The Devil's Long Tail: Religious Moderation and Extremism on the Web

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Abstract: Adam Smith's *Wealth of Nations* first suggested that an unfettered religious market leads to a multitude of small sects and away from monopolistic churches. 'Strict' or 'extreme' religious views persist but they remain small in terms of membership because the moderate religious centre-ground is where most believers and potential believers reside. However, the Web, because of the ease with which information is passed across it, caters for individuals with extreme interests or niche markets just as easily as it does for mainstream tastes, which may help extreme or 'strict' religious groups and sects to flourish in a previously unprecedented way. This paper investigates this phenomenon of the marketplace of religious ideas from the point of view of Chris Anderson's long tail theory.

1. INTRODUCTION

An important thesis for the future of the Web, particularly e-commerce, is the 'long tail' theory of Chris Anderson [3]. In the language of economics, the traditional marketplace best satisfies the normal curve's 'bulge' where most consumers congregate, thanks to economies of scale. The tail of the curve is badly served, because those economies do not exist on such a small scale. The Web removes many costs traditionally associated with market operations, thus 'fattening the tail', i.e. allowing a longer tail to be catered for.

In this paper, we examine this theory in the context not of an economic market, but rather the competitive marketplace of ideas. In a religious context, we interpret the long tail theory as predicting that extreme or strict sects can flourish in a previously unprecedented way, because it is more feasible to cater to the long tail online. If this is true, it threatens the orthodox understanding of the dynamics of religious extremism. It also undermines the associated idea that convergence on the middle ground of religious beliefs by groups cultivates and is cultivated by liberal civic virtues. If radical groups can flourish preaching virtues diametrically opposed to liberalism, freedom of religion might not be so good for liberalism after all.

The structure of the paper is as follows. Section 2 sets out the traditional view from its origins in the theories of Adam Smith. Section 3 examines the case for an increase of religious extremism online. Section 4 then looks at the long tail theory in this context. Section 5 suggests some policy applications, while section 0 is a discussion and conclusion.

2. RELIGIOUS FREEDOM AND RELIGIOUS MARKETS

The eighteenth century Enlightenment was a time for the promotion of rationality, and great opposition to religious irrationalism, or what was called at the time *enthusiasm*. Many, including David Hume, held the intuitive position that government sponsorship of moderate religion would help damp down extremism. A "ghostly practitioner" (in Hume's phrase) who relied on adherents for resources would move to extreme positions "to excite the languid devotion of his audience", while the government salaries of clergymen of established churches would render it "superfluous for them to be farther active than merely to prevent their flock from straying in quest of new pastures" (quoted in [17], 377-9).

In his great theory of market societies *The Wealth of Nations*, however, the economist and philosopher Adam Smith denied this intuitive doctrine, and argued instead that state sponsorship would merely aid extremism by de-incentivising moderates, and increasing the vigour of religious enthusiasts. "It is with them as with the hussars and light infantry of some armies; no plunder, no pay" ([17], 377). A free religious marketplace was the way, paradoxically, to promote moderation. With total freedom of conscience, one would expect that there would "have been a great multitude of religious sects" which would be forced to compete for the centre ground.

> The teachers of each sect, seeing themselves surrounded on all sides with more adversaries than friends, would be obliged to learn that candour and moderation which is so seldom to be found among the teachers of those great sects whose tenets, being supported by the civil magistrate, are held in veneration by almost all the inhabitants of extensive kingdoms and empires … . The teachers of each little sect, finding themselves almost alone, would be obliged to respect those of almost every other sect, and the concessions which they would mutually find it both convenient and agreeable to make to one another, might in time probably reduce the doctrine of the greater part of them to that pure and rational religion, free from every mixture of absurdity, imposture, or fanaticism, such as wise men have in all ages of the world wished to see established. [17], 380-1

Smith's account seems to have been vindicated. The more controversial part of his claim was that this multiplicity of disestablished religious groups would converge on the moderate centre-ground. The reason for this, he conjectured, would be that because the clergy would depend for their financial existence on donations from their flock, they would

naturally seek to maximise membership. Most potential adherents exist in the moderate centre-ground and it is to here that such groups gravitate. Hence there is a feedback loop – less rigid doctrine puts off fewer people, while a desire to increase will engender the aim of compromising and maximising consensus. Those churches which do not take practical steps to move towards a more consensual position will fail to exploit economies of scale and tend to wither [10].

Smith's observations led to the theory of the church-sect cycle (CSC). The CSC explains the persistence of small, but 'radical' sects, and the seeming eternal occurrence of the splintering of religious groups – the rise, decline, and fragmentation of denominations [7].

The logic of the CSC is a continual process of movement from a position in tension with the social environment to one in harmony with it, until a split occurs and a new sect arises that seeks to assert a new high tension position. As a sect grows and begins to attract increasing numbers of members there is an inevitable moderation of its stance towards this-worldly positions. Popularity and security come at the price of having to accommodate a wider array of members. The largest potential pool of members occupies the moderate centre-ground – i.e., the centre-ground of the social environment – so sects gravitate to this pool of potential adherents. Those who desire a higher-tension version of the faith will become increasingly restless and dissatisfied, until a rift occurs and a splinter group moves to reaffirm the old position by splitting with the main group and forming a new sect [7].

What explains the predominance of moderate adherents is the low cost of participation. If a religious group's beliefs and practices are in harmony with the surrounding social environment, then there is little or no cost involved in participation. The adherent does not have to change his or her beliefs, morals, diet, daily rituals, dress, language, or the like. The benefits of religious participation – levels of spiritual and physical well-being, social recognition, collaborative goods, and the like – accrue with no outlay on the part of the individual.

Similarly, this also explains the persistence of membership by a smaller set of people in radical sects. Here the costs of membership are higher – often much higher – including differences from the social environment in such things as diet, dress, rituals, and so forth, as well as enclave mentality and group persecution. Yet, the benefits are perceived by members as also being much higher. High costs deter free-riding; those who continue as members are playing their part through costly participation. As a consequence the existence of goods such as group solidarity, and higher spiritual worth gained through sacrifice, exist and are perceived by members as outweighing the costs.

The Mormons (the Church of Jesus Christ of Latter Day Saints), for example, show this process to good effect. At their foundation their heterodox views of polygamy, the nature (and purpose) of Jesus and the Trinity and the strange foundational myth of the transfer of the Book of Mormon to Joseph Smith, the Mormons were persecuted, resulting in Smith's assassination and the relocation of the cult from Missouri (where revelation decreed it should be based) to sparsely-populated Utah. As the church grew, it moved towards the centre, economic and theological factors playing a part. Weeks after the US Supreme Court upheld the decision of Congress to enforce forfeiture of its property because of its support for polygamy, the 1890 Manifesto was published renouncing the

practice. A colour bar was revoked in the face of civil rights protests in 1978. Now, the Church is the fourth largest in the United States and one of the fastest growing worldwide. Mormons such as the Osmonds and more recently Mitt Romney have become mainstream figures.

However, the 1890 Manifesto also sparked off a series of splits as various fundamentalist cults moved away from the consensual position. The Apostolic United Brethren is one of the most moderate, and probably the largest, with a little under 10,000 adherents. The Fundamentalist Church of Jesus Christ of Latter Day Saints, on the other hand, has suffered since its President, Warren Jeffs, was convicted of accessory to rape as a result of his alleged arrangements of illegal marriages between men and underage girls.

A corollary of the CSC is what Rosenblum has termed the 'logic of congruence' [14]. Participation in groups helps cultivate certain values and virtues in the members, the nature of which depending on the nature of the group in question. Membership of moderate groups that exist in little tension with the surrounding social environment tends to produce individuals predisposed to uphold and perpetuate the values and virtues of that environment. For Smith, the logic of congruence was an extremely useful social benefit. The free market in religion would create civically virtuous citizens minded to uphold the basic pillars of liberal society.

3. ONLINE RELIGION AND EXTREMISM

The theoretical analysis, based on Smith's free market philosophy, above has been borne out over the intervening years. However, two new ideas make Smith's analysis worth revisiting. First, the Web has been associated, rightly or wrongly, with an increase in religious extremism. Second, many commentators have asserted that the Web, by removing the friction in information flow, has effected a fundamental change to market structures. Given the juxtaposition of these two developments, it is worth asking whether changes to the free market of religious ideas wrought by the Web have been the (or a) cause of extremism. In this section, we will examine the first idea, while in the next we will look at the second.

There is certainly evidence about extremists' use of the Internet. One survey found that the Internet was a powerful tool for hate groups, for reaching an international audience, recruiting members, linking diverse groups and allowing maximum image control [8]. Terror groups have been observed using the Internet for communication, data mining, networking, recruitment, mobilisation, providing instructions and online manuals (e.g. of bomb-making), planning and coordination, fundraising and attacking rival terrorists [20].

Frictionless information markets facilitate distributed group dynamics as well as reducing costs. In a face-to-face world, where sect members would expect to communicate during physical presence, lack of numbers of people would be a handicap. A sect of 6,000 members randomly distributed across the globe would have minimal group dynamics. But online they could use Web resources to communicate and to promote solidarity. 6,000 Facebook friends would be a large number to have. Even a very small percentage of cyberspace is a lot of people.

Technology is a friend to the spread of religious ideas. In a world of media with high barriers to entry (TV, radio, newspapers), ideas markets are driven by scarcity. On the Web,

with low barriers to entry, they are characterised by abundance. Religious works are often given away free (cf. http://www.freekoran.com/index.php), and texts are available online. Biblical texts can be sent to your 'Psalm Pilot', and wrestled with on large discussion spaces (e.g. http://www.ebible.com/). You can download a GodCast (e.g. http://www.godcast.org/). You can even be a censor; Yusufali is a Trojan worm which works its way into a remote computer's hard disc, and censors websites by minimising the browser and substituting appropriately stern verses from the Qur'an.

But the low barriers to entry mean that the texts being distributed form a wider set than in the days of scarce ideas. Some changes appear (to an outsider) frivolous – the GodCast website includes a translation of Biblical texts into Klingon. Jediism (http://www.jedi-church.com/) and Matrixism (http://www.geocities.com/matrixism2069/) now claim to be 'genuine' religions. Other changes are more challenging – it has been argued that Qur'anic texts and commentaries distributed most frequently online are those which accentuate the differences between Islam and Christianity and Judaism, rather than those which acknowledge their common roots and assumptions [1]. This wider distribution is important at a time when religiosity is growing, and there is profound ignorance about religion, even in very religious countries. A scarce supply of religious texts corrals popular religious thought into a relatively strict space; abundance means that restrictions of availability provide no filter.

Individual entrepreneurs can be better at engaging with people than major churches. Their interaction models are decentralised, two-way and networked, rather than centralised, one-way and hierarchical. The result feels more like a conversation, not a lecture. Web technology has clearly changed the nature of the interaction [9]. The Web has been used to try to create environments for prayer, meditation and pilgrimages (e.g. to cybershrines like http://hometown.aol.com/theBVMPage/), and in the course of this will tend to alter the effects of these kinds of religious experience. Roy has argued that the Web, combined with widespread satellite television and a large number of Muslims living as minority communities in non-Muslim countries, has reduced the localism formerly prominent in Islam, and created a technologically-mediated 'global' Islamic experience [15].

Use of the Web is skewed toward the young, and so helps to change the demographic of churches and sects. In general, older people are more mainstream in their belief, and so the online demography again facilitates fragmentation and aggravates the CSC.

The radical heterogeneity of online behaviour means that 'normal' behaviour is harder to find online. People behave in different ways, and furthermore people's understanding of a given online situation will also differ. Some users are highly experienced, and others inexperienced. For example, analysis of behavioural networks generated by patterns of network traffic shows that the behaviour of Internet users is so marked by heterogeneity that it is meaningless to develop models for average Internet use [11]. There is no average Web user, and *a fortiori* that makes it easier (indeed trivial) for a sect member to diverge from the mean.

The question is whether these perceived changes stack up to produce a genuinely qualitative change in the marketplace of religious ideas, and the church-sect cycle. Can we say with any confidence that moderation has been damaged by the new technologies? The arguments listed here in this section are

weighty. However, there is a question as to whether the prominence of extreme cults has happened as a by-product of various terrorist actions of groups like al-Qaeda and Aum Shinrikyo, and that changes in communication technology are secondary to a willingness to abuse weapons of mass destruction in ways that invite media coverage. A further point we must consider is that Web technologies allow intelligence agencies to monitor and disrupt electronic communications.

4. THE RELIGIOUS MARKET IN CYBERSPACE

If the nature of strict or extreme religious activity does seem to be changing, how has the Web contributed to that? We will try to address this question in this section. Section 4.1 looks at Cass Sunstein's theories about personalisation. Section 4.2 then explores Anderson's long tail theory in this context. Finally, section 4.3 assesses the relevance of empirical evidence that seems to undermine the long tail theory.

4.1 The Daily Me

The logic of congruence which tends to drag extremists to the centre can be sidestepped if the adherent personalises the content he receives. As Cass Sunstein has argued [18], it is easy for a Web user to avoid information from sources that may contradict his deeply held beliefs. The public space through which we all have to move offline does not exist online. General information aggregators, such as the BBC or large national newspapers' websites, can be avoided in favour of partial sites such as blogs that preach to the converted. Indeed, network analysis shows that political blogs tend to link to other blogs that support similar rather than opposing views [2]. Arguments that blogs help provide the 'wisdom of crowds' are misplaced, because they require some method of aggregation of views which does not occur in the blogosphere ([18], 138-50).

The result, argues Sunstein, is that extreme views receive large amounts of positive feedback, and become entrenched. If the aim of the extremist is to impose his views through a political process, this is unproblematic as the political process itself (whether democratic or bureaucratic) will involve persuasion, and therefore (such are the rules of interlocution) undertaking the risk that one might receive a convincing opposing argument [12]. But not all extremists interact politically; tight positive feedback loops for extremist views are dangerous if the extremist anticipates acting violently, as with suicide bombers or those who undertake school shootings [13].

4.2 The Long Tail

By lowering the costs of information transfer and reducing the friction of interactions, the Web allows culture to evolve unmediated (or less mediated) by cost considerations. Anderson sets out what he calls 'six themes of the Long Tail age,' applicable to markets in general, comparing the fortunes of niche products with extremely popular ones. In an offline market, popular goods, which reap economies of scale of production, are often produced at the expense of the niche products, which cannot command enough demand to justify the sacrifice of shelf space ([3], 53). Each of these six themes affects the 'theological economy' of the CSC, if we interpret 'popular item' with a mainstream religion, church or theology/ideology, and 'niche product' as a more extreme position/sect.

1. **In most markets, there are far more niche goods than hits.** In theological terms, we might see this as

there being a small number of large, stable, inertial, institutionalised religions, surrounded by countless theological variants which do not attract many adherents.

2. **Digital technologies, including online distribution, search and broadband have lowered the costs of reaching those niches.** A religious ideology is largely information and can be discovered and distributed cheaply using search engines, tagging etc.

3. **Filters, including search engines, recommender systems, rankings and social networks are required to drive demand down a long tail.** Such filters are likely to be present as someone curious and dissatisfied about religion engages with online communities such as a group of Facebook friends, a MySpace group, an Internet forum, a bulletin board, or a mailing list. Books purchased on Amazon will include further recommendations. Blogs will link to related blogs.

4. **Exploitation of the long tail causes demand to flatten.** As niches attract more consumers, demand for the bigger hits declines. As people are drawn to strict sects about which they have been able to find information, adherence to major churches appears to decline, especially as churches and sects are rival, in that membership of one religious group is generally incompatible with membership of others. As information has spread about alternatives, adherence to mainstream religions has declined.

5. **Niches add up.** Small sects are individually insignificant, but their total number can be significant. The number of 'unaffiliated Christians' (i.e. persons professing Christianity in censuses but not claiming affiliation with a particular group) is 119.5m worldwide, and 48.6m in the US (up from 18.8m in the US in 1900) [4].

6. **A long tail market reveals the natural shape of demand.** The picture of religious belief is presented with fewer distribution bottlenecks, and people can seek out smaller sects closer to their individual beliefs.

Anderson suggests three forces produce the long tail ([3], 53-7). First, the tools of production are democratised, which lengthens the tail by providing more niche goods. In this context, this links to the technology for religious communication, including Web 2.0 (many sects share videos on YouTube, for instance). Extremist extra-legal groups may also use security systems and privacy-enhancing technologies. Second is the democratisation of the tools of distribution, in other words aggregating demand using search engines, tagging, social networking and so on. This fattens the tail by providing more access to niche goods. Third, supply and demand need to be connected, so filters send people down towards the niches at the tail.

The Web provides a means for people to sidestep the problems and lower the costs of being in an extremist sect. Public hostility and indifference can be ignored. The only cost that the Web leaves untouched is the 'pure' cost of ritual, which is the chief mechanism for ensuring loyalty and continuity.

4.3 The Empirical Critique of the Long Tail

The long tail theory has recently come under some pressure from empirical analyses of actual markets. Elberse has argued that the market for music downloads and DVD rentals has not changed as predicted, and that retailers are still rational to focus on the blockbusters [6]. An analysis of music downloads by Page et al shows that the curve is a log-normal curve with little in the tail – 0.4% of tracks accounted for 80% of downloads [19]. Bentley et al confirm that when consumer preference is very changeable, the inventory size that maximises profit for a retailer is pretty small [5].

This does not necessarily undermine the long tail theory in all fields, though. An insight into what is going on is provided by Salganik et al, who looked at music downloads among a large sample of young people [16]. The volunteers were divided into groups, some of which received recommendation feedback based on the purchases of other members of the group, while others did not. The market shape of the groups without recommendations had longer tails. The groups with recommendations had more traditionally shaped market curves, but the 'hits' in each group were different –the groups all showed a tendency to converge, but around a different set of songs.

This implies that a key factor is intra-market communication. The original short tail market form happened because of the friction in the market, which was removed by Web technology. Recommender systems seem to replace the friction, by focusing preferences, especially in volatile markets such as music downloads, on items that have previously sold well. The friction has been, in effect, replaced in the system. Collaborative filtering requires historical sales data, so items that have not sold well are disadvantaged.

How does this play out in the marketplace for religious ideas? On the one hand, there are no recommender systems ("if you are an adherent of this deity, you may also like …"), and collaborative filtering of religious ideologies would be hard. On the other hand, religious sectaries do seek out others – a small hard core of comrades seems important for many types of religious experience. Furthermore, although religions themselves are hard to filter collaboratively, important associated items – books, videos of sermons etc – can be subject to recommendations. This will tend to narrow the field.

These factors will probably shorten the tail in the religious market. However, given the lack of a dedicated pattern of recommendation, and given the weight of the considerations in the previous section, it seems a reasonable hypothesis at this stage to continue to assume that such markets do have a longer tail than prior to the introduction of Web technology. Empirical testing of this hypothesis would be an important step for research in this area.

5. POLICY ISSUES AND APPLICATIONS

Censorship is a very hard option. The Web depends for its function on decentralisation of control. This is an engineering essential, as any centralisation would create bottlenecks which would not allow the Web to scale.

If our arguments are correct, the policy issue for those who wish to reduce extremism online boils down to the question of how to shorten the tail of the religious market. In many ways, this is what Sunstein's policy proposals ([18], 190-211) attempt to do, by subsidising and supporting deliberative domains, adopting formal codes of conduct and linking to sites with

opposite points of view. The arguments of section 4.3 imply that the provision of information about other users' preferences would be a method for doing this, and new technologies such as the Semantic Web could also be exploited here [12].

However, the difficulty for policymakers is that in order to expose relatively extreme ideas to argument from more moderate positions, it is necessary to give them air time. Information filters have to be trusted – many consumers trust Amazon's recommendations, but if they always pointed away from some publishers and towards others they would not be trusted, and would not therefore work. To squeeze and shorten the tail of the religious marketplace, information provision must be trusted – and lack of trust of authorities, of course, is part of the problem of religious extremism.

Debate must be visible, free and fair; otherwise there will be little effect. It is in the interests of extremists to lengthen the tail as well, and it seems that their best strategy is the provision of information about the ideas in the marketplace, without also providing information about others' preferences and behaviour. The ideal extremist will be informed about ideas, but socially isolated. Hence the personalisation systems that worry Sunstein can only be part of the problem – collaborative filtering is a personalisation technology that seems to shorten tails. Hence also extremists will tend to try to discourage debate, and suppress links to opposite points of view, in order to create the type of intellectual ghetto to which Sunstein objects.

6. TENTATIVE CONCLUSIONS

Heterodox sects have always appeared and disappeared, often suppressed with violence, and often linked with growing assertiveness of classes of people hitherto denied a voice, the rootless poor with little stake in society, lacking or rejecting material and emotional support from traditional groups and churches, and, unfettered by memory or history, willing to cast their rebellion as a once-in-human-history struggle against demonic forces of evil. The Web has a number of advantages for such people, including the ability to cater for niche tastes as argued by Anderson (section 4).

There are also reasons to think that the Web may have changed the terms of religious trade qualitatively as well as quantitatively (section 3). It is not possible to impose a heavy handed secular editor of content, because it would break the Web. Furthermore, it is a strong implication of the CSC that extremism will not go away; rather, fears that it will spread beyond a hard core are likely to be overblown. Like the poor, the strictly religious (with whom, demographically, they have a lot in common) will always be with us.

A free market in religion would be a bumpy ride, and with the frictionless communication the Web facilitates, the ride may be bumpier than before. Terrorists and extremists use the Web with great facility, just as they used the printing press and roads. At the moment, there is not sufficient evidence that this relatively new form of communication technology has qualitatively changed the nature of religious groupings. But in policy terms, we are beginning to see the limits of Anderson's long tail thesis, and it is in the interests of the opponents of extremism to ensure that those limits are in place in the marketplace for religious ideas.

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