

RELIGION, WARRIOR ELITES, AND PROPERTY RIGHTS

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Abstract

In 1119 C.E., King Baldwin II of Jerusalem granted nine French knights space in the Al Aqsa Mosque on the Temple Mount over the ruins of Solomon's Temple to create the headquarters of a new monastic order: The Poor Fellow-Soldiers of Christ and of the Temple of Solomon (*Pauperes commilitones Christi Templique Solomonici*). The Knights Templar, or Templars, as they have become known, grew in wealth and power after that modest beginning to become an influential and pervasive organization throughout Western Europe until the years before their suppression by King Philip of France in 1307.

The Templars were only one of a number of Christian holy orders of "warrior monks" founded after the First Crusade. The Knights Hospitaller (Order of Saint John) and the Teutonic Knights are the most well-known, but at least fourteen other orders were founded in Syria, in Central and Eastern Europe, and in the Iberian Peninsula.

More importantly for this paper, the Templars are one example of what we label "warrior elites." Our definition of warrior elites is not precise, but is intended to include pre-industrial full-time specialized soldiers that represent a relatively small part of a region's military forces but possess disproportionate military strength. In addition, warrior elites often possess significant political and social power.

This paper explores the extent to which warrior elites have two characteristics: they adopt a special religion, either different from the mainstream religion or a unique adaptation of the mainstream religion, and the special religion has doctrinal provisions which enforce property rights. To the extent warrior elites have these two characteristics, we hypothesize they are an example of a social institution that evolves as a low-cost alternative to government and to ordinary religion as a method of property rights enforcement.

Our preliminary analysis yields mixed results. Certainly there are examples of warrior elites who have the two aforementioned characteristics: the Templars and at least some of the other post Crusades warrior monks being examples.

By contrast, the loyalty to leaders by Japan's samurai the Ottoman Empire's Janissaries likely eroded a well-defined system of property rights is not consistent with our hoped-for results.

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In 1119 C.E., King Baldwin II of Jerusalem granted nine French knights space in the Al Aqsa Mosque on the Temple Mount over the ruins of Solomon's Temple to create the headquarters of a new monastic order: The Poor Fellow-Soldiers of Christ and of the Temple of Solomon (*Pauperes commilitones Christi Templique Solomonici*). The Knights Templar, or Templars, as they have become known, grew after that modest beginning to become a powerful, wealthy, and pervasive organization throughout Western Europe

More importantly for this paper, the Templars are one example of what we label "warrior elites." Our definition of warrior elites is not precise, but is intended to focus on full-time preindustrial specialized soldiers that represent a relatively small part of a region's military forces but possess disproportionate military strength. In addition, warrior elites often possess significant political and social power. We restrict the definition to warriors before the emergence of modern centralized governments.

This paper explores the extent to which warrior elites have two characteristics: they adopt a special religion, either different from the mainstream religion or a unique adaptation of the mainstream religion, and the special religion has doctrinal provisions which enforce property rights. To the extent warrior elites have these two characteristics, we hypothesize they are an example of a social institution that evolves as a low-cost alternative to government and to ordinary religion as a method of property rights enforcement.

A substantial body of literature has drawn attention to the role of property rights in the level and direction of economic development and activity, property rights being broadly defined as the right to use, earn income from, and transfer a good. Early examples of this literature include classic work by Coase (1937), Demsetz (1967), and Alchian and Demsetz (1973). Well-defined property rights in turn reduce transaction costs, encouraging economic activity. Menard (2004) provides a comprehensive overview the property rights and transactions cost literature. Allen (1995) extends this work to the church noting especially that Catholic Church doctrine evolved to encourage priestly financial honesty.

In previous work, we argue that religious institutions and doctrine can serve as alternatives to family, community, and government in defining and protecting property rights (Hull and Bold, 1989, 1994). Fukuyama (1995) makes a similar argument. In fact, the historical prevalence of religion may reflect its secular role as a low cost instrument for defining and enforcing property rights. The basic rationale is that if a populace believes adherence to or violations of an established set of rules will result in some sort of divine reward or punishment, people will tend to follow those rules. The symbiotic relationship between a society and a religion will direct religious toward such things as non-salvageable, quality-assuring capital including large religious structures, priestly garb, and unique icons. Further, the religion's doctrines about the afterlife in general and about rewards for good behavior or punishment for bad behavior after death will change in predictable ways as religion is more or less important in property rights enforcement. Religion's temporal reward and punishment structure will follow a

similar pattern. Research focusing on the High Middle Ages supports the argument (Cleeg and Reed, 1994; Hull, 1989).

It is clear that other property rights enforcement methods, notably government-produced coercion, can and do coexist with religion. This paper explores the interplay between religion and government coercion as alternative institutional tools for enforcing property rights. Of particular interest are “belief frontiers” where the degree of belief is less strong and coercion will be relatively more effective constraining undesired behavior. An internal belief frontier exists where people within a society do not adhere to the rules set forth by the religion, and coercion through some police force becomes more common. An external belief frontier exists on at the geographic edge of the society where a different society with a different religion exists.

This framework suggests a possible societal path. A more localized society possessing an effective religion experiences economic growth because it has a defined and divinely enforced property rights system. With increased wealth and trade, growth takes two forms. There is a transition to greater specialization and trade with other societies as well as geographic expansion which pushes the geographic extent of the society outward. In both instances there is contact with people who may be less inclined to follow the religion-based property rights system. In other words, a society with a successful religion-based property rights system may have an inherent tendency to evolve to one in which religion plays a declining relative role and institutions for coercive enforcement become increasingly important.

Note that a substantial literature focuses on the rent-seeking behavior of religious organizations, following from the assumption of profit maximization (Anderson, et al., 1992; Ekelund, et al., 1996). This is not a competing hypothesis. Profit maximization is not inconsistent with production of valuable products.

Case Study: The Templars (period of interest: 1119-1307 C.E.)

The First Crusade culminated with the capture of Jerusalem in 1099. Christian control of Jerusalem in turn made the city more attractive to pilgrims and others traveling to the Holy Land. Although the city itself was relatively safe for Christians, the intervening travel route was not. Further, most of the crusading knights who captured Jerusalem had returned to their homes, leaving the city and Kingdom of Jerusalem with only minimum defense. The Templars were founded to protect the route to the Holy Land. Soon after, the order's mission expanded to include its defense (Forey, 1992, pp. 18-19). Later and especially after the fall of the Holy Land, the order participated in the defense and reconquest of the Iberian Peninsula.

The Templars initially received support for their efforts in the form of money and especially of estates donated by nobles concerned about keeping Jerusalem in Christian hands. Bernard of Clairvaux was an early benefactor who also promoted the Templars throughout Medieval Europe. The order's prosperity was assured when Pope Honorius II endorsed it at the Council of Troyes in 1129 and when Pope Innocent II granted it exemption from temporal laws and taxes in 1139.

Templars were a warrior elite. They were elite in part because they were few, numbering no more than several hundred in any region (Forey, 1992, pp. 77-83). They were few in part because each one was very expensive to train and support. Each was heavily armed and armored and was trained to fight effectively on foot or on horseback. In the latter case, development of an effective stirrup and the breeding of heavy horses gave mounted knights tremendous striking power, especially against lightly-armored cavalry or less disciplined infantry. Likely the most dramatic illustration of the Templars as warriors came at the Battle of Montgisard in 1177, where a force of perhaps five hundred Templars and a few thousand supporting infantry crushed Saladin's army of twenty-six thousand. Interestingly, Saladin's battle losses included his personal bodyguard of Mamluks, another warrior elite.

Templar numbers were limited as well by the order's demands on its members. Members adopted a version of the Benedictine Rule including vows of poverty, chastity, and obedience:

58. You who have abandoned the pleasant riches of this world, we believe you to have willingly subjected yourselves to poverty; therefore we are resolved that you who live the communal life may receive tithes.

17. For if any brother does not take the vow of chastity he cannot come to eternal rest nor see God,

1. We speak firstly to all those who secretly despise their own will and desire with a pure heart to serve the sovereign king as a knight and with studious care desire to wear, and wear permanently, the very noble armour of obedience.

[The Primitive Rule of the Templars, translated by Upton-Ward (1992)]

Members of course were bound by the same standards as other Christians and some of these standards clearly benefited society in way significant here. The Ten Commandments, for example, included prohibitions on murder, theft, and dishonesty. It seems reasonable to presume members of the order were expected to adhere to these standards more strictly than the general population given the degree of their commitment to the faith.

As mentioned, the order received significant donations of land and money directly to support defense of the Holy Land. Because of the vow of poverty, additional significant Templar income came from new members donating their wealth and estates. Further, nobles traveling to the Holy Land on pilgrimage or to fight allowed the order to manage land (and receive a portion of its income) while absent. Eventually more of the order's members lived in Europe, maintaining these estates, than lived in the Holy Land.

Of special interest to our research, however, is Templar financial and trade activity. The order built a chain of forts to protect the route to the Holy Land. To support these forts and its efforts in the Holy Land and to transport pilgrims, the order built and maintained a fleet, also engaging in significant international trade. The Templars became bankers, lending money to pilgrims and knights and even to kings, managing to avoid the Christian prohibition on charging interest on loans. King Philip IV of France's suppression of the order in 1307 might well have been motivated in part by a desire to eliminate his debts to the Templars. Interestingly, Philip did not confiscate Templar estates, choosing instead to transfer them to the Hospitallers.

The order created what might be the first example of a debit card and ATM system. Travelers to the Holy Land deposited cash at a Templar facility in Europe and received a letter of credit, possibly coded. The traveler redeemed part or all of the funds, less a fee, at Templar facilities en route or upon arrival. Not only did this practice reduce the risk of a traveler being robbed, it eliminated the difficulty in an era before efficient currency markets of exchanging silver currency used in Europe with gold currency common in the Near East (Marvin, 1989).

The Knights Templar were an international banking, trade, and travel conglomerate. They became wealthy, but they became wealthy by providing valuable goods and services at relatively low cost. Their cost advantage came in part from their temporal tax exemption, but also from their ability to freely cross national boundaries and from the low cost of uncertainty about the reliability of their services.

This latter point tends not to be acknowledged. Financial markets were in their infancy, and especially in the area of banking, widespread institutions protecting participants from opportunistic behavior had not evolved. The unique character of the Templars and their code and beliefs assured product quality. Note also, during the trials of Templars after their suppression, the focus of accusations was on religious not financial misbehavior. As mentioned, it was their very success at banking that made them King Philip's target. It might even be argued that the order's suppression and the decision by other orders to discontinue banking and financial activities set back European progress in this area.

Case Study: The Hospitallers (period of interest: 1113 to 1565 C.E.)

The story of the Hospitallers is similar to that of the Templars, but with a different emphasis. The Order of Hospitallers or Knights Hospitaller began as group of men supporting a hospital in Jerusalem intended to aid Christian pilgrims. After Jerusalem was captured by Christians in the First Crusade, the Hospitallers organized as warrior monks under the Benedictine Rule and were confirmed as such by Pope Paschal II in 1113. The Hospitallers defended the Holy Land until, along with the other holy orders, Jerusalem and other of the Holy Lands were reconquered by Muslim forces. The order established itself on Rhodes and then on Malta, continuing to defend against Muslim advances from the east as well as in the Iberian Peninsula. The successful defense of Malta against the Ottoman leader Suleiman in 1565 was the last time members of the order fought as armed knights. The order then changed its (increasingly modest) focus to efforts against the Ottoman-sponsored Barbary pirates.

The Hospitallers engaged in trade, banking, and finance activities as did the Templars, but on a more modest scale. In addition, and as mentioned, those activities largely ended when the Templars were suppressed.

Land as a source of wealth was always more important to the Hospitallers than to the Templars and of course Hospitaller holdings increased significantly after the Templar's suppression. The order had estates (commanderies) Portugal, Spain, Italy, England, Ireland, Germany, Eastern Europe, and as many as two hundred fifty in what is now France (Sire, 1994).

The holdings mainly consisted of agricultural estates, but also included hospitals for the sick, facilities for travelers, villages, and even convents.

Consistent with this paper's hypothesis, the Hospitallers managed their assets responsibly, with an eye to long-run benefits. In 1296, Master Vissaret in granting a charter of independence to the village of Le Burgaud stated: "The more the town grows in consequence of the liberties accorded the inhabitants, the more the house of St John also will prosper." (Sire, 1994, p. 107). When he took possession of the commandery in Cours in 1459, Fortanier de Lat took a formal oath to protect the vassals: "That he will be to them a good lord and legal and will guard their right and their liberties and their usages and will guard them from wrong and from force of his own and of others of his legal power." (Sire, 1994, pp. 107-8, 290) French commanderies prospered even until the French Revolution, during which time they were confiscated. Commanderies in other nations lasted even longer. The order also maintained roads and bridges in their holdings. They were active in reclaiming and attracting settlers to wild lands in Southern France and in Germany. That vassals tended to move away from exploitive estates and toward prosperous ones, is an enforcement of the order's policies (Bloch, 1961).

Not only did the it benefit its from exemption from temporal taxes, but the order's beliefs and practices further enhanced land values. Having taken a vow of poverty, the inclination of individual members to exploit land holdings for personal benefit was attenuated.

Case Study: The Samurai (period of interest: 1100s to 1603 C.E.)

The definition of the term samurai is somewhat imprecise. In use among historians, a samurai is "a lightly armored mounted archer characteristic of Japan after 1100" (Farris, 1992, p. 1). The term samurai means literally "one who serves" and can also refer to a person occupying the Sixth Court Rank who served a person of higher rank (one of the first five court ranks). A person occupying the Sixth Court Rank need not have been a warrior, however, nor did all warriors serve in the court. Before and even after the term samurai entered common usage, these specialized warriors were typically called *bushi*. Not all samurai rode horses nor did they rely on the bow.

Japan's Heian period, roughly 794 to 1100, was characterized by a bureaucratic central government similar to China's. "Heian" refers Japan's capital city during the period: Heian-kyō, or modern Kyōto. Of interest to this paper, military technology evolved during the Heian period. At the start, the imperial army consisted mainly of relatively poorly trained and equipped mass peasant militia. Over time, mounted archers became more common and eventually completely replaced the peasants as fighters (Friday, 1992). Well-trained mounted horse archers could literally run rings around foot soldiers and kill them at ranges that posed little risk to the archers. As with Europe's mounted knights, innovations in saddles and stirrups complemented this new method of warfare.

But, as in the case of the Templars and other knightly orders, an effective mounted fighter required specialized skills and training and expensive equipment. Instead of being

recruited from the peasantry, *bushi* were hired by the Emperor as needed from the lower nobility in the capital as well as the provinces. The lower nobility were relatively wealthy and had time available for training.

At the end of the Heian period, the *bushi* began to employ their unique military power to acquire political power, culminating in 1185, when Minamoto no Yoritomo seized significant imperial powers and gave himself the title Shogun. Although the emperor remained Japan's nominal leader, *bushi* maintained practical control of the central government until the latter 1860s.

Establishment of the Shogunate gave samurai control of the central government, but did not assure the central government's control of Japan. In fact, the power of the central government began a five hundred year decline: sometimes labeled Japan's Medieval Period (Adolphson and Ramseyer, 2009). Warfare between local leaders, which had occurred before, became more serious, culminating in a full-scale civil war from 1467 to 1573. Local leaders kept samurai on permanent retainer and hired others as needed. Samurai in turn benefited to the extent they could align themselves with a successful leader, and those alignments could and did change.

What role did religion play in a samurai's life? Did the samurai adopt a unique religion? Interestingly, new forms of Buddhism came to Japan at the beginning of the Medieval Period. While much of the population adopted Pure Land Buddhism, the samurai tended to choose Zen Buddhism. This, at least, is consistent with our hypothesis.

As adopted by the samurai, Zen Buddhism did not encourage behavior conducive to property right enforcement, however. Not just Buddhist doctrine, but samurai teachings in general tended to focus on loyalty to the leader and fearlessness in battle (Wilson, 1982, p. 33).

When one is serving officially or in the master's court, he should not think of a hundred or a thousand people, but should only consider the importance of the master. Nor should he draw the line at his own life or anything else he considers valuable.

[Hojo Shigetoki, The Message of Master Gokurakuji, 1256, in Wilson, 1982, p. 38]

So the interesting question is whether or not Medieval Japan can be considered a successful society. If Japan during this time was successful, samurai doctrine is not consistent with this paper's hypothesis. However, to the extent the Medieval period can be regarded a failed society, the paper's hypothesis is supported. That is, the society was a failure in part because the samurai did not adopt a religious doctrine useful to society.

One perspective comes from recent work by Adolphson and Ramseyer (2009). These authors argue that the Medieval Japanese government largely failed. They further argue that Buddhist temples and monasteries became substitute enforcers of property rights: "By helping to secure basic claims to property, the temples and monasteries helped to promote investment and growth; by competing against the government itself, they helped to forestall the crippling effect of a predatory monopolistic state." In other words, religion did play a role in enforcing property rights in Medieval Japan, but the instrument of that enforcement was the church, not the warrior

elite. This conclusion does not contradict our more general view of religion's role in preindustrial societies.

Historians date the end of Japan's Medieval Period as 1603 when Tokugawa Ieyasu unified Japan and established himself as shogun. The Tokugawa Shogunate endured until it was abolished in 1867 during the Meiji Restoration. The Tokugawas period was peaceful, stable, and rigid, perhaps in its later years more accurately described as ossified. The powerful central government successfully ended warfare between estates and generally neutralized the samurai as active warriors. As the era progressed, samurai became more or less wards of the state or petty bureaucrats (Yamamura, 1971).

Case Study: The Janissaries (period of interest, late 1300s to 1826)

Founded in about 1300, the Ottoman Empire eventually encompassed the western Mediterranean region, the entire Middle East, and Egypt (Goodwin, 1998). It eventually declined, evolving into the nation of Turkey in the early 1900s. During much of its existence, the empire's leader or sultan employed a class of elite infantry warriors called Janissaries, the term meaning "new troop." The Janissaries typically constituted about ten percent the Ottoman army's numbers.

Formed after about 1383 by Murad I, the Janissaries were first recruited from prisoners of war and slaves and not long after from Christian boys in the Balkan territories of the empire given as an alternative to taxes. Behavior standards were strict and included celibacy. A recruit did not formally enter the ranks until age twenty-five and then only after proving worthy. The Janissaries adopted (or were forced to adopt) Bektashism, a sect in the Islamic Sufi tradition founded by Hajji Bektash Wali expressly for the Janissaries under orders from Sultan Murad II. The sect borrowed significant rituals from Christianity. Interestingly given that recruitment was from youth, higher ranked individuals in the sect are called baba (father) and dede (grandfather).

Although certainly elite warriors, the Janissaries are not a warrior elite as defined in this paper. Until after the late 1500s, they exercised no political power. Further, given their loyalty and attachment to the Sultan, they served to protect property rights only to the extent this was the Sultan's objective. But the Sultans tended not to impose themselves on conquered regions, leaving a fairly loose administration whose main objective was to levy taxes and tribute. Who provided a legal structure? "Charismatic sects, chivalric orders, brotherhoods, and guilds imposed codes of behavior which maintained a kind of order in areas where authority such as Osman's was weak" (Goodwin, 1998, p. 9). Note again religion's enforcement role.

The late 1500s saw the beginning of three trends. First, recruitment and requirements became more lax. The celibacy rule was relaxed in 1566, volunteers were accepted, and Muslim from within the empire joined the ranks. Recruits eventually also came from the children of Janissaries with little restriction or training.

Second, and following from the first, the military effectiveness of the Janissaries declined. They had been military innovators, being early adopters of the musket, for example. But over time, innovation ceased. Their suppression came in part because they objected to the Sultan forming newer units based on western models.

Third, at the peak of their military power, they began to make increasing demands on the Sultan. These began with simple extortion: striking for higher wages. Eventually, the Janissaries staged palace coups to install malleable sultans. They became landholders and business owners. Eventually they dominated Ottoman politics.

Thus they became an elite, but were not warriors.

The Janissaries were suppressed and killed by Mahmud II in 1826 after the mutiny mentioned above.

Conclusion

This very preliminary analysis of warrior elites shows at least some support for the hypothesis that they adopt unique religious doctrines of value in protecting property rights. Clearly the Templars and the Hospitallers did so and we would expect to find similar results for the other European Medieval holy orders.

But other results are weaker. Although the samurai adopted a unique religion and were certainly elite warriors, their actions during much of the period of interest did little to help their host society. On the other hand, to the extent Medieval Japan's economy failed in achieving its potential, the samurai's failure to protect property rights is a useful counter-factual. In addition, the role Buddhist monasteries and temples substituted for the government (and the samurai) provides some support to our general theory of religion.

By our definition, the Janissaries in their early history were elite warriors but not a warrior elite. In their later history, they were an elite but not warriors. We suspect other examples in this same mold might include Rome's Praetorian Guard and Tsar Peter's elite Streltsy soldiers.

Obviously significant additional research is required. Additional warrior elites should be analyzed, examples include the Mamluks and the Immortals. In addition, our current case studies present only the cursory examination of the warriors and their context. As an additional issue, these warrior elites existed in roughly the same historic period and might be a response to the extant military technology, as might the cause of their demise: the increasing power of central government and effective weapons usable by mass armies that required discipline, but not skill.

Nevertheless, we feel this first effort provides an interesting addition to the body of work relating religion to property rights enforcement.

REFERENCES

- Adolphson, Mikael and J Mark Ramseyer, 2009. The Competitive Enforcement of Property Rights in Medieval Japan: The Role of Temples and Monasteries. Journal of Economic Behavior and Organization 71, no. 3: 660-68.
- Alchian, Armen A. and Harold Demsetz, 1973. The Property Rights Paradigm. Journal of Economic History 33, no. 1: 16-27.
- Allen, Douglas W., 1995. Order in the Church: A Property Rights Approach. Journal of Economic Behavior and Organization 27, no. 1: 97-117.
- Anderson, Gary M. et al., 1992. An Economic Interpretation of the Medieval Crusades. The Journal of European Economic History 21, no. 2: 339-64.
- Bloch, Marc, 1961. Feudal Society. Chicago: University of Chicago Press.
- Clegg, Nancy W. and Clyde G. Reed, 1994. The Economic Decline of the Church in Medieval England. Explorations in Economic History 31, no. 2: 261-80.
- Coase, Ronald H., 1937. The Nature of the Firm. Economica 4: 386-405.
- Demsetz, Harold., 1967. Toward a Theory of Property Rights. American Economic Review: 347.
- Ekelund, Robert B. et al., 1996. Sacred Trust: The Medieval Church as an Economic Firm . Oxford: Oxford University Press.
- Farris, William Wayne, 1992. Heavenly Warriors; The Evolution of Japan's Military, 500-1300. Cambridge, Massachusetts: Harvard University Press.
- Forey, Alan, 1992. The Military Orders: From the Twelfth to the Early Fourteenth Centuries. London: MacMillan Education Limited.
- Friday, Karl F., 1992. Hired Swords: The Rise of Private Warrior Power in Early Japan. Stanford, California: Stanford University Press.
- Fukuyama, Francis, 1995. Trust; The Social Virtues and the Creation of Prosperity. New York: The Free Press.

- Goodwin, James, 1998. Lords of the Horizons: A History of the Ottoman Empire. New York: Henry Holt and Company.
- Hull, Brooks B., 1989. Religion, Afterlife, and Property Rights in the High Middle Ages. Studies in Economic Analysis 12, no. 1: 3-21.
- Hull, Brooks B. and Frederick Bold., 1994. Hell, Religion, and Cultural Change. Journal of Institutional and Theoretical Economics 150, no. 3: 447-64.
- _____. 1989. Towards an Economic Theory of the Church. International Journal of Social Economics 16, no. 6: 5-15.
- Marvin, Lawrence W., 1989. Bankers in Armor: A Financial History of the Knights Templar. Master's Thesis, University of Wyoming.
- Menard, Claude E. ed., 1997. Transaction Cost Economics: Some Recent Developments. Edward Elgar: Northampton, Mass.
- Sire, H. J. A., 1994. The Knights of Malta. New Haven: Yale University Press.
- Upton-Ward, J. M., translator, 1992. The Rule of the Templars: The French Text of the Rule of the Order of the Knights Templar. Woodbridge, Suffolk, UK: Boydell Press.
- Wilson, William Scott, translator and editor, 1982. Ideals of the Samurai. Santa Clarita, California: Ohara Publications.
- Yamamura, Kozo, 1971. The Increasing Poverty of the Samurai in Tokugawa Japan, 1600-1868. The Journal of Economic History 31, no. 2: 378-406.