altogether. Thus, to some degree, the aristocracy was fluid in its membership at the bottom, but it was a long road to a peerage.<sup>36</sup> A potential entrant had to invest in certain ways, while always under the observation of others in the aristocracy. The starting point in the journey was an investment in land.

Land was always the *sine qua non* attribute of the aristocracy, the test of rank and position.<sup>37</sup> However, it was hardly sufficient, and being the first member of a family to purchase a landed estate never garnered immediate acceptance into the social elite.<sup>38</sup> Once a family had obtained an estate it had to be improved, and these improvements had to be of a specific type. To begin with, a country house, known as a “seat” was to be built. The country seat functioned not only as living quarters, but also as a quasi-public space for other local gentry. Large rooms were built for entertaining and hosting guests for extended stays. Large tracts of land were to be taken out of production and rebuilt as parks and gardens. An interesting feature of the country seat was its isolation—often even isolated from the local village.<sup>39</sup>

<sup>30</sup> The model is overly simplistic in order to focus on the role of hostage capital. As a result, the model predicts that those who invest in hostage capital will not cheat. A more realistic model could allow for the possibility of cheating either through mistakes in matching offices with the appropriate hostage capital, or through exogenous shocks that could alter the return to cheating. Clearly, history provides numerous examples of untrustworthy servants: Admiral Byng and John Churchill being two of the more famous.

<sup>31</sup> This paper is only concerned with the British aristocracy. Other European nations had aristocrats, presumably for the same reasons as Britain. However, considering them is beyond the scope of this paper.

<sup>32</sup> A coat of arms was a necessary condition for entry into the aristocracy and early on was synonymous with it. However, problems with fraudulent arms both increased the policing of arms and reduced their significance.

<sup>33</sup> To put this into perspective, the Homestead Act of 1862 created western farms of 160 acres. Until recently a North American wheat farm of 1000 acres was considered large, and currently a small-grain farm of 10,000 acres is big.

<sup>34</sup> This is the major thesis of Stone and Stone (1984). Cannon (1984) also contends that the peerage was only open in principle, and in practice was essentially closed. Of the 229 peerages created in the eighteenth century, 206 had some connection with nobility (p. 20), and so he concludes that any new positions were “not so much replenishment as re-cycling” (p. 21).

<sup>35</sup> This process may appear too long. Why make a self-sacrificing investment that will not pay off for 100 years? Inter-generational utility aside, one must keep in mind that the process involved steps. Investments were made, and lower positions granted. Later, more investments were made, and better positions were possible.

<sup>36</sup> And so it was that the founding member seldom made it in. According to Beckett the eager-to-be aristocrat spent time: ...building a manor house, extending the property, acquiring a coat of arms, inter marrying with the local elite, and ensuring a proper education for the next generation. [p. 92, 1986]

<sup>37</sup> Stone and Stone (p. 295, 1984).

<sup>38</sup> One might wonder how an individual became wealthy without land or membership in the aristocracy to begin with. However, this points to the fact that there were always options outside the aristocracy for gaining wealth (e.g., merchant trade, professions, industry). The aristocratic monopoly was over the provision of high public office.

<sup>39</sup> Many literary writers (e.g., Evelyn Waugh in *Brideshead Revisited*) refer to the isolation and boredom of living at the seat. Among the nonfiction: “The perennial complaint about country houses—apart from the boredom of living in them—was that they cost their owners too much, both to build and thereafter to live in.” (Stone and Stone (p. 349, 1984)). See also, Stone (pp. 388–391, 1965).

In addition to improved land, the owner's children were to be "properly educated", and they were to marry appropriate members of the elite. Families that continued to marry in the merchant, professional, or lower classes seldom were able to raise their status.<sup>40</sup> Aside from land, education, and marriage, there were a host of other, less well defined, terms for entry. For example, many families emerged from the masses through success in some merchant enterprise. It was a standard expectation that the family would give up the occupation that earned the income necessary to purchase an estate if it wished to gain entry.<sup>41</sup> Similarly, investing in industry or commercial activity was frowned upon and could lead to a movement down in the social ranks.<sup>42</sup> Since most industrialists did not do this, they were considered vulgar and not allowed in. Loyal service to the Crown, especially through military service could speed up the process, but this did not eliminate the other requirements. Most striking of the entry requirements was that there was no hard and fast rule. A family was admitted and considered aristocratic when it was accepted.<sup>43</sup>

In contrast, exit from the aristocratic group was easy, quick, and often permanent. A breach of trust, an adulterous affair, a decline of a duel, meant instant and complete exile from the aristocratic class. In addition, often a bad specified outcome was enough to face removal from office, even if there was no direct evidence of bad behavior.<sup>44</sup> If the infraction was directly against the king the punishment might be prison or decapitation, but generally it meant banishment from court. The family would remain on its estate and live off the rents, but it was socially cut off.

All of the characteristics of entry and exit are consistent with the simple aristocratic model. Entry was allowed because the aristocracy played an important role in the administration of the country, and because demographic failure was a stark reality of the pre-modern era.<sup>45</sup> The striking theme among entry conditions was that an entrant had to demonstrate investments in hostage capital. Some investments were more observable than others, and many took time to observe, and so acceptance took a long time. In addition, in order to achieve repeated cooperation it is important that the aristocrat be patient and not discount the future benefits too heavily. By extending the time necessary to become an aristocrat the system naturally screened for patient people. Still the over-riding feature is that they were large sunk investments.<sup>46</sup>

In the sections below I discuss land investments and the role of education in more detail, but consider the other investments. First, estates were isolated because urban centers offer a host of alternatives to elite living, which reduces the punishment of social ostracism. An alternative society might have had their ruling class live in urban centers, but this reduces the ability to punish bad behavior. Although the elite often maintained a town house, the bulk of their household investment and time was at the country seat. Second, marriage into the aristocracy, even at the lower levels, meant that one's social life was tied to the group. Ignoring the quality of these relations, by forcing aristocrats to limit their social contacts, the ability to punish through social exclusion increased. Third, requiring a merchant family to give up its historical source of business removed an obvious exit strategy for cheating. Allowing a family to hang on to a prosperous business meant, again, that punishing bad behavior would be incomplete if the family could remain wealthy through business. Fourth, the informal rules of acceptance made it very hard for strategic cheaters to enter the elite group. A cheater is one who pretends to make specific investments, but who is intending to cheat when allowed in. Cheaters need to know the specific rules so they can determine if entry is worthwhile. The ultimate rule of general acceptance meant that a cheater might meet all the explicit terms of entrance and still never be allowed in the ruling class. The rule of general acceptance meant that subjective judgments could be made about an individual's "character" over and above the specific investments.<sup>47</sup> Finally, when a violation was confirmed, exit was quick because all that mattered in the patronage system was the knowledge that trust was violated. The purpose of the aristocracy was to provide a pool of trustworthy types. Any discovery that an individual was not trustworthy meant immediate removal from the system.<sup>48</sup>

<sup>40</sup> This was a major issue in the eighteenth century, and several bills were brought from the Lords to the Commons to prevent "mismatched" love marriages. This culminated with the 1753 Marriage Act which strengthened the patriarch's power by, among other things, requiring his permission to marry if the child was under 21, and by requiring the reading of banns for one month within the parish (Cannon, p. 74, 1984; Beckett, p. 103, 1986). A fictional account is found in *Pride and Prejudice*, in a conversation between Bingley, his sisters, and Mr. Darcy. "I think I have heard you say, that their uncle is an attorney in Meryton." "Yes; and they have another, who lives somewhere near Cheapside." "That is capital," added her sister, and they both laughed heartily. "If they had uncles enough to fill all Cheapside," cried Bingley, "it would not make them one jot less agreeable." "But it must very materially lessen their chance of marrying men of any consideration in the world," replied Darcy. To this speech Bingley made no answer; but his sisters gave it their hearty assent, and indulged their mirth for some time at the expense of their dear friend's vulgar relations. (Austen, pp. 36–37, 2003).

<sup>41</sup> Stone and Stone (p. 290, 1984).

<sup>42</sup> Bush (p. 68, 1984).

<sup>43</sup> A good signal was when one was asked to act as Justice of the Peace, Sheriff, or some other position of local authority. Heal and Holmes, in answering the question 'who were the gentry?', claim "the gentry were that body of men and women whose gentility was acknowledged by others." (p. 19, 1994).

<sup>44</sup> For example, British naval captains were required to be up wind of the enemy in an engagement (the weather gage). Failure to take the weather gage, even if the captain claimed the wind failed to cooperate, was met with some type of discipline—usually movement to half-pay.

<sup>45</sup> Very precious few families can trace their line back in time uninterrupted. In the Stone and Stone samples between 20% and 40% of land owners did not have a surviving son between 1660 and 1800 (p. 101, 1984). Entry was also important because economic growth would have required a larger ruling class. For the first half of the pre-modern aristocratic era, however, per capita economic growth was flat.

<sup>46</sup> Entrance into the aristocracy almost always took place at the bottom where errors in estimating an individual's trustworthiness were least costly.

<sup>47</sup> There were occasional instances throughout the pre-modern period when the entrance requirements of the aristocracy were violated. For example, during the early Stuart reign James I attempted to raise funds by selling knighthoods. As Stone and Stone note, the position of knighthood became "a title without social distinction, and therefore meant nothing in terms of social integration." (p. 241, 1984).

<sup>48</sup> Given that there was always a surplus of aristocrats, there was never a problem finding a replacement.



## 5.2. The strict family settlement

The purchase of a landed estate may have been the initial move towards aristocracy, but it was hardly sufficient. Indeed, it was the restrictive conveyances on the land that signaled an intent to be more than a landowner. Under the feudal aristocracy, property rights to land were restricted by law. Established in 1285, English property was held entail through primogeniture, which meant that there was a continuing estate passing from one generation to another through the eldest son. In 1614, just as the pre-modern aristocrats were emerging, the common law courts of England struck down the ability to place perpetual restrictions, such as entails, on property.

This posed a serious problem for the emerging aristocrats who needed to use the land as a form of hostage capital, and it was solved by the middle of the seventeenth century when landowners began placing a conveyance on their property called the “strict family settlement”.<sup>49</sup> The goals of the strict family settlement were threefold. First, the practice of primogeniture was preserved to the extent it was possible. Although many often focus on the feudal practice of passing estates to the eldest son, the identity of the recipient was not as important as the practice of preventing the estate from being split. Often an estate would pass to others in cases of premature death, lack of an heir, etc. Second, younger sons, daughters, and widows were to be cared for through payments from the estate, and these payments could be significant. Finally, the rights of the current property holder were contractually constrained over generations. The settlement usually covered two generations until the son was 21 or the daughter was married, but could cover until the grandson was 21. In practice it was a complicated document, with multiple conditions depending on the survival and sex of the future generations. The effect of these restrictions was to prevent the sale of the property, restrict long term leasing, curb many productive uses of the land (e.g., mining), and increase the cost of mortgaging the land. According to Stone and Stone this legal creation “enabled a landowner to tie the hands of his heir and turn him into a tenant for life”.<sup>50</sup>

Unlike the feudal system of entails, the family settlement was a *voluntary* act on the part of aristocrats to “bind their hands”.<sup>51</sup> It not only restricted the uses of the lands, but it provided for other members of the family beyond the eldest son. Many large landowners who were not peers, did not constrain their land. At the same time, on many occasions when the opportunity presented itself for an aristocrat to leave the settlement, the option was rarely exercised. Indeed, in their sample Stone and Stone find less than 5 examples over 350 years.<sup>52</sup>

The strict family settlement dealt with more than just the land. An estate consisted of five elements: the “seat” or home, the landed estates, the furniture and other mobile capital, the family name, and any titles. The major goal of the settlement was to make sure that these elements all remained in tact and bundled together.<sup>53</sup> Thus, when there were multiple children the younger sons and daughters were given cash settlements in the form of annuities and dowries. They were not given part of the estate, which was passed on intact to the heir.<sup>54</sup>

More interesting was the desire to maintain the estate even when there was a failure in the male line. The family settlement would contain provisions allowing for a male cousin or other distant kin to inherit. If none were available, then the estate could pass to a daughter, and if she married the husband would often be required to adopt the family name. In this way, the estate was passed on to pseudo-kin. When an aristocratic line went extinct, the estate reverted back to the Crown, and the entire bundle could be reinstated at a later time.<sup>55</sup> At all times, the goal was to preserve the estate in its entirety.

Adam Smith was greatly opposed to the legal restrictions put in place by the strict family settlement. In *The Wealth of Nations* he states:

<sup>49</sup> The best discussion of the family settlement is Bonfeild (1986).

<sup>50</sup> Stone and Stone (p. 73, 1984). The strict family settlement explains why aristocrats were in the habit of describing each others wealth in terms of flows rather than stocks (as in Mr. Darcy receives ten thousand a year).

<sup>51</sup> “The strict settlement was an ingenious legal device, but it was invented by conveyancers to meet the wishes of their clients.” Stone and Stone (p. 78, 1984).

<sup>52</sup> Stone and Stone state:

... the full force of social convention and family custom brought to bear by his kindred, ‘friend’, trustees, and advisers such as the family clergyman, solicitor, and conveyancer ... [made it such that] ... only an unusually independent or unusually irresponsible young man ... would be able to stand up to such psychological pressures. [p. 78, 1984]

They go on to say,

When the premature deaths of their fathers left young men free to do as they pleased, few of them took the opportunity to sacrifice long term family interest to short-term personal advantage. [p. 79, 1984]

<sup>53</sup> Stone and Stone (p. 72, 1984), Heal and Holmes (p. 39, 1994) point out the falling importance of lineage during the transition between the feudal aristocrats and the pre-modern ones. Demographic failures of many male lines hinders the use of an estate as hostage capital when there is strict primogeniture. Being loose with lineage solves this problem and allowed the estate to remain intact.

<sup>54</sup> Many critics of aristocracy focus on this inheritance aspect and note how, even if the original holder had merit, there is no guarantee that his descendants will. However, this misses the point. The value of an aristocrat came from hostage capital, not human capital, and the aristocratic institutions were designed to keep the hostage capital together.

<sup>55</sup> It was very common for a title to go extinct. Stone and Stone find, depending on the county examined, that between 1660 and 1800 the percentage of families that did not have a surviving son was 20–40% (p. 101, 1984). For example, in 1444, Humphrey Stafford, 6th Earl of Stafford, was created 1st Duke of Buckingham, and his line went extinct in 1521 with the execution of the 3rd Duke. King James I made George Villiers the 1st Duke of Buckingham in 1623, but the title died with the death of his son in 1687. Queen Anne made John Sheffield the 1st Duke of Buckingham in 1703, and the title again went extinct with the death of his son in 1735. Finally, Richard Nugent Temple Grenville was, for the fourth time, made the 1st Duke of Buckingham in 1822.

...nothing can be more completely absurd. They are founded upon the most absurd of all suppositions ... that the property of the present generation should be restrained and regulated according to the fancy of those who died perhaps five hundred years ago. [Smith, p. 415, 1994]

Quite naturally, Smith saw the settlement as a binding constraint that hindered the incentives of the current land owner without any consequent benefit. He argued that the settlement prevented the land from being put to its best use and discouraged investment:

There still remain in both parts of the United Kingdom some great estates which have continued without interruption in the hands of the same family since the times of feudal anarchy. Compare the present condition of these estates with the possessions of the small proprietors in their neighbourhood, and you will require no other argument to convince you how unfavorable such extensive property is to improvement. [Smith, p. 417, 1994]

What Smith failed to recognize was that the family settlement had a purpose other than maximizing agricultural output.<sup>56</sup>

Investment in land has the advantage that it is easily observable and valued. The problem with it is that it can easily be resold. This created a problem for aristocrats wanting to use land as a form of hostage capital. If a land owner is unrestricted in his rights to the land, then the land can be sold when necessary and it ceases to act as a bond for good performance. The strict family settlement was an ingenious way of placing effective encumbrances on the property which allowed the land to become hostage capital. Land that was unrestrained could be sold, and therefore could not act as a signal of trustworthy performance. As a result, failure to enter into such an agreement negated the ability to enter or remain in the aristocracy.

The strict family settlement included the title, seat, coat of arms, furnishings, and the like because these items were less easily observed and measured when not tied directly to the land. By tying everything together the aristocracy created an enormous class of hostage capital that others could easily recognize. When others recognized the hostage capital investment, then it became valuable as an entry condition for political office. Of course, any breach of trust meant that resale was virtually impossible, and most of the investments were lost. The very aspects that Smith complained about are the features which gave the family settlement its value.

### 5.3. Education

Nobility prior to the pre-modern era were a warrior class and formal education was not a significant part of their life. In contrast, the pre-modern aristocracy was a social elite defined by investments in hostage capital, and their education was an important factor in entering the elite. One of the distinguishing features of the aristocracy was not just the incentive to attend public schools and university, but also to attend specific schools and focus on specific types of learning. In terms of content, the emphasis was on knowledge that was not practical and had no alternative use outside aristocratic occupations. The young gentleman was to learn ancient languages like Greek and Latin.<sup>57</sup> There was an emphasis on classic literature and liberal arts. There was an outright avoidance of any type of training in the trades or skills, and a professional education was tolerated only for younger sons.<sup>58</sup> A proper education also meant that students went to the right schools.<sup>59</sup> Finally a major part of a gentleman's education came on the "Grand Tour" where the young man would travel the continent with a private tutor to "imbibe culture (and perhaps life experience) in foreign climes".<sup>60</sup> In the end, the aristocracy fostered a reputation for amateurism which encouraged pursuits that were unpaid and untrained for.<sup>61</sup>

There was a purpose to an education in a dead language: it was worth little outside aristocratic social circles. The purpose of attending the same schools was to develop social ties among the aristocracy, and to cheaply signal to others that the education was not practical. The switch from private tutors to a few small schools throughout the eighteenth century was to encourage further social connections.<sup>62</sup> Education is a means of developing social ties among the aristocracy. Social connections that lead to productive human capital investment, however, dilutes the role of hostage capital. By forcing young aristocrats

<sup>56</sup> The great economist J. S. Mill also had similar sentiments regarding the use of aristocratic lands.

The truth is, that any very general improvement of land by the landlords, is hardly compatible with a law or custom of primogeniture. When the land goes wholly to the heir, it generally goes to him severed from the pecuniary resources which would enable him to improve it. ... [Mill, p. 286, 1865]

<sup>57</sup> They also were trained in music and dance.

<sup>58</sup> Beckett (p. 102, 1986). John Locke noted:

Latin I look upon as absolutely necessary to a gentleman ... Can there be anything more ridiculous, than that a father should waste his own money and his son's time in setting him to learn the Roman language, when at the same time he designs him for a trade ...? [Locke, Section 164, Part X, 1692, 1996]

Cannon notes: "... boys read almost exclusively in Latin authors and when they proceeded to university often did little more than read them again." (p. 34, 1984).

<sup>59</sup> Cannon (p. 41, 1984), notes that in the last half of the eighteenth century 72% of peerage children attended either Eton, Westminster, Winchester, or Harrow.

<sup>60</sup> Beckett (p. 102, 1986).

<sup>61</sup> Bush (p. 75, 1984). A modern remnant of this is the Olympic Games, which were established with the principle of amateur athletes, not because this embodied a truer nature of sport, but because the modern Olympics were intended to be the realm of aristocrats.

<sup>62</sup> The quality of these social connections and the depth of investment in this type of social capital is unobservable, and therefore not relevant to this paper. See Allen and Reed (2006) for how the duel screened for this investment.

to invest in learning with little use outside of the elite group, the young gentleman again invests in hostage capital. Any aristocrat caught cheating would be expelled from the group, and the investment in Latin would be worthless.

#### 5.4. Extravagant living and voluntary service

The pre-modern aristocracy distinguished themselves from earlier nobles and the rising middle class by the incredible extravagance that was expected in their lifestyle. Their homes were massively over-built, with large sections that were quasi-public spaces for entertaining the other families in their county. Large sections of their estates, up to 5000 acres, were devoted to elaborate gardens and parks, and taken out of production.<sup>63</sup> They were expected to have parties on a regular basis and hosted hunts and horse races. The aristocracy was to provide schools and churches for their communities. The country seat was usually isolated and not part of a village or town. This isolation led to the common complaint that country life was not just expensive, but it was boring.<sup>64</sup> This type of living was called “port” and an elite was expected to engage in it.<sup>65</sup>

At the same time, an aristocrat was expected to provide voluntary community service and to engage in charitable activities towards the commoners under their authority.<sup>66</sup> Aristocrats served as justices of the peace, sheriffs, deputy lieutenant, commissioner for taxes, members of the county bench, members of Parliament, and magistrates in a volunteer capacity. Furthermore, they were actively involved in charity, and placed a high value on generosity and considered it a hallmark of their station in life.<sup>67</sup>

By now the role of this type of behavior should be obvious. Expenditures on ostentatious living were visible sunk expenditures that acted as hostage capital. Volunteer work and charity were other forms of sunk investments. Should an aristocrat ever be found faulty, there would be no recouping the investment in elaborate parties, gifts to the poor, or time spent on the bench. The only way these expenditures can lead to payoffs is for the aristocrat to continue to reside in the elite group.<sup>68</sup>

#### 5.5. Wealth levels

The aristocratic model predicts that two classes of wealthy individuals would have existed during the pre-modern era: aristocrats and a middle class or bourgeoisie. Given the enormous cost, length of time, and uncertainty involved in becoming an aristocrat, the gross rates of return to the aristocracy must have been higher on average during the pre-modern era: extreme self-sacrifice required extreme rewards. Thus, if the aristocracy was selected and rewarded for the services of faithful servant, then the rewards for such service must have been competitive against other occupations. For some individuals, however, the extra returns to the aristocratic life would not have been worth the cost, and they would have remained middle class, which grew throughout the pre-modern era, and eventually took over.<sup>69</sup> From 1780 on it was common for successful industrialists to purchase large tracts of land; however, this did not place them among the aristocratic class, and they were generally not accepted as such.

Unfortunately systematically comparing wealth and income levels between aristocrats and merchants prior to the nineteenth century is impossible. Only in 1809 do probate records begin in a usable form, and although two surveys of estates were made during the nineteenth century, it was not until 1895 that the Inland Revenue began recording estates probated by level of wealth. Indeed, only in the 1858 survey of wealth was occupation listed. Complicating matters, wealth often only included personalty and not realty which was tied up in the family settlement. Having said this, however, there is considerable qualified evidence to show that prior to the eighteenth century being wealthy and being a member of the aristocracy was almost synonymous. That is, the gross rate of return to the aristocracy was greater than the merchant market for the average wealthy individual.

There are a number of estimates of average peer income in the late seventeenth and early eighteenth centuries, ranging from £2800 per year to £6030 per year. Soltow (1968) reports a study on incomes in 1688, in which Temporal Lords earned £3200 per year on average. The only two classes of individuals who come close to a merchant or middle class are ‘eminent and lessor merchants by sea,’ who earned £400 and £198 per year on average, respectively.<sup>70</sup> It is known that several peers at this time had incomes that exceeded £25,000 per year, and that by 1710 incomes greater than £10,000 per year were not uncommon.<sup>71</sup> By 1801, the average peer income was £8000 per year, while the average income for merchants, lawyers, and

<sup>63</sup> In *Pride and Prejudice* Elizabeth Bennet notes the timing of her first feelings for Darcy: “But I believe I must date it from my first seeing his beautiful grounds at Pemberley” (Austen (p. 353, 2003)). To the modern reader this smacks as mercenary on Elizabeth’s part. However, at the time she would have recognized that the grounds, the happy tenants, and the housekeeper’s praises signaled trustworthy merit in Darcy’s character.

<sup>64</sup> Stone and Stone (p. 349, 1984).

<sup>65</sup> Stone and Stone state: “. . . an obligation to spend generously, even lavishly on occasion, as part of one’s duty to society, in return for the privileges of wealth and membership of the ruling class.” p. 185, 1984.

<sup>66</sup> Beckett notes: “. . . the majority of aristocrats accepted that their inheritance included an ethos of service in the community”.

<sup>67</sup> Bush (p. 75, 1984)

<sup>68</sup> One problem with using hostage capital to ensure trust is that many might pretend to convert their wealth, when in fact, most of it remained liquid. This explains why many of the specific investments were so lavish and public. Conspicuous investments in consumption activities are relatively inefficient investments in hostage capital. However, their observability to others made them worthwhile.

<sup>69</sup> Beckett (Table 2.1, p. 50, 1986) claims that by 1870 there were 4217 owners of estates 1000 acres and up. Of these 400 were peers. Although he does not separate out commoners from gentry, they are included in the number.

<sup>70</sup> Soltow (pp. 18–18, 1968).

<sup>71</sup> Beckett (p. 288 1986).

**Table 1**

Numbers of wealthy by time period.

	1809–1858	1859–1879	1880–1899
<i>Millionaires</i>			
Aristocrats	4	5	7
Commoners	0	2	4
<i>Half millionaires</i>			
Aristocrats	10	13	9
Commoners	3	2	5

Source: Rubinstein, p. 210, 1981.

laborers was £800, £350, and £31, respectively. At a time when a very good doctor or lawyer might make £500 per year these sums were enormous.<sup>72</sup> Although the Soltow numbers are only two snapshots of income, they show that the incomes of the aristocracy were far larger than all other classes of individuals during the pre-modern era.

In his seminal work on wealth and income among the very rich in nineteenth century Britain, Rubinstein (1981) finds a number of facts consistent with the model here. Table 1 shows the distribution of the very rich across social classes and time, and shows a number of things. First, there were very few individuals with over one million pounds in the nineteenth century. Indeed, Rubinstein claims there were no recorded millionaires in the eighteenth century. Second their number increases over time, and by the turn of the twentieth century they start to increase considerably. Finally, early in the century the very wealthy are dominated by the peers and gentry, though the proportion of commoners among the very rich starts to grow from then on. Of the landed incomes in 1883 greater than £75,000 per year all 29 were made by peers, and in 1873 there were only 77 business incomes in Britain that exceeded £50,000 per year.<sup>73</sup> Although prior to the nineteenth century there were always a few untitled very wealthy landowners like Andrew Montagu, “by far the single most important element in British wealth structure [was] landed wealth”.<sup>74</sup>

Rubinstein breaks down the numbers of wealthy Britons by profession, which provides evidence that further supports the model. Among the category “professions, public administration and defence” there is a rapid decline in the number of wealthy after 1840.

The decline in this category ... occurred above all among those who earned their fortunes in the public administration and defence sphere ... Why was this? This was the end of ‘Old Corruption,’ the world of patronage ... [Rubinstein, p. 71, 1981]

In other words, Rubinstein is claiming that aristocrats were able to earn large sums in patronage appointments that disappeared with a professional bureaucracy. Rubinstein follows with a long list of members of the wealthy elite and the size of the estate they left at death. For example, Charles 1st Baron Arden (1756–1840), Registrar of the Court of Admiralty left £700,000. There are no commoners among the list. Later, when examining the close relationship to the size of estate in acres and income levels, Rubinstein notes that,

As with their wealthier counterparts, there are examples of men with very low landed incomes whose fortunes are inexplicably at variance with their stated incomes... The fortunes ... can be assigned with some definiteness to ‘Old Corruption,’ the world of government patronage and place. [pp. 204–205, 1981]

Again, he follows with a list of *titled* individuals.

All available evidence there is seems to speak with one voice. Prior to the Industrial Revolution the very wealthy in Britain were almost always members of the aristocracy. During this time, and with very few exceptions, only members of the aristocracy were allowed to participate in patronage, and members of this servant class amassed large fortunes. This suggests that the rate of return to the pre-modern aristocratic lifestyle must have been greater than any other option for the average potential aristocrat. What is remarkable is that it takes until the twentieth century for the merchant/industrial class to take over the position of the wealthiest individuals—almost 100 years after the Industrial Revolution. Becoming a member of the aristocracy was costly, but it would appear that the rewards existed to support these expenses.

### 5.6. The end of the aristocracy

Dukedoms may be abolished by the year 2000—we pretend to no opinion on that point—perhaps no man save John Stuart Mill could give us even a reasonable prophecy: but of this we feel assured, that if they are not abolished an English Dukedom will in that year be a prize beyond all social compare—a prize such as the Throne is now—a position of the ultimate

<sup>72</sup> Soltow, p. 19, 1968.

<sup>73</sup> Rubinstein (p. 196, 1981).

<sup>74</sup> Rubinstein, p. 193, 1981.

goal of all that is great, or ambitious or rich among a race which will by that time be ruling directly or indirectly over half the world [Sanford and Townsend, p. 20, 1972 (1865)].

Bold as they were in their prediction in 1865, Sanford and Townsend got it wrong. At the dawn of the 21st century a dukedom was still a matter inheritance and elitism, but it had long since diminished as a prize above all others, and English dukes rule no one, let alone half of the world. Yet at the time of their writing the future of the aristocracy could hardly have been predicted different. Around the middle of the nineteenth century the aristocracy was, by most accounts, an elite without comparison. Approximately 7000 families owned about four-fifths of the land in the British Isles. After three centuries of wealth accumulation the top 250 pre-modern aristocratic families had estates and treasures virtually without comparison anywhere in the world. Their social status was intact and alone. They dominated the church, judiciary, army, law, civil service, Commons, and of course, the House of Lords. By any measure, the pre-modern aristocracy were an elite in terms of status, power, and wealth... just as they had been from c. 1550.

By 1890 the world had changed for aristocrats.<sup>75</sup> Various acts of Parliament had transferred rights from them to commoners, and restricted their ability to legally distinguish themselves. The Settled Land Acts 1882–1890 removed the strict settlement clauses and freed land owners from the restrictions on sale. The County Councils Act 1888 replaced Justices of the Peace with elected councillors. The Reform Acts 1864, 1867 and the Secret Ballot Act 1872 allowed Parliament to be dominated by commoners by extending the voting franchise and shifting seats from rural to urban centers. And the Parliament Act of 1911 denied the House of Lords the right to sanction legislation by taking away their veto powers. These acts, however, reflected a reality that had begun slowly and earlier in the nineteenth century, when industrialists and the rising middle class began to challenge the status and power base of the aristocracy. The occasional non-noble began to match aristocratic wealth levels by mid-century, and by 1914 were surpassing them. Some industrialists even started to enter into the aristocratic class through the back door of purchased titles, estates, and mimicked behavior.<sup>76</sup>

After three centuries of stable dominance the dramatic decline of the aristocracy was revolutionary—yet peaceful, and, for the most part, voluntary.<sup>77</sup> At the mid-point of the nineteenth century the landed class controlled the voting for Parliamentary seats, but by 1918, with the Fourth Reform Act, there was universal male suffrage—the majority of whom were landless and working class.<sup>78</sup> Ironically, the Reform Acts which brought about this change were passed by the patrician House of Commons. Furthermore, the landed gentry voluntarily sold the vast majority of their estates, creating the largest block of land transfers since the monastic dissolutions which had taken place at the dawning of their reign.<sup>79</sup> In the years surrounding World War I alone, almost 1/3 of the land in England was sold by aristocrats.<sup>80</sup> Along with the selling of land came the destruction of the lavish country seats and palatial town homes.<sup>81</sup> The general patronage of the arts ceased, and large collections were broken up. The introduction of open competition into the civil service, ecclesiastical patronage, and the law ended the aristocratic dominance of the professions. The number of titles and honors increased, and recipients were from all classes. It became a common practice for wealthy men to “purchase” titles through strategic donations. By every account and all margins the aristocracy left within a period of seventy years.

The quick decline of the aristocracy is well documented.<sup>82</sup> The question here is, why did the last quarter of the nineteenth century see the break up of estates, county governments become bureaucratic, the removal of patricians from the House of Commons, a professional army, and the dilution of high society? The answer does not lie in falling land values, American wheat, Corn Laws, Marxian revolts, or extended voting rights, which were all outcomes of deeper changes. The answer lies in two underlying fundamental changes brought about by the Industrial Revolution.

First, there was a deep change in the nature of measurement. The increased standardization brought about by the many innovations of the Industrial Revolution caused a significant fall in the variance of production outcomes.<sup>83</sup> This fall in variance allowed workers to be monitored directly through observation, measurement of hours, or performance. The measurement filtered through the entire economy. Although production clearly moved from small cottage industries to factories, the effect

<sup>75</sup> This is noted by historians, but also Tennyson at the time: *Hope the best, but hold the Present fatal daughter of the Past, / Shape your heart to front the hour, but dream not that the hour will last* (Locksley Hall Sixty Years After) Alfred Lord Tennyson, though born among the minor gentry, had to wait almost his whole life until he was made a Baron in 1884. Unfortunately for him, it was just the time when the aristocracy was quickly losing all that he admired. In Locksley Hall he laments the future of the elite and wonders at the speed of the decline.

<sup>76</sup> The appearance of successful grocers like Lipton and Lusk in country seats in the very late nineteenth century were symbols of the first serious erosion of traditional standards of status hierarchy. [Stone and Stone, p. 289, 1986]

<sup>77</sup> By the early twentieth century, nearly two-thirds of the aristocratic estates had changed hands after three centuries of monumental legal, social, and political efforts to keep them together (Stone and Stone, p. 425, 1984).

<sup>78</sup> Cannadine places the last nail in the political coffin in 1911:

But it was 1911 that had been the great turning point. At the behest of Lloyd George, the people's trumpet had sounded, and through the blast had been a little uncertain, the citadel of patrician pre-eminence had finally fallen. Symbolically, and substantively, the political power of traditional landed society had been broken for good. [p. 54, 1990]

<sup>79</sup> Cannadine notes “In scale, this was land reform on a par with Bolshevik Russia: the hereditary owners, who had held the land for centuries, held it no more.” (p. 105, 1990).

<sup>80</sup> Cannadine, p. 111, 1990.

<sup>81</sup> Between 1870 and 1939 300 British mansions were destroyed (Cannadine, p. 119, 1990).

<sup>82</sup> See Cannadine (1990) for a definitive and detailed study.

<sup>83</sup> See Allen and Barzel (2008) for a detailed discussion.



was felt in service industries as well.<sup>84</sup> The civil service began staffing based on exam performance, professional standards, and input monitoring, which were too costly before the age of detailed measurement. In particular, the role of trust, as the foundational building block of public service was eroded. The removal of trust as the basis of appointment meant that the social institutions designed to generate that trust were no longer needed. For three centuries political power, social status, and wealth had virtually gone hand in hand, since status was a necessary condition for trustworthy political service, which led to wealth creation. By 1911, with the removal of the Lord's right to sanction legislation, the three were no longer necessarily intertwined.

Second, there was a significant change in the middle class. The opportunities for wealth creation through the market place increased relative to political offices. As this rate of return ( $M_i$ ) increased, the cost of making aristocratic hostage capital investments increased. Hence, the Industrial Revolution brought about a fall in the benefits and a rise in the costs of the pre-modern aristocracy.

The best evidence for this claim lies in the peaceful and voluntary nature of the transition. The aristocratic lifestyle was second-best and expensive. The posting of hostage capital was costly and the use of amateur staff meant lost output from reduced specialization. This system worked while trust was so important, but when measurement could substitute for trust and the opportunity cost of hostage capital increased, other forms of organization dominated. Hence, in the fifty years that spanned 1875–1925, aristocrats generally sold out because it made them better off. There was little point in engaging in such a costly lifestyle when the benefits of hostage capital no longer existed.<sup>85</sup>

## 6. Conclusion

Cannon puts the puzzle well:

It is not easy to see how the elevation to the peerage of . . . [list of names] . . . contributed to that self sustaining economic growth . . . We are not, after all, dealing with the elevation of captains of industry . . . but with persons who . . . owed their peerages to years of tactful service at court, to sound voting in the House of Commons, or to the possession of borough interests. [p. 19, 1986]

How could this group, known for its extravagant and foolish lifestyle, be a part of the rise of British supremacy in the pre-modern era? The standard answer is that they were not. Most have viewed the pre-modern aristocrats as extreme status seekers. However, such an explanation falls short. The modern aristocracy, which includes the likes of Conrad Black and Paul McCartney, is a status centered one where the purchase of title is common, large rural estates unnecessary, new titles are mostly for life, and where most of the trappings of the pre-modern aristocracy are missing. If the aristocracy was simply a matter of achieving status, it should always have been accomplished at least cost, and this was clearly not the case prior to 1850. The pre-modern aristocracy, on the other hand, was serious business, and although it was costly it was tied to economic growth because the elite provided a very valuable service. The institutional detail of their group, which looks as complicated as Chinese grammar on the surface, were the signals of this good service.

As western Europe emerged from the feudal system, the opportunities for wealth creation through trade, exploration, and production grew as well. In order to exploit these opportunities nations required a strong rule of law and the ability to protect the rights of citizens without succumbing to the “problem of the Sovereign”.<sup>86</sup> In modern times our ability to monitor service performance allowed for the development of bureaucratic institutions. However, prior to the Industrial Revolution, such measurement was not possible. The solution in England was found in granting governing rights to an elite group who were able to commit to trusting behavior by posting significant levels of hostage capital. I have argued that this elite group are those individuals we have come to call “the aristocracy.”

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<sup>84</sup> It is beyond the scope of this paper to provide a series of examples, but consider the following. The officers of the Royal Navy during the age of sail was staffed by aristocratic patronage. As I argue in Allen (2002) this was designed to police the problem of captains seeking out wealthy enemy merchant prizes rather than fighting naval battles. Propulsion by wind meant that failure to complete almost any duty could be blamed on nature. The British designed a complicated system, centered around aristocratic patronage, to deal with this. Once steam was introduced by the mid nineteenth century into ships, the ability to measure the performance of captains increased dramatically. The efficiency wages, Articles of War, complicated promotions, spying, and aristocratic patronage all went. The same story could be told over again for virtually every public service. Measurement allowed for professionals to replace trust.

<sup>85</sup> Cannadine (pp. 125–136, 1990) goes through a number of examples of cases where aristocratic incomes were higher after estates were broken up, sold, and the proceeds invested. The fact that homes were actually torn down is strong evidence of how inefficient they were to live in.

<sup>86</sup> The problem of the Sovereign is the dilemma whereby a strong sovereign is able to protect his subjects from others, but cannot credibly protect them from himself.

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