

The Arithmetic of Social Movements: Theoretical Implications

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This paper tries to explain many well-known patterns in the careers of cult movements by close examination of the arithmetic of plausible rates of recruitment and growth. Why do cults so often grow rapidly at the start, only to stall after a few years? Why do cult movements so often retreat from their initial aim to convert the world and turn inward? Are cult founders charismatic in any useful sense of that term? Why do religious movements maintain their initial doctrinal intensity as long as they continue to grow? We argue that the answer to these and many other pertinent questions can be inferred from some simple arithmetic results.

Knowledge of the rise of mass movements is oddly misshapen. A great deal of attention has been paid to why and how individuals join such movements, especially religious movements (cf. Stark and Bainbridge, 1980). Somewhat less attention has been paid to the tactics movements use to gain followers (cf. Lofland, 1966; Bainbridge, 1978; Balch and Taylor, 1977; Bromley and Shupe, 1979). But virtually no attention has been paid to the implications of growth for the structure and fate of social movements per se. It is recognized, of course, that movements must grow in order to succeed. But, beyond this truism, growth is not examined from the point of view of movements rather than from the point of view of individual recruits and recruiters.

In this paper we depart from this restricted view. We pay little attention to why people join social movements. Instead, we postulate a small, new religious cult movement and consider the implications of growth for this movement per se. What rates of growth are needed for this group to be successful under a variety of conditions? What factors govern what rates of growth can be achieved? What are the consequences of various rates of growth for the morale of the movement's founders and for maintaining the movement's original ideology?

In pursuit of these matters we sometimes draw upon data for specific cult movements. But for the most part, we rely on "thought experiments." Given certain likely assumptions, what are the arithmetic possibilities, and what are the likely implications of various outcomes? Some readers undoubtedly will object that such an approach is merely hypothetical. We respond that pursuit of the hypothetical can establish clear limits on the possible. Moreover, we hope to show that a lack of awareness of the arithmetic of growth rates often has obscured the vision not only of social scientists studying social movements, but, more importantly, the vision of movement founders and their first generation of followers.

Although we focus our discussion on a cult movement, our conclusions apply to any social movement that begins with but a few members and which seeks to establish a permanent and highly committed mass following.

We define cults as religious movements in a deviant religious *tradition* (Stark and Bainbridge, 1979). That is, cults differ from sects in that they are not a deviant religious group within a conventional or dominant religious tradition. Rather they present enough cultural novelty to fall outside the prevailing tradition(s). Keep in mind that cults always *start small*. First an individual or a small group must invent or discover a novel religion (Bainbridge and Stark, 1979). Only then can recruitment begin. Our concern in this paper is with what happens to groups after the initial founding nucleus has formed, and the effort to spread the faith has commenced.

By combining a series of arithmetic projections with theoretically-grounded assumptions we hope to demonstrate the following conclusions:

1. In large societies cults must grow at extremely high annual rates in order to become numerically significant within a generation or two.
2. Despite relatively high rates of annual growth, the small *absolute* number of recruits gained during the first generation is a plausible reason why cult founders so typically lose hope and turn movements inward.
3. Given certain restrictions on who is available for recruitment, cult members must form implausibly high numbers of strong bonds with outsiders in order to sustain "adequate" growth rates.
4. Simple calculations about the formation of cult nuclei sustain widely-held impressions about the "charisma" of cult founders.
5. The arithmetic of expanding social networks suggests that an initial high rate of cult growth often is braked because the founder is "smothered" by internal relationships thus preventing the formation of relations with new potential members.
6. Rates of growth that doom cults in large societies can produce success for cults in small societies or in a small population segment such as a political elite.
7. Cults can grow more rapidly when they spread through pre-existing networks than when they recruit from among social isolates.
8. Cults probably are easier to *start* in large, loosely-integrated, societies.
9. Cults probably are more likely to *succeed* in smaller, more tightly-integrated, societies.
10. Even quite modest rates of growth will result in the *majority* of cult members being *converts* rather than socialized members at all points in time. From this it follows that:
11. *Growing* cults will tend to retain their doctrinal intensity indefinitely.

Rates of Growth

We begin with a hypothetical cult that consists of 20 members. We need not be concerned with details of their doctrine, but only with what rates of growth they need in order to amount to something over a reasonable interval of time. For now, we shall assume that this cult is operating within a large society—one with, say, a population of 50 million or more.

Suppose that over the first year of observation our cult attracts two new members. This is a growth rate of 10 per cent for the year. Let us assume this rate is maintained for the indefinite future. Let us also suppose no one ever quits the group and that the group is demographically stable—births equal deaths so there is no growth through fertility and no decline through mortality. With a 10 percent annual growth rate, will this group become

large over a reasonable span of time? In part that depends on what one means by “large,” and how long is a “reasonable” time span. But, as is shown in Table 1, at a 10 per cent annual rate of growth, in 10 years this group will have 52 members. In 20 years they will only number 135. In 40 years still only 905. Even after 100 years they will number only 275,000.

Let’s see what happens if our group grows at twice this rate, or at 20 per cent per year. Even then they grow very slowly, having only 124 members after a decade, and 767 after 20 years of recruitment efforts. Indeed, a group that maintains an annual growth rate of 20 per cent for 40 years will still only number slightly more than 29,000—and that is a small absolute size if the surrounding society is large. Of course, the table shows that should a group keep up a 20 per cent annual growth rate for 100 years they would be triumphant even in the largest society, for at that rate they would have gained 1.6 billion members.

TABLE 1
 CONSEQUENCES OF VARIOUS ANNUAL GROWTH RATES FOR CULT MEMBERSHIP
 ASSUMPTIONS: 1. AN INITIAL NUCLEUS OF 20 MEMBERS
 2. NO DEFECTIONS
 3. BIRTHS BALANCE DEATHS

Annual Rate of Growth	Absolute Number of Members			
	After 10 Years	After 20 Years	After 40 Years	After 100 Years
10%	52	135	905	285,612
20%	124	767	29,395	1.6 Billion
30%	276	3,800	722,377	4.9 Billion
40%	578	16,733	14 Million	8.2 Billion
50%	1153	66,505	221 Million	81 Billion

The table shows that even when a 30 per cent annual rate of growth is assumed, growth is slow over the first two decades: after 10 years the group would have only 276 members and after 20 they would have 3,800. Indeed, to become numerically strong during one generation a cult must grow at truly phenomenal rates.

Consider the case of the Unification Church, popularly known as the Moonies. When first observed in late 1962 (Lofland and Stark, 1965), they had but 20 members in the United States—the same total as our hypothetical cult. It is estimated that there were about 6,000 Moonies in the United States in 1980. In the context of American society, 6,000 people mean little numerically. Yet, in order to achieve this rate of growth in about 17 years, the Moonies must have maintained a 40 per cent annual rate of growth! As we shall see, this is an extraordinary performance. And, if they could keep this up for another 13 years there would be 500,000 American Moonies.

Growth and Hope

Even for our hypothetical group it seems reasonable to suppose that its members are mortal and that they experience hope and disappointment. When we consider the small absolute size of our group after twenty years of active recruitment, even with high annual rates of increase, it ought not surprise us that cults so often lose heart and turn inward.

You have discovered the true religion. You have set out to bring it to the world, or at least to a significant portion of your society. You have worked hard at this task for 20 years. Even though you have grown at a rate of 30 per cent a year there are still fewer than 4,000 persons who have responded to the word. True enough, if you could keep this up for *another* 20 years, you would have more than 700,000 members. But this too would be a very small religious group in a large society. Moreover, the prospects of even this level of success must seem dim indeed to people who already have given their all and have not yet been rewarded by a really impressive increase in *absolute* numbers of converts.

Let us assume that our cult founder began his or her efforts to start a new religious movement at age 35. The first several years were spent gathering the original founding nucleus of 20. Let us assume that converts are about the same age as the founder. Twenty years later they remain the most influential followers of the movement. Like the founder, they are not so young anymore—they are in their middle to late 50s. Even if they accepted our arithmetic projections about growth over the next 20 years, they would not expect to live to see the movement become large, let alone dominant. Moreover, people are not adept at interpreting their affairs in terms of compound rates. They tend, instead, to project the past into the future in terms of absolute rather than geometric increases—to think that 4,000 in 20 years projects as 8,000 in 40 years.

The ethnographic and historical literature on cults abounds with examples of movements that, after a decade or two of growth, turned inward and ceased to seek converts (Dohrman, 1958; Bainbridge, 1978; Whitworth, 1975). Doctrines once directed towards saving the world often shift to conceptions of an elect or a saving remnant of believers. We think our simple arithmetic computations help illuminate this common phenomenon. It takes truly phenomenal percentage rates of growth to produce a large absolute number of members over the course of one generation. In the absence of such response, it seems understandable that the first generation often lose heart and transform the movement in ways that assuage their own waning hopes.

Of course, we have set no limits on potential growth rates. If a group of 20 grew by 100 per cent per year, in 20 years they would number 20 million members. But because cults seem not to grow at such high rates it seems time to impose some further assumptions on our calculations.

Limits on Recruitment

Not all members of a population can be recruited into a cult movement. While the proportion of potential converts will vary from time to time and from one society to another (we shall explore some of these variations later in this paper), several categories of people are very unlikely to be converted. For example, studies find that people who do not accept the existence of an active supernatural do not join cult movements. This is more than tautology. One supposes that people who do not believe in the supernatural could be convinced of its existence during the recruitment process. However, Lofland and Stark (1965) and Barker (1981b) found this not to be the case. Rather such a belief was a necessary precondition (or background factor), the lack of which was sufficient to prevent recruitment. In contemporary America this factor would reduce the potential pool of cult recruits by perhaps 10 per cent, and by considerably more in some contemporary European nations.

A second category of persons unlikely to be potential recruits are those who are firmly committed to another religious organization or cult movement. People whose religious needs are being met adequately do not take up an alternative faith. At present about 56 per cent of Americans are official members of a specific religious congregation. Not all of them are active or well-satisfied members, of course. On the other hand, many others who are not official members, but who continue to hold conventional religious beliefs, to pray, and who claim a cultural affiliation with a specific denomination also are probably not available for conversion to a non-Christian cult movement. Roughly three quarters of the U.S. population falls into these two categories, and are unlikely candidates for conversion.

In addition, cult movements are deviant and hence membership in them carries a social stigma. To join, one must give up something. People enjoying economic and social success have a considerable amount to lose by conversion to a cult movement and correspondingly less to gain, since they are in less need of the comforts of faith. Hence the shape of stratification systems limits recruitment to cult movements and one supposes that in contemporary America large numbers are relatively immune to conversion because of their relative affluence. While we are not prepared to assert any firm estimates of the pool of potential recruits for cult movements, it is clear that this pool is very limited in many societies.

By now it is well-established that recruitment to cult movements flows through networks of social relations. Whatever else enters into recruitment it seems necessary that a person must possess or develop a strong interpersonal attachment to a member of the group. But if not just anyone can be recruited to a cult movement, then *not all such bonds will result in recruitment*. A most important finding from Eileen Barker's major study of recruitment to the Unification Church (the Moonies) in Great Britain helps illuminate this point. Barker (1979; 1981 a and b) collected data from all persons attending two-day weekend workshops run by the Moonies in London during 1971 as a first step in seeking recruits.

Table 2 shows the attrition of these potential recruits as they moved from the start of the two-day workshop through progressively longer ones. During the first weekend, 13 per cent dropped out before it was over. Moreover 55 per cent dropped before undertaking a

TABLE 2

ATTRITION OF PERSONS BEING RECRUITED BY THE UNIFICATION CHURCH IN LONDON DURING 1971

Per Cent of Those Who Began a Two-Day Unification Workshop Who Stayed to the End	87%
Per Cent Who Returned to Begin a Seven-Day Workshop	45%
Per Cent Who Completed the Seven-Day Workshop	33%
Per Cent Who Returned for a Three-Week Workshop	22%
Per Cent Who Completed the Three-Week Workshop	11%
Per Cent Who Were Unification Members One Year Later	4.6%

From: Eileen Barker, "The Ones Who Got Away," paper presented at the Conference on Alternative Religions, Chicago, May, 1981. To be incorporated in her forthcoming book on the Unification Church.

seven-day workshop, and only 33 per cent actually stayed through this week. Twenty-two per cent continued into the three-week workshop, and only 11 per cent completed it. Finally, of those who began the whole workshop process only 4.6 per cent were members of the Unification Church a year later.

Keep in mind that all of these people had *some* prior contact with the Moonies—enough to get them to the first weekend. Some who filled out Barker's questionnaire during the first two-day workshop indicated they did not believe in God. None of them returned for a seven-day workshop. Others found the weekend boring or incompatible with their conventional religious commitment. In addition, many newcomers probably failed to develop (and did not already possess) close interpersonal relations with Moonie members during the first weekend—hence the very high drop out. However, it seems reasonable to assume that those who came back for a whole week of immersion in Unification teachings had more significant ties to the group. Still, substantial attrition continued. Moreover, of those who stayed through the whole sequence, completing the three-week session, more than half did not become Moonies, or did so only briefly.

These data suggest that there are severe restrictions on the pool of potential recruits to the Unification Church in England. Presumably those who attend an initial workshop are not a random cross-section of the English public, but already have been screened considerably. If so, then the English pool must be substantially less than five per cent. These data are in agreement with observations of the first American cell of the Unification Church during its operations in San Francisco during 1962 and 63. Only about one person in twenty who attended meetings of the group eventually joined. Of course, the potential pool of Moonies in Britain and the U.S. could be smaller or larger than that for many other cult movements (cf. Bainbridge and Jackson, 1981). But these data do encourage the assumption that very significant limits face all such movements. Therefore, let us make some assumptions about pool limits and explore their implications.

Assume that in order for a recruitment to occur a cult member must form a close interpersonal bond with an outsider or activate a pre-existing bond with an outsider. If each member could do this once a year, and if nothing else influenced recruitment, then the group would double in membership annually. But other things do influence recruitment. To the extent that outsiders are unavailable for recruitment, then many bonds formed or possessed by cult members to outsiders will not produce a recruit.

In Table 3 we explore various estimates of potential recruitment pools and see what this implies for the number of interpersonal bonds an average cult member must form or activate annually in order to achieve various rates of growth. If we assume that only 1 per cent of the population are potential recruits, then in order to achieve even the very low growth rate of 10 per cent a year, each cult member must form or activate 10 interpersonal bonds. Or to grow at a 40 per cent rate, as the American Moonies have done, requires 40 bonds each year. In our judgment these figures are implausible. Humans simply can't form so many relationships so quickly. Moreover, as we see in a later section, many cult members are likely to be quite deficient in social skills. If so, then the more skilled members would have to produce staggering numbers of intense interpersonal bonds a year in order for even modest growth rates to be achieved.

However, if five per cent of the population consists of potential recruits, the picture becomes more credible. The average Moonie would need to create or activate only 8 bonds a

TABLE 3

HOW PROPORTIONS OF POPULATION POTENTIALLY RECRUITABLE
INFLUENCES THE NUMBER OF INTERPERSONAL BONDS EACH MEMBER
MUST FORM OR ACTIVATE ANNUALLY TO ACHIEVE VARIOUS RATES OF GROWTH

Average #of Bonds Needed Per Member Per Year if:	To Achieve Annual Growth of:				
	10%	20%	30%	40%	50%
Only 1% of Population is Recruitable	10	20	30	40	50
Only 5% of Population is Recruitable	2	4	6	8	10
Only 10% of Population is Recruitable	1	2	3	4	5
Only 20% of Population is Recruitable	.5	1	1.5	2	2.5

Assumptions: Initial Nucleus of 20
No Defections
Births Balance Deaths

year to produce a 40 per cent growth rate. And, as the potential pool becomes even larger, a correspondingly higher proportion of bonds will produce recruits and a correspondingly smaller number of such bonds per member are needed. Thus if 20 per cent of the population are potential Moonies, then each member need have only two bonds a year to produce a 40 per cent growth rate.

The major implication of this hypothetical arithmetic is that most cults probably remain so small because their pool of potential recruits is such a small percentage of the population that most member contacts are unproductive. Clearly, the size of the potential pool differs both among cult movements and societies. But unless the pool is substantial it *will remain largely untapped*. Cult members will dissipate their efforts on the unconvertable. This is exacerbated because, as most cult members will testify, it is difficult a priori to distinguish potential recruits from others—at least not until after a very substantial investment of time and affect has been made. Thus, for example, many with a very positive initial reaction to cult doctrine do not join, while many with quite negative initial reactions do join.

Charisma

Sociologists often decry journalistic use of the term charisma to mean merely an unusual capacity to influence others, to inspire intense liking and respect from others, as a woeful corruption of Weber. Yet, we think this might be the most useful definition of charisma if it is to be used at all to describe cult founders. Indeed, we suspect that this is exactly why sociologists so often apply the term charisma to the special qualities of cult founders. For cults to get started requires a founder able to attract others, to convince them to accept a new truth. Converts often will report how strongly attracted they were to the leader and hence to the movement. Indeed, given the centrality of close interpersonal bonds in the conversion process, cult leaders can only succeed if they have unusual social skills.

Let us reconsider our hypothetical cult. Recall we assumed that it already had 20 members. But now let us examine how these 20 people were drawn into the movement. If we start with a lone cult founder without followers, and suppose even a very high 50 per cent rate of annual growth, then in five years the group would have grown to only 7.5 persons. That is far short of our initial group of 20. Indeed, for a founder to recruit a group of 20 in

the first five years of effort requires an annual growth rate of nearly 90 per cent. We know that is unrealistically high for most cults once they have gotten going. But it seems *typical* for the first five years of almost any cult that has ever come to scholarly notice—cult leaders usually *are* able to attract 20 or more followers over the first five years of the movement. This suggests that they are uncommonly skilled at recruiting. Indeed, unless such recruiting skill was uncommon cults would continue to grow at much higher rates than they do. Thus simple arithmetic reveals that the vast majority of cult founders must have been extremely skilled at building strong interpersonal ties with others. In this sense, then, they deserve to be called charismatic.

Smothering the Leader

Since cults must grow at extraordinary rates if they are to gain a founding nucleus, and that then they usually grow at a much slower rate, suggests an important trend in the career of cults. As the group gets larger, the leader's contribution to the growth rate must decline.

We have seen that cult formation is possible because leaders are gifted recruiters. Suppose nothing interferes with this gift and each year the leader is able to convert the same number of new recruits as before. Even so, these new recruits will constitute a declining growth rate if the leader is the only effective recruiter. A constant number is a declining percentage of a growing number. Thus, to the extent that cult growth rests on the recruiting skills of a single leader, or of a small group of founders, growth will be progressively slower. This must be quite common because so many cults do reach a size of 50 to 100 and then stall. Moreover, it seems unlikely that a cult leader could continue indefinitely even to produce the same number of converts each year.

Cult leaders will tend to become swamped in internal social relations as the group gets larger. Because people join cults on the basis of close interpersonal bonds, to the extent that the leaders play the major role in early recruitment they will tend to be the foci of the social network of the group. This in turn will limit their capacity to continue to form new bonds with outsiders. As this develops, leaders will bring in a declining number of new recruits.

Declining Social Skills

To the extent that cults depend upon the *formation* of bonds between members and outsiders for recruitment (as opposed to spreading through pre-existing bonds), recruits will be overselected for lack of interpersonal skills. Studies of recruitment report that converts were very deficient in social bonds prior to recruitment (cf. Lofland and Stark, 1965; Bainbridge, 1978; Lynch, 1979; Stark and Bainbridge, 1980). Such people are most accessible to forming intense social bonds with cult members and are little restricted from recruitment by their bonds with outsiders. Some recruits lack social bonds because of circumstances. For example, they may be newly arrived strangers in the city where they encountered the cult movement. But for many others, their lack of bonds reflected limited ability to form such bonds. They were very approachable because of their unfulfilled desire for social relations, but not very good at approaching, and for that reason lacking in relations. People with excellent social skills and many firm attachments to others are not high probability recruits. For such people there is no special premium in finding a warm recep-

tion from cult members. But for the wallflowers of life, to be treated as very socially valuable is a heady experience. From this it follows that those most readily recruited by cult movements will tend to be below average in social skills or interpersonal attractiveness. Yet, if the cult is to continue to grow these recruits must become effective recruiters. Sometimes a period of immersion in warm relations inside the group enables recruits to develop effective social skills. But often they remain of limited capacity to win friends and influence people. As the proportion of such persons rises in a cult movement, the growth rate will decline. This too must inform the common observation that cult movements often stall after an early period of growth and that they often fall apart upon the death or withdrawal of the founder.

Small Groups

Thus far we have been considering the arithmetic of growth in the context of a large society—50 million or more. We have seen that even with quite optimistic assumptions about annual recruitment rates that groups grow very slowly during the first generation. It is important to note that such growth rates are *independent* of the size of the target population, so long as that population is large enough to provide the additional needed recruits. This being the case, rates of growth that frustrate hope among the founding generation in large societies are *adequate to spell success in small societies*.

Consider a small tribe of several hundred. Even a very modest rate of growth, say 10 per cent, would lead to the conversion of the majority within a twenty year span. Even in relatively larger pastoral or agrarian societies, the small *absolute* numbers recruited over the first 20 years would be *relatively* large.

Thus it may be much harder for cults to succeed in modern societies simply because such societies are so large. In the context of large populations even high percentage rates of growth yield relatively small numbers of members over the first generation. This seems a paradox. Large societies seem to offer so many more *potential* members. But the arithmetic of growth shows that the larger the society the larger the apparently *unfulfilled* potential growth, at least in the critical early period.

As we consider below, it may well be harder for cults to get their initial nucleus together in small, stable, traditional societies. But if they do it is much easier for them to find hope and power in the same set of absolute numbers that can crush hope in large societies. Indeed, our impression of the historic record is that cults have more often triumphed in small societies. Exactly the same number of recruits that made, for example, the Ghost Shirt Dancers a major historical phenomenon among the Plains Indians would have constituted but another small, curious cult in the context of any 19th century industrialized nation.

Small societies are not, of course, the only small groups relevant to cult formation. Elites often are small groups, especially in societies with highly centralized power. And here too small absolute numbers can take on great relative importance. Thus to get a cult started among members of the Roman Imperial Court, or among the Party elite in the Soviet Union, and to acquire a few thousand members, in 20 years, would promise great success for the movement. Indeed, historically one notes how often the conversion of a society has occurred in precisely this fashion. The Vikings were not Christianized because monks went from farm to farm leading Ole and Swen to Christ. The monks converted the nobil-

ity and Ole and Swen did what they were told. By the same token, Lysenko did not spread his magical claims of acquired genetic characteristics among collectivized farmers, but among the ruling Soviet elite.

The point is that while the arithmetic of growth rates is inexorable, its relative meaning depends upon context.

Pools and Networks

Earlier, we assigned arbitrary limits to the potential recruitment pools for cult movements. We now explore these limits more systematically.

Clearly, societies differ in the proportions of their populations who are potential recruits for a new religious movement – indeed, a society may vary in this respect quite dramatically over time. At least two factors greatly influence recruitment pools: 1) the degree of social integration of the society; 2) the strength of a society's conventional religious organizations. Let us elaborate on each factor.

If we think of societies as relatively closed networks of social relations, their degree of social integration is the proportion of members having strong ties within this network. Conversely, to the extent that societies contain persons who are only weakly connected to others, such societies are poorly integrated (cf. Durkheim, 1897). Given what we know about the cult recruitment process, it must follow that poorly integrated societies will contain larger proportions of potential recruits (other things being equal). Joining a cult is not simply a function of forming a bond with a member, but also of having relatively weak bonds to non-members. The more numerous and strong the bonds an individual has to noncult members, the (1) more that such bonds will restrain entry into a deviant group, and (2) the less likely it is that a person will form strong bonds with cult members, for the less such a person is open to new relationships and the less important such relationships are in the person's overall interpersonal economy.

From these considerations it follows that to the extent that a society contains many socially unattached or "loose" members, the easier it will be to start a cult – the greater the probability for a given cult founder to meet and form bonds with enough people to get a movement going. Other things being equal, then, it will be easier to *found* cults in modern industrial societies than in more stable agrarian societies. But, as we shall see, it may be in the more stable agrarian societies that cults, if started, have the best probability of real success.

People do not turn to new religions if their old religion serves them adequately. The abundance of cults in modern times stems not only from poor social integration, but from the progressive weakening of the long-dominant religious organizations. The loss of commitment to an active supernatural by leading Christian denominations, for example, has left these bodies with but tepid means for dealing with fundamental human concerns. As such changes take place in societies the proportions who are open to new, more satisfying religion grows. Elsewhere we have demonstrated the powerful negative correlations between church-membership rates and a variety of measures of cult formation and strength (Stark and Bainbridge, 1981a; Bainbridge and Stark, in press). The secularization of conventional faiths, therefore, periodically creates market openings for new religions.

However, such market opportunities can occur suddenly as well. Natural disasters, economic collapse, war, contact with more advanced societies, and other causes of social dis-

organization can place such demands upon the conventional religious system that it is overwhelmed. In such circumstances new religions often spring up. Indeed, some scholars claim that all successful new religions originate during social crises (cf. Wallace, 1956). In such crises one need not look to social isolates to recruit cult members. Cults can form and prosper among those well-integrated into the society.

Finally, crises need not envelope a whole society for new religions to prosper. If an integrated subgroup within a society is particularly deprived, and available faiths fail to suffice, here too is a major market opportunity for a new faith. We may note the frequency with which new religions have sprung up among dissatisfied peasants and the frequency of millenarian cult outbursts in medieval cities straining under feudalism.

We may pull many of these themes together by postulating two societies. Society A, like modern industrial societies, is not highly integrated. Perhaps as many as a third of its members have but few or weak ties to others. Society B is preindustrial and no more than five per cent of its members are poorly attached to others.

Other things being equal it will be much easier to found a cult in Society A. It will be relatively easier to locate social "atoms," people lacking ties that would restrain them from joining and for whom the opportunity for close ties with members will facilitate joining. Moreover, a tendency to recruit social isolates will be amplified by both experience and selection. In societies having many unintegrated people, cult members will learn from experience that such people are more easily recruited and may shape their recruitment tactics, and even their doctrines, to maximize appeal to the unattached. For example, the Moonies in California developed various singles parties and activities in order to attract the unattached and then concentrated on "love bombing" such newcomers in order to construct intense bonds (Bromley and Shupe, 1979). In addition, there will be a selection bias in favor of groups that concentrate on the unattached, for they will more easily build a sufficient nucleus to amount to something. As mentioned, of course, such groups will thereby tend to overrecruit persons deficient in social skills. Such groups will also maximize the need to depend upon *new* social bonds in order to grow. That is, by overselecting members lacking in social bonds, conversion of a new member will not offer access to a preexisting network of relationships along which the group can grow. Finally, when a cult movement is based on the unattached it will exhaust the potential pool of recruits without converting the majority of members of Society A. For even in poorly integrated modern societies most people are not unattached social atoms but enjoy dense and intense relations to others.

Let us now examine the plausible career of cult movements in Society B. Here few are unattached. In such a society we doubt that cults will focus on the unattached, for it will be clear from the start that their numbers are too few. Here success rests on making headway among the well-attached. Obviously, this is a much greater initial challenge. One cannot just appeal to marginal people, but must find means to attract the main body of society. That often will be difficult or even impossible, which is probably why cults are more numerous in poorly integrated societies. However, as we have sketched above, there are times when it is possible for a new religion to supplant an old one right at the center of the most integrated social network. Granted that cult founders have no control over these conditions. Cult founders either come along at a favorable time or they remain in obscurity. But if they do come with the right alternative at the right moment, they may achieve

true success. For, when a cult movement gets going inside a well-integrated social network amazing growth comes rapidly (cf. Granovetter, 1973). This is because, when a new religion penetrates a pre-existing social network:

1) there will be no tendency to overrecruit persons deficient in social skills. Instead, recruits will possess the normal range of social skills.

2) members need not possess unusual social skills in order for the movement to grow, for they will not need to form new bonds but to merely influence others with whom they long have had close relations.

3) given even very modest assumptions about the social relations of the average new recruit the movement will grow very rapidly.

Table 4 lets us examine growth under these conditions. If a cult movement penetrates a well-integrated social network we can assume that its appeal is not aimed at a marginal minority of the unattached, but will suit the majority. Hence the potential pool is very large and most bonds will not be with the unrecruitable. Furthermore, the average recruit will have a number of such bonds prior to recruitment. If a religion has strong appeal for a given individual it ought to appeal to that person's intimates (Bainbridge and Stark, 1981a; 1981b). Hence a new recruit ought to be able to recruit many of his or her friends and relatives.

Let us see how such pre-existing bonds can cause rapid growth of a movement. Suppose that each new recruit has one preexisting bond that can be activated within two years after conversion to produce one additional recruit. Again assuming a nucleus of 20 we can see in the first column of Table 4 that only very slow growth would result—after 20 years there would be only 220 members in the cult movement. But suppose that the average recruit has two pre-existing bonds that can be activated for recruitment. Then after 20 years the cult would have more than 40 thousand members. But suppose the average recruit possessed three pre-existing bonds that could be activated within the first two years following conversion. Then, in 20 years the group would have nearly 1.8 million members. And, if the average convert had four unique and recruitable pre-existing bonds, then in 20 years the group would number almost 28 million members.

TABLE 4
IMPACT OF PREBONDED (NETWORK) CONVERSION
WITHIN TWO YEARS OF CONVERSION EACH CONVERT BRINGS IN:

Year	1 New Member	2 New Members	3 New Members	4 New Members
Total				
2 Members:	40	60	80	100
4	60	140	260	420
6	80	300	800	1,700
8	100	620	2,420	6,820
10	120	1,260	7,280	27,300
12	140	2,540	21,830	109,220
14	160	5,100	65,570	436,900
16	180	10,220	196,790	1,747,620
18	200	20,460	590,450	6,990,500
20	220	40,940	1,771,430	27,962,020

In our judgment we do not strain plausibility by supposing that an average recruit might produce four new members. If a group begins to recruit followers who are socially-integrated members of a stable society such growth seems quite plausible. Most such people would have many more than four close bonds to draw upon. In fact, we think columns three and four approximate what often has happened in history when a new religion has swept through a society or geographic area. The rise of new religions often does not take generations. Rather like Islam, Christianity, and Buddhism, they have arisen with great rapidity. Indeed, we suspect that cult movements either get big fast, or they are likely to always be small.

Growth and Orthodoxy

It is a commonplace that once new religions have swept to a dominant position in a society they tend to compromise their original stance towards the world. Once dominated by those with a substantial stake in this world, religious organizations tend to deemphasize their pristine otherworldliness. This is, of course, the well-known process by which sects are transformed into churches, and by which churches are secularized until they no longer function adequately as religions. Elsewhere we have discussed this process at length (Stark and Bainbridge, 1979; 1981a; 1981b; 1983). Here we want to introduce an important consideration about *when* the secularization process is likely to make headway. Put another way, how long can a successful new religious movement maintain its original orthodoxy? We believe that the answer is: a cult movement will remain very orthodox as long as it is *growing* at even a modest rate via recruitment.

We begin with the truism that “converts are holier than the Pope.” Here is captured the recognition that people who take up a new faith because of the way in which it satisfies their religious needs are unlikely to favor changing that religion. More specifically, people who join a religious movement because of the potency of its “otherworldly” compensators will not want to weaken those compensators, for this would simply be to reduce the benefits they gain. Religions tend to be transformed from emphasis on the otherworldly to greater accommodation of this world when they are supported primarily by socialized rather than converted members and when many of their members have been upwardly mobile. But so long as a majority of members are converts this process is likely to be greatly retarded.

Simple calculations reveal that even with a very modest rate of annual growth via recruitment, a group will always contain a majority of converts among adult members, unless it also has a very high fertility rate. Moreover, even if a group’s fertility is high, it will always contain a majority of converts if recruitment continues at any substantial rate.

It appears that successful cult movements gain relatively young recruits. We therefore assume that the average recruit will spend as many adult years in the group as will the average socialized member. That is, recruits will enter at the same age as socialized members become effective adults. Suppose that a group is growing via recruitment at a rate of 10 per cent a year—a very slow growth rate as we have already seen. If we assume that the average member (whether recruited or socialized) spends forty years as an adult member of the group, then for each adult, 0.1 new recruits will be added to the group annually, or four over their lifetimes. If we set fertility at replacement level—one offspring per adult member—then .025 new socialized members per adult will be added each year, or one over their

lifetimes. Hence recruits will outnumber socialized members by four to one indefinitely. Indeed, in order for socialized members to overtake converts in numbers when a group recruits at a 10 per cent annual rate, we must assume an even sex distribution and an average fertility of eight per female.

These calculations suggest that secularization of a religious movement will be impeded until significant growth by recruitment ceases. Growing movements retain their otherworldliness as a simple function of having a substantial majority of converted members. Hence, the ability of the Mormons to withstand secularization probably rests upon their continuing rapid growth via recruitment. Moreover, the ease with which converts rise to influential positions in Mormonism is probably due to the fact that they are not a small minority of newcomers, but a very sizeable proportion of the membership. The more rapidly a religious movement exhausts its recruitment potential, the more rapidly it will come to be dominated by socialized members. Thus growth not only influences a religious movement's morale, its sense of destiny, but its fundamental store of zealous members.

Conclusion

In this paper we have explored the reasons for the common observation that while hundreds of new religious movements form in modern societies they rarely amount to much. The primary reason is that because modern societies are so large, social movements must grow at astonishing rates in order to reach significant size in a generation or two. Such rapid growth seems impossible unless it occurs within a well-integrated social network. For when recruitment depends upon the formation of bonds between members and outsiders the arithmetic of rapid growth becomes implausible. Moreover, because most cults gather their initial nucleus from among those lacking in social bonds, the average recruit will be somewhat deficient in interpersonal skills, thus further limiting the prospects for rapid growth. Moreover, rapid early growth will decline as the founder(s) become smothered in internal relationships.

To achieve the needed growth, new religions must appeal to mainstream members of a society, not to only marginal members. Rapid growth must travel along pre-existing social relations—thus the group must gain access to well-integrated members of a society. This seems to have been precisely how the truly successful historical religious movements did achieve their success. Jesus first recruited his immediate family as did Mohammed. Indeed, the case of Mormonism in the early 19th century is quite well-documented. Joseph Smith's first followers were his family, and neighbors. Early Mormon growth flowed along along a network of close *kinship* spreading out from this initial nucleus—as converts brought in their brothers, sisters, parents, aunts and uncles. Under these conditions early Mormon growth boomed. The rapid rate of growth of modern Mormonism is based on the ability to appeal to well-integrated people, not just social isolates, and therefore to gain entry to new networks (Stark and Bainbridge, 1980).

The bottom line seems to be that new religions must grow rapidly, or fail. To grow rapidly they must not be deluged with recruits who are social isolates. Rather the primary appeal must be to the social mainstream. In this sense prophets do not control their own destinies. They must not only discover the right religious message, they must appear in the right place at the right time. For only when dominant religions are failing to serve most

people is there a real opportunity for a new faith to flourish in the heart of a society. Such moments may occur only rarely. Thus, while new religions constantly form, most are fated to oblivion. However, the constancy of religious innovation guarantees that whenever conditions are right, there will be no anxious wait for the new messiah to appear. Salvation is always at hand.

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