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THE CULT OF MARTYRS

ABSTRACT.

This paper suggests a rational explanation for extreme voluntary sacrifice in situations in which the state of the world when the decision must be made is observable only by the agent. Such explanation is the cult of martyrs, heroes, and saints. This cult may get out of control and fuel fanaticism, or excessive sacrifice from the standpoint of the sponsoring organization. A survey of the historical evidence of Christian martyrdom strongly suggests that martyrs were driven by the expectation of a cult in this world, not by otherworldly rewards. In particular, it is argued that the evidence of excess martyrdom in both Muslim Spain and the Roman Empire strongly speaks for the cult theory.

1. Introduction

Economists have recently tried to come to grips with the difficult problem of finding a rational explanation for martyrdom, or the voluntary sacrifice of one's life ostensibly made for the purpose of serving the common good, however understood. The main contributions to this literature include Azam (2005), Ferrero (2006), Harrison (2006), Wintrobe (2006). Though widely different, all these approaches share the feature that no reliance is placed on the expectation of reward in the hereafter, which makes the models applicable to both religious and secular martyrs – a valuable feature since both types abound, and sometimes shade into one another, in the real world. On the other hand, all the mentioned approaches also share one limitation: the need or usefulness of the life sacrifice in a given circumstance is public information, so that each model concentrates on conditions for individual participation and suggests a device that makes the contract enforceable, or the commitment self-enforcing. Relatedly, in such a setup, the demand for martyrs is not analyzed, or is implicitly assumed to be unlimited: the organization knows what it wants and when it wants it done, its only problem is to motivate people to do the job.

While the assumption of full information is often adequate, this is not always the case: the long, varied history of martyrdom from ancient times to the present is replete with examples in which the specific occasion for martyrdom is observable only by the individual or group on the spot, not by the organization which sponsors them. Furthermore, the mismatch between need and deed, or demand and supply of particular actions, can occur both ways: sacrifice may not be forthcoming when the organization would welcome it if it only knew the relevant circumstances, and conversely, suicidal action may be undertaken that ultimately harms the organization. In other words, perhaps surprisingly, even for an organization that sponsors self-sacrifice there may be too much of a good thing, as the classic instances of both early Judaism and early Christianity clearly exemplify. If that is the case, then clearly the problem must lie with the incentives.

This paper works within the framework set forth in Ferrero (2006) and develops it to account for unobservable martyrdom situations and the possibility of excessive, as well as insufficient, supply of martyrs. It retains the basic idea that there is a *probability*, not certainty, of death, which makes expected utility theory applicable, and which places martyrdom on a continuum of contracts that can encompass military heroism, political insurgency, civilian self-immolation, and other high-risk operations. The only conceptual

innovation the paper makes with respect to received utility theory is the assumption that (some) people care about the way they will be remembered after death: even though their preferences may give no weight to life in the next world, altruism toward family or community, or within-group solidarity as such, they value the survival of their good deeds in the collective memory of those who will have witnessed their sacrifice. The device that ensures this is the cult of martyrs, or of heroes, that the organization, or "society" itself, will keep alive. This key assumption does not seem outlandish – arguably less so than regard for the common good of future generations (as in Azam, 2005), trading life for identity (as in Harrison, 2006, building on Akerlof and Kranton, 2000), or switching the leader's preferences for one's own (as in Wintrobe, 2006). On reflection, most people value some kind of earthly survival beyond death: most ordinary people through their offspring, Ludwig van Beethoven or Leonardo Da Vinci through their immortal art, and some people through becoming the object of the survivors' cult. These people will naturally tend to be young, unmarried, and not especially gifted, which accords well with the observed demographic characteristics of martyrs around the world. Finally, since the cult need not be reserved to those who died in action but can be, and often is, extended to those who died peacefully after an exemplary life of sacrifice, the model naturally lends itself to an explanation of saints.

The remainder of the paper is organized as follows. The next section sets forth a simple hidden-information, principal-agent model of the cult. Section 3 engages in a selective review of historical evidence that broadly supports features of the model, while section 4 is devoted to an extended discussion of Christian martyrdom in search of support for the cult model as against the hereafter hypothesis. The last section draws some policy implications and conclusions

2. A simple model

The full-information model set forth in Ferrero (2006) envisages a two-period contract between an organization and an individual. This "martyrdom contract" offers members certain benefits in the first period and probabilistic benefits in the second period, when the individual's sacrifice of life may be called for, in which case if he complies his benefits are zero. If his martyrdom is called for but he reneges on his contract, he incurs a social sanction or stigma. Individuals accept the contract if it yields a level of expected utility that is no lower than their reservation utility. Members comply and undergo martyrdom, if and when

requested to, if the sanction on reneging is sufficiently strong. The contract is thus viable and efficient to the extent that the organization is in full control of benefits and sanction. However, the sanction provides an adequate enforcement device only if the realization of the requirement of martyrdom, and hence the actual occurrence of compliance or reneging, can be observed costlessly by all parties. If such realization is private information to the agent, then there are no grounds to apply the sanction and deterrence of reneging requires a different incentive mechanism.

To sharpen our focus on essentials, consider a single period when the realization of a random state variable, θ , occurs, and consequently an action, a, is undertaken by the agent. While the organization observes the actual action, the realization of θ is observed only by the agent. For simplicity, assume that both variables can take on only one of two values: martyrdom (M) and non-martyrdom or normality (N), where the action of martyrdom means that one "behaves like a martyr", i.e. is willing to sacrifice his/her life, though not necessarily dying in the process. A situation of martyrdom is one that in the organization's judgment would call for the agent's sacrifice, if only the organization knew enough about it. A martyrdom situation ($\theta = M$) occurs with probability P, known to all parties. Both the principal/organization's returns and the agent's utility depend on the action conditional on the state, in the following way. The organization gains returns $r(a, \theta)$ which are higher when the action matches the situation, i.e. $(a, \theta) = (M, M)$ or (N, N), than when it does not, i.e. $(a, \theta) =$ (M, N) or (N, M), while it could be $r(M, M) \ge r(N, N)$. Call the pair $(a, \theta) = (M, M)$ appropriate martyrdom, the pair $(a, \theta) = (N, N)$ appropriate non-martyrdom, the pair $(a, \theta) =$ (M, N) excess martyrdom or fanaticism, the pair $(a, \theta) = (N, M)$ insufficient martyrdom or defection; that is, fanatics are those who act like martyrs when the situation does not warrant such behavior, while defectors are those who avoid sacrifice when the situation would call for it. Therefore, while there is no presumption that appropriate martyrdom should generally be better or worse than appropriate non-martyrdom, we assume that the organization's long-term interests are harmed if either excess martyrdom or insufficient martyrdom occur. Thus:

$$r(M, M), r(N, N) > r(M, N), r(N, M)$$
 (1)

Turning to the agent, without loss of generality, we assume risk neutrality on the part of the agent. People who engage in such activities are not noted for their aversion to risk, and risk aversion would only complicate the algebra without yielding any additional insight. As is standard in the principal-agent literature, we assume that individuals' utility is an additively

separable function of the benefits provided by the organization for each action, b_a , and the cost of action, $c(a, \theta)$. With a dichotomous structure of both a and θ , we have:

$$U = b_a - c(a, \theta)$$
 with $c(M, \theta) > c(N, \theta)$ for any θ ; $a, \theta = M, N$ (2)

For future reference, let us specify a more structured cost schedule:

$$c(M,N) \ge c(M,M) > c(N,M) \ge c(N,N) \tag{3}$$

The first specification of the cost schedule in (2) is obvious: it simply says that in any state of the world, life is preferred to death. The specification in (3), however, which satisfies (2) but adds further restrictions on the way cost varies with θ , is not obvious and deserves comment. The first part of the inequality says that martyr behavior when the situation calls for it (M, M) is less costly to the agent than the same behavior when it is unwarranted (M, N). This seems a reasonable assumption but is not a logical necessity: exhibitionists would feel otherwise. The second part of the inequality says that non-martyr behavior when this is just the right thing (N, N) is less costly than defection in a martyrdom situation (N, M). This too seems reasonable, possibly because of the sense of guilt that strikes a defector, but is not a logical necessity: "shameless" people would feel otherwise. These two assumptions about the cost structure are critical: as we will see, if either assumption fails the optimal contract that deters both fanatics and renegades may not exist.

With two types of action we have two values of the benefits, b_M and b_N . While the latter are the ordinary benefits that accrue to group members as a reward for normal behavior, b_M is special. If the martyr's action results in death, as will often be the case, these benefits consist in his anticipation, at the time of action, of the cult that will keep his name and deeds alive, praised and loved through time. This is the "special" assumption about preferences discussed in the introduction.

As a benchmark, let us first examine the full-information situation. If the organization observes the realization of θ , it can direct members' behavior as appropriate and write down the corresponding rewards in the contract. Given a member's reservation utility U°, the organization maximizes its expected net returns subject to the participation constraint:

$$\max_{b_{M},b_{N}} P\big[r(M,M) - b_{M}\big] + (1 - P)\big[r(N,N) - b_{N}\big] \\ s.t. \qquad P\big[b_{M} - c(M,M)\big] + (1 - P)\big[b_{N} - c(N,N)\big] \ge U^{0}$$

Clearly the participation constraint will be binding in the optimal contract. Hence, because of risk neutrality, any pair (b_M, b_N) that satisfies the constraint as a strict equality will be equivalent in the optimal solution – including $b_M = 0$.

We now turn to our central concern, when the realization of the state θ is unobservable by the organization. Now the appropriate behavior in each state cannot be specified ex-ante in the contract. Rather, appropriate incentives must be given to make it in the agent's interest to behave as the principal would want him to behave if she could observe the actual state. The organization's problem becomes:

$$\begin{aligned} \max_{b_M,b_N} P\big[r(M,M) - b_M\big] + (1 - P)\big[r(N,N) - b_N\big] \\ s.t. \quad & (i)P\big[b_M - c(M,M)\big] + (1 - P)\big[b_N - c(N,N)\big] \ge U^0 \quad \text{(participation)} \\ & (ii)b_M - c(M,M) \ge b_N - c(N,M) \qquad \qquad \text{(no defectors)} \\ & (iii)b_N - c(N,N) \ge b_M - c(M,N) \qquad \qquad \text{(no fanatics)} \end{aligned}$$

The participation constraint (i) is now supplemented by two incentive-compatibility, or truth-telling, constraints. Inequality (ii) says that when a martyrdom state obtains, behaving as a martyr yields utility no lower than defecting does; similarly, inequality (iii) says that when a normal situation obtains, the utility from normal behavior is no lower than the utility from martyr behavior, or fanaticism. Note that unlike the PC, the ICs are independent of probabilities: once a state θ is realized, what could happen in a different state does not matter.

Using cost schedule (2), constraints (ii) and (iii) yield:

$$0 < c(M, M) - c(N, M) \le b_M - b_N \le c(M, N) - c(N, N)$$
(6)

If the reward structure satisfies this inequality, the organization will always get what it wants¹ and achieve a first-best outcome as under full information. Also, in the optimal

¹ It may be the case that implementing the contract (5) proves to be too costly for the organization, which would then be better off by giving up on the pursuit of martyrdom entirely. This can be checked by comparing net benefits under (5), with constraint (i) binding, to net benefits when the action requested of the agent is always N and correspondingly $b_M =$

contract the PC (i) will again bind² while the ICs may or may not bind and consequently, condition (6) may or may not be satisfied as strict equalities. As in the full information case, it is still the case that a range of (b_M, b_N) pairs of values is compatible with the optimal contract, but now this range is sharply narrowed: b_M must now be strictly greater than b_N and therefore, if b_N is taken to be nonnegative, it must be strictly positive. Thus while a cult of martyrs is possible but not necessary under full information, it is strictly necessary for a hidden-information contract to work.

Further insight into what incentive condition (6) implies for the working of this martyrdom contract can be gained by looking at the more structured cost schedule (3). If the latter holds with strict inequalities, there is a broad margin to accommodate the efficient (b_M – b_N) value; but if the schedule holds with strict equalities throughout (which implies that c(.) is invariant to θ) then both ICs bind and there is a unique ($b_M - b_N$) value that satisfies condition (6): the optimal contract still exists but is more "brittle". Furthermore, if the inequalities in either the first part or the second part of the cost schedule (3), or in both, are reversed, then there is no assurance that condition (6) can be satisfied. Specifically, if there are exhibitionists who prefer to be martyred when the organization would not want them to, reversing the first part of inequality (3) (c(M, M) > c(M, N)), it is easy to check that condition (6) may or may not hold, depending on how "wrong" they are. Similarly, if there are shameless people who prefer not to be martyred when the organization would want them to, reversing the latter part of inequality (3) (c(N, N) > c(N, M)), condition (6) may or may not hold depending again on how "wrong" they are. Finally, if people are both exhibitionists and shameless so that the b_N, subject to only the PC and IC (iii) (which then reduces to cost schedule (2)). As one would expect, it turns out that contract (5) is optimal for the organization if moving from a = N to a = M when θ = M brings about a greater increase in returns than in costs, i.e. r(M, M) - r(N, M) = r(M, M) + r(M, M) = r(M, M) + r(M,M) > c(M,M) - c(N,M). For the remainder of this paper we assume that this is always the case.

² This is because the incentive constraint (6) depends only on the difference in benefits, not their absolute value. If the agent enjoyed a surplus, benefits level could be lowered while keeping their ratio constant until the PC binds. The fact that asymmetric information in this model entails no efficiency loss and no transfer to the agent as a rent on his information monopoly may seem at variance with standard principal-agent theory. However, it is only a consequence of the dichotomous structure of action, which creates a hit-or-miss situation: to get a "hit", i.e. for the contract to succeed, action must be at its first-best value in either state of the world.

entire inequality (3) is reversed, then condition (6) cannot hold and the optimal contract that solves problem (5) and simultaneously deters both fanatics and defectors does not exist. When for whatever reason condition (6) is not satisfied, the difference in benefits $(b_M - b_N)$ is either low enough to deter fanatics but then everyone will defect, or it is high enough to deter defectors but then everyone will commit suicide.

The conclusion is that the incentive contract (5) is fairly robust to alternative specifications of individual preferences. It will fail only if the exhibitionists are really wild, or if agents really enjoy reneging on their commitment to the organization, or if they totally disagree with the organization's evaluations across the whole range of possibilities. However, it should be kept in mind that in the real world actual rewards can be affected by events or factors beyond the organization's reach. If the organization's control of benefits, and particularly of the cult of martyrs, is less than complete, then it is even more likely that either defection or fanaticism will be the norm.

3. Some historical evidence

The single empirical reference for the analysis in Azam (2005), Harrison (2006) and Wintrobe (2006) is current Islamic suicide terrorism. Although Ferrero (2006) surveys a broader range of cases, most involve tightly directed suicide missions, including the Assassins of the medieval Middle East, the Palestinian suicide bombers, the Iranian *pasdaran* of the 1980's, the Japanese *kamikaze*, and Sri Lanka's Tamil Tigers. All such instances approximate fairly well the condition of full information. Although a cult usually exists in those cases too, in this section we focus attention on the range of cases in which the agent is virtually alone in evaluating the situation and making the decision. The cases span all the range from the religious to the secular.

The paragon of the cult of heroes is found in Greek antiquity (see Wikipedia, 2009, and the references therein). Starting at least with Homer's poems, certain fateful characters willfully chose fame and honor instead of leisure for the sake of living on in the memory of subsequent generations. The early heroes, like Achilles, were mythical but their cult was historical, continuing well into Roman times; in time, historical figures again and again followed on their steps. If we believe the ancient sources, this shows that extreme sacrifice, to varying degrees, can indeed be motivated by the expectation of a cult. It must be noted that

this classical prototype is unambiguously secular, since ancient paganism had no conception of the afterlife as a reward and punishment system.

Coming closer to us in time, three groups of cases can be distinguished. The first involves the fighting martyrs, even if religiously inspired, and includes the Sikhs of the heroic days, the Muslim *jihad* fighters³, as well as war heroes of all stripes across history. Here the cult of martyrs and heroes has been under the control of an army, or a militarily oriented religious organization, and so has proven reliable as an incentive system (Cook, 2005, 2007; Fenech, 1997). Due to the completely decentralized organization of the Muslim religion, however, a given martyr cult may be functional to the incentives devised by a given Muslim group for its members but not to other groups, nor arguably, to the Islamic cause in general.

The second group involves suffering passive death at the hands of persecutors or enduring lifelong sacrifice. Here the cult may escape the control of the sponsoring religion and feed on itself, yielding excessive deaths; or, the sacrifice may be endorsed by a splinter group that fosters the cult and thrives on it. After the experience of the Jewish zealots in the war against the Romans of CE 66-70, rabbinic Judaism tried to restrain martyrdom by stringent rules (Shepkaru, 1999). Early Christianity was beset by excessive, unnecessary sacrifice of lives, both in the mainline church (discussed in detail in the next section) and in several deviant, radical sects such as the Montanists (Klawiter, 1980; Trevett, 1996, pp. 121-129, 176-184) and the Donatists (Frend, 1971): decentralized cult was too strong (Ferrero, 2006). Thereafter, in the mainline Western church, a secular shift to centralized canonization by the popes occurred, both for martyrs and saints in general, which gradually brought the cult under church control – something that makes sense only if the cult itself had been judged excessive in the earlier period (Delooz, 1969; Ferrero, 2002). This shift was a controversial affair that began in the High Middle Ages and came to a head with the Counter-Reformation. As a consequence, the plentiful crop of Catholic martyrs of the early modern era – fallen under the Reformation, in the French revolution, or in the overseas missions – had to wait between two and three centuries to achieve canonization, clearly lagging behind other saints; a clear indication of "political" preferences by the church hierarchy, which began to change only after 1850 (Delooz, 1969, pp. 300-310).

³ There seems to have been hardly any instance of passive martyrdom of Muslims under persecution after the days of Muhammad, because Islam has ever since been closely identified with power. In Islam, martyrdom is sought rather than suffered (Cook, 2005, pp. 34-35; 2007, pp. 23-30).

Finally, the third group involves individual, solitary actions or organized political actions. A cult exists and thrives even here, and may be strictly controlled e.g. by the communist parties or other revolutionary organizations. For example, "Hero of the Soviet Union" was an official title awarded by the Soviet state, bestowing praise and privilege on the individual (if surviving the action) and his/her family; 12,745 such titles were awarded in the fifty years between the 1930's and the 1980's (Wikipedia, 2009). On the other hand, the anarchists (Ferrero, 2006) and the agents of self-immolation for a civic cause (Biggs, 2005) are not responsive to any well-defined demand and so can perpetuate their lineage without bounds.

Consider self-immolation. In his thorough study of the subject, based on an extensive dataset from 1963 to 2002, Biggs (2005) notes that despite the fact that religious vocations, especially of the Hindu and Buddhist types, are predominant in his sample, evidence of an otherworldly motivation is almost entirely absent (pp. 198-199); that "vanity", i.e. gaining notoriety or attention from others, and the desire to make up for past personal failures must be substantial factors, though naturally very difficult to trace (pp. 199-200); and that the site and date of the event can become focal points of commemoration and celebration for a long time afterwards (pp. 203-204). Though he never uses the term, the idea of a cult is not far from his characterization. Were it not for the atrocity of the most popular means of death – by fire – entry into this cult would be "easy", compared to entry into the cults of the other groups discussed above: the act requires no organization, the person need not have made any prior commitment or investment as member of a religious or secular organization in order to qualify, and in many cases, though not all, the act generates a tremendous response – a wave of imitation – which both ensures that the initiator will be revered and provides incentives for others to join in the chain. One could say that by joining a collective cause and volunteering for fiery death in that context, an individual gains a (probabilistic) opportunity to secure a martyr cult for himself or herself. Since there usually is no sponsoring organization, it is not clear that we can ever speak of "excessive" martyrdom; significantly, in a rare case in which there was such a sponsoring organization – the Kurdistan Workers Party (PKK) – disavowal occurred (Biggs, 2005, p. 192).

4. Christian martyrs: the cult versus the hereafter hypothesis

As the last section showed, the case of the non-religious martyrs clearly indicates that afterlife rewards are not necessary for explaining martyrdom while a cult can provide an alternative explanation. Restricting now our attention to the religiously denominated martyrs, up to this point this paper has only claimed that the cult hypothesis can be as good as the hereafter hypothesis in accounting for martyrs' behavior. In this section we ask what kind of evidence, if any, can be found to discriminate between the two hypotheses. For any evidence to speak for the cult theory, it would seem that three conditions must be met: first, there must be a real element of choice in the individuals' behavior – that is, it must be possible for them to avoid death without apostatizing; second, the theology must be such that the heavenly rewards granted a martyr are equally available for other kinds of virtuous behavior; and third, there must be a correlation between differential propensities to become a martyr and some observable characteristics or strengths of the cult – often, the presence of "excess" martyrdom or fanaticism can be a telling indicator. The second condition disqualifies the Muslim and the Sikh martyrs for the purpose of this discussion: the Hadith and the Jihad literature (though not the Quran) single out martyrs for special treatment in heaven, where certain rewards, such as sexual delights, are uniquely available to them and not to other righteous Muslims (Cook 2007, pp. 31-33, 37-38); similarly, the Sikh martyrs are granted liberation from the cycle of existence and union with God whereas ordinary believers are not (Fenech, 1997). The Jews' case is too complex to be dealt with here as their theology of the hereafter is itself controversial. Therefore this section focuses on Christianity in its Mediterranean and European heartlands⁴, which offers a rich variety of cult organizations and promises the same bliss to all who are granted access to heaven, martyrs or otherwise.

4.1. Jesus and the early Christian martyrs

The most spectacular example of someone who underwent martyrdom for the sake of a cult among the living and not for gaining access to heaven is none other than Jesus of Nazareth. This is true whether one looks at the historical figure of Jesus the man or one accepts the Christian claim about the divinity of Jesus the Christ. If Jesus was divine, he was one of the persons of the Godhead who was incarnated, died and rose again to deliver the hope of salvation to all who would accept his gospel and worship him. So we can say that the

⁴ Martyrdom in the Christian missions overseas would be a promising extension of this study. As one example, the case of the Korean Catholic martyrs of the 19th century appears similar to the ancient Roman case: see Finch (2009).

purpose of his supreme sacrifice was to found a cult centered around himself as the Son of God. If Jesus was a man⁵, then he was an apocalyptic Jewish prophet who preached the impending coming of the kingdom of God for the redemption of all Israel and then faced his execution while promising soon to return in glory to establish the kingdom. He was certainly not striving to earn a place in heaven for himself: he thought of himself as God-blessed and God-sent, let his followers hail him as Messiah, and looked confidently to his place back on the right hand of God. All his followers had to do to earn themselves a place in the upcoming kingdom was to believe his promise, remember him, and keep the hope alive – which they did. In the event, this particular cult of a martyr survived the waning of apocalyptic hope and gave rise to a major world religion. Furthermore, Jesus appears as the archetypal "fanatic" martyr in the technical sense used in this paper: the Judaism of his time was filled with messianic expectations but never envisioned that the Messiah – a victorious leader and redeemer of the people of Israel – should sacrifice himself and die on a cross.

The two centuries between the early second century and Emperor Constantine's edict of toleration (CE 313) were the age of Christian martyrs in the Roman Empire⁶. The Roman authorities typically put Christians to the sacrifice test: a largely symbolic acknowledgment of the Roman gods as a token of loyalty to the empire, upon which they would be free to continue to practice their religion; in other words, unlike the Jews, the Christians were not excused from practicing what they saw as idolatry. Large, though unquantifiable, numbers no doubt yielded to the persecutors and apostatized, but several thousands died, while another untold but large number, for a variety of reasons, were lucky enough to escape execution without recanting.

While the standard account by Christian historians presents the martyrs as dying "for the Name of Christ", ie to witness their faith, there are at lest four reasons to think that the pursuit of a cult is a better description of their actions. First, voluntary martyrdoms were pervasive: many Christians were not sought out and apprehended but spontaneously offered themselves up to the Roman authorities, courting their own death in a way that bordered on suicide. Church leaders and theologians were only too aware of this widespread eagerness for

⁵ The "quest for the historical Jesus" has given rise to a large and controversial literature. Here I follow Sanders (1993) and Fredriksen (1999).

⁶ The standard reference is Frend's (1965) detailed account. However, I found the shorter, sharper discussions in de Ste Croix (1963) and Bowersock (1995) particularly illuminating. See also the analysis in Ferrero (2006), which accurately deals with defection but touches on fanaticism only as a problem for the church hierarchy' hold on power.

martyrdom and, from Clement to Origen to Cyprian, relentlessly tried to restrain it. However, their message did not get through because the church itself was of two minds: other prominent leaders, including the great orator Tertullian in the early third century and later the Donatist sect in North Africa, enthusiastically endorsed and supported the voluntary martyrs. Not until the end of the fourth century, in the then Christian empire, did the church settle on a definitive, unambiguous injunction against suicide, which has persisted as a central Christian doctrine down to this day. Second, although voluntary martyrdom was a Christian innovation, it was not made up from whole cloth, as it connected to, and drew support from, an influential precedent: the well-established, time-honored, Roman pagan tradition of noble suicide, dating back to Roman antiquity and re-fuelled by Stoic and Cynic philosophy in imperial times. Tertullian was perhaps the most outspoken heir to, and apologist for, this view among the Christians. Bowersock (1995, pp. 72-73) writes: "Without the glorification of suicide in the Roman tradition, the development of martyrdom in the second and third centuries would have been unthinkable. The hordes of voluntary martyrs would never have existed. Both Greek and Jewish traditions stood against them. Without Rome, a martys would have remained what he had always been, a 'witness' and no more". Third, since persecution always struck in the cities and was often localized and unevenly and intermittently enforced, those Christians who chose not to be martyred in a persecution had the option of leaving the city, as Jesus himself had instructed them to do (Matthew 10: 23) and as the great Cyprian himself did in CE 250 (Bowersock, 1995, pp. 43, 54). Again, some leaders condemned flight, others did not. Fourth, and perhaps most important, martyrdom was an urban phenomenon. Although Roman governors routinely toured the provinces to administer justice, the martyrs regularly showed up in the big cities or, if imprisoned elsewhere, requested to be transferred there to be tried in the central square and executed in public spectacles of blood sport in the city amphiteater (Bowersock, 1995, pp. 42 ff), so as to presumably advance the cause of the church with maximum impact. They faced up to their ordeal much like the Sophists, who also drew crowds of supporters, teaching and preaching lengthy sermons to an intrigued audience. They died like gladiators of God, athletes performing in the Graeco-Roman urban space. Later, when the soldier-martyrs appeared under Emperor Diocletian's persecution, the military context provided an analogue to the civic one (p. 55). This set of facts strongly speaks for the cult theory since no variety of Christian theology of salvation has ever claimed that heavenly rewards are denied to those who are interrogated in small towns or executed out of sight. Thus as Edward Gibbon remarked, "The assurance of a lasting reputation upon earth, a motive so

congenial to the vanity of human nature, often served to animate the courage of the martyrs" (quoted in Bowersock, 1995, p. 4).

4.2. The martyrs of Cordoba

Between 850 and 859 forty-eight Christians were executed by the Muslim government of Cordoba on two different charges: most made denigrating remarks about the prophet Muhammad in public places, while some were Christians of Muslim parentage who had previously kept their faith secret but suddenly revealed themselves in public as apostates. All concerned fully knew that both types of action qualified as capital offenses under Islamic law, so they deliberately invited execution. They were hailed as martyrs by the group of radical Christian contemporaries in Cordoba to which they belonged, but at the same time were disparaged as fanatics and troublemakers by many – possibly the majority – of their fellow Christians, both clergy and laity. So clearly we have here a case of militant dissent from the mainline church and hence a level of martyrdom that is "excessive" from the church's point of view. Following Coope's (1995) careful study, our task is to ascertain if a martyr cult can explain their behavior.

By the middle of the ninth century relations between Christians and Muslims were relatively peaceful and functional in Muslim Spain. As *dhimmis* (non-Muslim monotheists living in an Islamic society), Christians were subject to legal discrimination but otherwise free to practice their religion and be governed by their own laws. Many were drawn to the emir's court and held government jobs. Then the martyrs' movement precipitated a crisis in Muslim-Christian relations and a bitter split within the Christian community. The government reacted harshly to the attacks by arresting clergy, closing monasteries, raising Christians' taxes, and dismissing them from government service – all on the principle that the *dhimmi* community as a whole was accountable if some of its members did not behave. As a result, prominent Christians spoke out against the movement, accusing the radicals of bringing down a persecution on all Christians where none existed before for "selfish" motives. Such a reaction was justified in that the Muslim authorities did not seek the Christians out before the start of the crisis. But if so, what were the martyrs' "selfish" motives? Why did some Christians prefer death to life under Muslim rule?

The movement was largely the work of the priest Eulogius, who provided intellectual leadership, offered support to the martyrs awaiting execution in prison, chronicled their words and deeds in installments to inspire and sustain the next candidates who would follow suit,

and finally was himself executed as the last victim of the group. The chief motive he attributed to the martyrs was concern about the afterlife; in a parallel fashion, the moderate party complained that the fanatics wanted to ensure "their own place in heaven by provoking a confrontation with the Muslims, then dying and leaving the rest of the Christian community to face the consequences" (Coope, 1995, p. 71). Yet since the Christians were not sought out and asked to recant, it is not at all obvious that their salvation was at stake short of joining the martyrs' ranks – and if it were indeed at stake, why was there no martyrs' movement under Muslim rule either before or after the 850's? Furthermore, at least half of the victims were either clergy, or monks and nuns, or people who had spent at least some time in a monastery, and many of the others were members of (sometimes religiously mixed) families with ties to the monasteries. These people were ascetics and literate in Latin Christian scripture, thus they kept aloof from the perceived corruption of the Muslim court and society. So it would seem that all such people were already taking extra care of their salvation in the next life.

On the other hand, the charged atmosphere of a close-knit penitential community provides a clue to the motivation that triggered the movement: the pursuit and expectation of a cult. Coope (1995, p. 72) recognizes just that: "Once someone from a given monastery was executed, he or she became an example to other members of the community. Some of the extremely ascetic monks and nuns who were martyred were celebrities even before they died. (.....) If such people were famous in life, their prestige must have increased dramatically after they were martyred (and after Eulogius told their story). Such martyrs inspired other members of the community to follow them, out of religious zeal and, perhaps, a desire to share in the glory." At the end of the cycle, two French monks came to Cordoba and brought the relics of some of the martyrs back to France, whereupon those relics began to perform large numbers of miracles – exactly the fulfillment of the outreach program toward which Eulogius had been working all along (pp. 52-54).

Why, then, did the promotion of a martyr cult become a successful enterprise exactly at that point in time? By the middle of the ninth century the Muslim court in Cordoba had become a social, economic and political attractor. Increasing numbers of Christian men were working with or under Muslims, learning Arabic and neglecting Latin Christian letters, "passing" for Muslims while keeping their Christian practice hidden, taking halfway steps to please the Muslim court such as circumcision, and even undergoing full conversion to Islam. This was threatening the collective identity of local Christian society in a way that had never happened before, when following the Muslim conquest conversions were few, and would never happen again thereafter, as conversion progressed too far and the battle was hopeless.

By their provocation on the Muslim establishment, Eulogius and his associates were targeting not really the Muslims but the moderate Christians who were willing to seek accommodation and compromise with Muslim rule, disguise or minimize their religion, and thereby "sell out" their principles. In this sense, the authorities' backlash against Christians at large was not collateral damage but the movement's prime goal: to show in practice that when Christian life was taken seriously, the middle ground vanished and life under Muslim rule was intolerable (Coope, 1995, pp. 7-11). In other words, Eulogius's stand was what in Reformation Europe would have been called an anti-Nicodemite stand. Relatedly, the radicals' position was strongly reminiscent of Donatism in Roman North Africa (pp. 62-63). Therefore, the 850's were a critical point in time when a radical group, building on the heroic tradition of early Christianity, could find it both necessary and still possible to try and persuade fellow Christians to stop associating with Muslims and thereby turn back or at least slow down the clock. In the long term the radical movement proved irrelevant to the conversion and assimilation process, but it did secure a martyr cult; remarkably, this "cult" was taken out of church by modern Spanish historical scholarship, which has hailed Eulogius and his group as the forerunners of Spanish nationalism (Coope, 1995, pp. XI-XII). Not bad for an ordinary priest working in a backwater of Christianity.

4.3. Conflicting martyrdoms in post-Reformation Europe

A uniquely interesting case study is provided by religious conflict in Europe in the century following the Reformation. Here we see three mutually exclusive martyrdom traditions developing alongside each other, all appealing to the same scriptural sources, and each claiming as own martyrs the victims of another's persecution. All three traditions — Protestant, Anabaptist, and Catholic — took down the words and deeds of their saints in elaborate martyrologies and promoted a thriving martyr cult. Of course each group denounced the others' as "false" martyrs, but repeated attempts on all sides at finding behavioral criteria to tell true martyrs from false failed: each group had to recognize that the others' were as capable of steadfast suffering and dying as its own, so that all groups eventually agreed on Augustine's dictum that "not the punishment, but the cause, makes a martyr". This has led the leading scholar of the subject, Gregory (1999), to take seriously the victims' own words and argue that they self-consciously died because of their faith, to bear witness to the Lord's word as they understood it in the face of persecution. While this is a healthy counterweight to allegations of benighted fanaticism that seem to be popular in the relevant historical literature,

Gregory himself recognizes that: "Thousands of people endured death (.....) but many more dissembled their convictions, and literally millions (.....) more or less conformed to religious changes without significant incident. (.....) Taken seriously, Christian faith made one a candidate for martyrdom, but it did not guarantee steadfastness. (.....) Many people believed deeply, moved in the same circles as martyrs, and professed their complete steadfastness, yet recanted rather than face torture or death. Their capitulations baffled and dismayed fellow believers. (.....) Profound religious faith therefore accounts for martyrdom, but it is not retrospectively predictive of actual martyrs" (pp. 110-111). To an economist, this means that faith was a necessary but not a sufficient condition for actual martyrdom. I will now argue that the strength of the martyrs' cult provides the sufficient condition.

First, as with the ancient Roman Christians, flight or exile was an acceptable alternative to martyrdom, supported by Scripture (Matthew 10: 23) and accepted by controversialist writers from all groups (p. 103). Furthermore, the "anti-Nicodemite" imperative (never dissemble your faith or compromise your witness) was not without its critics, both among Protestants and Catholics (pp. 154, 262-263). Second, for a variety of reasons, local magistrates and inquisitors often did not carry out the laws mandating executions of heretics, and even more often were willing to release heretics who recanted regardless of what the law said. Prosecution was overwhelmingly bent on reclaiming lost souls, not slaughtering them; judicial records, where available, show that only a small percentage of the accused, even of those who refused to recant, were actually executed (pp. 78-81, 90-96). This implies that apprehension did not automatically imply death and that a given prisoner's actual fate did not reveal his or her behavior unambiguously. Third, and perhaps most importantly, there is a subtle point about the theology of martyrdom that may undermine any straightforward correlation between strength of faith and steadfastness in the face of death. Of all willing believers, actual martyrs were *chosen* by God as a gift of grace and their perseverance came not from self-reliance and self-control but from total reliance on God's help to overcome fear; as one Anabaptist wrote before dying, Christ had sent him the experience of terror in prison "so that I would not boast of myself, but that I would rely on the Lord alone and not on my strength" (p. 133). Since God chose and provided the necessary help to the chosen, it follows that as the apostle Paul said (1 Cor. 10: 13), God would not let one be tempted beyond one's ability; and this was perfectly credible to those concerned since God would never mislead those from whom he demanded so much (pp. 131-132). But if so, then clearly it was possible to exculpate oneself before one's conscience: if one was tested but failed to endure and recanted, it must be because one was not chosen nor helped by God, and this in turn must be because the trial was beyond one's strength.

The upshot of the foregoing discussion is that there was nothing either in the environmental constraints or the inner drive of a believer that dictated actual death. If so, then we are left with the martyrs' cult as an incentive for some, though not all, of the persecuted to become martyrs; and since the organization and strength of the cult differed across religious groups, we should expect to see some difference in results. And indeed we do. The Catholics could draw on a time-tested organization of the cult, still very alive although there had been almost no new martyrs since the Roman Empire. The doctrine of penance and Purgatory developed during the Middle Ages made now possible even for apostates to repent, cleanse their soul and be spared hell, something the early Christians had never taken for granted; other things equal, this should have encouraged defection. On the other hand, the Catholics could avail themselves of a unique additional incentive: unlike the other groups', their martyrs not only were remembered and loved by survivors but were also believed to perform intercession with God on behalf of supplicants and work miracles to their benefit. In the event, most European Catholics were safe, while persecution struck them only in the Netherlands – and there only against priests – and in England – and there only for open defiance of Elizabethan laws; those most at risk were the self-selected elite of English seminarians and Jesuits who voluntarily went to missionize in England in the same way as they did in the overseas missions (p. 297). So for these relatively localized, small numbers (some 430 people, as against some 4400 Protestants and Anabaptists combined, p. 6) the incentives proved just sufficient.

The Protestants, and especially the Calvinists who had a particularly stern doctrine and were hard-tested in France and elsewhere, wrestled with more problems. They of course would not hear of intercession and miracles or the cult of relics, but on the other hand they could not get away with defection through penance in the way the Catholics could. Under the doctrine of predestination, steadfast behavior in the face of death might have been promoted and understood as a sign of election by God – a typically unverifiable quality (p. 162); yet as we have seen, the theology of grace from, and reliance on, God when confronting death made this incentive less than binding. All told, the clearest indication that incentives were hardly sufficient to sustain martyrdom on the scale the movement would have required is the massive, long-lasting barrage of anti-Nicodemite writings, first and foremost by John Calvin himself, apparently far more intense than in the other groups (pp. 154-155).

Like the Protestants, the Anabaptists too would have none of the miracles and intercessions nor would they allow themselves the benefit of penance. It is clear that large numbers recanted (pp. 80, 208), yet they managed to account for more than half of the roughly 4,400 non-Catholic martyrs of the period (Monter, 1996, p. 49) – a remarkable, if grim, record for a single group confined exclusively within the German- and Dutch-speaking lands. The proximate reason for this is that they very early renounced any attempt at political influence and withdrew into complete separation, thereby forsaking any possibility of political protection and becoming targets for persecution by both Catholics and Protestants of all stripes. So there was no safe haven for the Anabaptists and their numbers remained small, but the obverse side of this was a source of great strength: alone among all groups, they suffered but never killed, like Christ himself and the early Christians before them. This unique status of non-victimizing victims enhanced their claim to truth and righteousness in their own eyes, thereby reinforcing group cohesion and endurance. Remarkably, the legacy of their martyrs outlived the seventeenth century and their cult has been kept alive in the Anabaptists' North American offshoots to this day (p. 249).

To cap this discussion with an extraordinary example, consider the case of John Frith, an early Lutheran and Cambridge-trained theologian who was burned in England in 1533. In a treatise he wrote while awaiting execution, he explained: "The cause of my death is this, (.....) because I cannot in conscience abjure and swear, that our prelates' opinion of the sacrament (that is that the substance of bread and wine is verily changed into the flesh and blood of our savior Jesus Christ) is an undoubted article of the faith, necessary to be believed under pain of damnation" (cited in Gregory, 1999, p. 102). So this man was willing to die not for a specific belief he held about the Lord' Supper, but for a *lack of certainty* about the Catholic doctrine about it (ie the doctrine of transubstantiation). Admittedly, the average martyr would have been considerably less educated and articulate than Frith. Still, he exemplifies well the point made in this section about a dignified, honorable survival in the memory of the living, in addition to a Christian faith, as key to the decision to accept martyrdom.

4.4. Back to the model

The discussion of Christian martyrdom in this section has pointed out several features that seem to strongly support the cult hypothesis. In each instance, death could be avoided without dissembling or reneging on the faith. In each instance, the observed willingness to be martyred strongly correlates with the strength of the cult: possibly the weakest cult for the

Calvinists, where widespread reneging was a persistent problem, a somewhat stronger one for the Anabaptists and the Catholics of early modern Europe, the strongest of all for the Spanish and Roman Christians. In these last instances, fanaticism, or voluntary martyrdom often at odds with church teachings, was very widespread: in the framework of the model, this occurred either because the cult grew beyond church control or even outside of the mainline church, or because groups of people featured "exhibitionist" preferences that disrupted the right-hand side of condition (6) above and hence made implementation of the martyrdom contract (5) impossible.

In particular, the existence of excess martyrdom per se can be construed as strong evidence in favor of the cult theory. Suppose that in a religion an insufficient supply of martyrs obtains from the leadership's point of view. This may be rationalized as defection in the framework of our model – for example because, despite the leadership's efforts, the expected cult is in fact not intense and widespread enough to motivate compliance with the contract (the left-hand side of inequality (6) above is not satisfied). But it is still perfectly possible to argue that the would-be martyrs are indeed motivated by otherworldly expectations, but man is a weak creature, lured by worldly pleasures and afraid of suffering, so that not enough volunteers can be found to live up to the call. Therefore, insufficient martyrdom per se is no evidence in favor of the cult hypothesis.

The opposite case of contract failure, however, is different. Excess martyrdom from the church's point of view, or fanaticism, cannot be so easily explained away by an urge for afterlife rewards. Granted, the faith was there, and church doctrine was not yet sharpened enough to disqualify the voluntary martyr from heaven by branding him a suicide. If we were dealing with some disconnected, solitary action, we could discount it as due to the odd zealot entertaining uncommon beliefs. But those involved in the Roman and Spanish movements were organized groups of people capable of consistent and sustained action though time, each action starting from the ongoing cult and feeding into it. In their words, the martyrs wanted to "join with Christ", the archetypal martyr and model. But join in what? Surely not in heaven, since this could be achieved in other ways – *join with Christ in the cult* suggests itself as the most natural interpretation. The hereafter hypothesis simply does not seem able to account for organized, collective, long-lasting fanaticism, at least under Christianity.

5. Summary and conclusions

This paper has argued that when the decision to sacrifice one's life for a (religious or secular) collective cause is taken under conditions that are not easily observed by third parties, such as the sponsoring organization, the individual's behavior can rationally be explained by the pursuit of a worldly cult after death, making any appeal to otherworldly motivations — when ostensibly present — unnecessary. A simple principal-agent model shows that a contract that implements the organization's preferences about martyrdom will in general exist, provided agents' preferences are not too strongly at odds with the organization's.

Implementation of the contract requires the cult to be neither too strong nor too weak, because in the former case it will foster excessive sacrifice, or fanaticism, while in the latter case it will allow defection, or insufficient supply of volunteers. Hence to hold both fanatics and defectors in check, the organization must retain full control of the martyr cult, which is not always the case.

To follow, a selective review of historical evidence has pointed out a whole range of cases that fit the broad features of the model, ranging from secular war heroes, through Islamic, Jewish and Christian martyrs, to revolutionary fighters and people who choose to die without killing. Then a close examination of the particulars of Christian martyrdom, beginning with Jesus himself and following with the Roman martyrs, the Spanish martyrs, and the three conflicting strands of martyrdom in Reformation Europe, has found strong support for the cult hypothesis in preference to the hereafter hypothesis as a basis for explanation of observed behavior. In particular, the evidence of excess martyrdom or fanaticism in both Muslim Spain and the Roman Empire has been argued to strongly speak for the cult theory.

If we were to draw policy implications for the way of dealing with suicide terrorists – the type of martyr that makes headlines today – the suggestion arising from the model in this paper is clear enough: do not waste any effort hunting down potential volunteers but knock down the cult, heaping shame or ridicule on the martyr and turning people's attention and devotion away from it and towards less deadly acts.

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