

CHAPTER 11

The Adaptiveness of Changing Religious Belief Systems

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For many years as a psychiatrist I treated patients who had undergone a change of belief system. In some cases the new belief system had a religious theme, such as that the patient was the Son of God or the Virgin Mary. What was most impressive was the utter conviction with which the new beliefs were held. No amount of argument could achieve any lessening of the new beliefs. Unfortunately for the patient, the new belief system was incompatible with continuing life in his or her previous social world; hence there was a referral to the psychiatric service. Often the new belief system was associated with highly prosocial aspirations, such as to "make the desert bloom," and a sense of mission to persuade others to go to "a land without evil."

One such patient was brought in by the police. He had been proclaiming himself as the Second Coming of Christ. I pointed out to the police that the second coming was widely anticipated by a large proportion of the population and that it was therefore not unreasonable for anyone to think they might have been selected. The police replied that he was clearly insane because he had been giving away his money to passersby. They said that he had even given away his credit card, and, to clinch the proof of his insanity, he had shouted out his personal identification number (PIN). There was little else wrong with this young man apart from his conviction of his sacred destiny. He was due to come before a judge to review his compulsory detention. I argued with him that he should tone down his claim a little. I suggested

that if he told the judge that he might spend some time in a theological college in order to prepare himself for his new role, he might be released from the section of the Mental Health Act under which he was detained. But his sense of mission was too strong. He told the judge that he intended to continue preaching. The judge, without the slightest hesitation, made an order for continued compulsory detention.

About this same period, Boston anthropologist Charles Lindholm¹ produced his book *Charisma*, which described similar experiences in a range of individuals who were labeled gurus, cult leaders, prophets, and inspirers of New Religious Movements. (When used in this chapter, a *cult* means a group of people who follow a leader and proclaim a revolutionary ideology; over time a cult may develop into a religion.) This was followed by *Feet of Clay* in which Oxford psychiatrist Anthony Storr² lucidly equated the revelatory experiences of these gurus with the delusions of psychotic patients. What distinguished the guru from the patient was his ability to persuade other people to share his new beliefs. As Storr put it, "some gurus avoid the stigma of being labelled insane or even being confined in a mental hospital because they have acquired a group of disciples who accept them as prophets rather than perceiving them as deluded."³

Perhaps there was a biological advantage in being a guru and leading a group of disciples to a "promised land." When successful this advantage might be great enough to balance those many cases in which a new sect died out for some reason, or committed mass suicide, or practiced celibacy, or those other cases in which the guru failed to recruit followers and ended up in a hospital. Perhaps this might account for the persistence of the genetic predisposition to psychosis in spite of the reduced reproduction that is typical of such patients.⁴ It may also help us to understand the social deficits of future patients, who are destined to relate only to followers and not to peers.⁵ Finally, it might also help us to understand the negative features of schizophrenia such as apathy and withdrawal, since the prospective guru has failed to have his new belief system validated by followers, has missed the "ecstatic merger of leader and follower which seems so central to the charismatic experience,"⁶ and receives only negative responses from those to whom he communicates his message.

BELIEF SYSTEMS (MAZEWAYS)

Human beings have a set of beliefs about themselves and the world they live in. Following the lead of anthropologist Anthony Wallace,

this set of beliefs will be called a "mazeway."⁷ The *mazeway* contains beliefs about the relationship of the individual to his group, his ancestry, his gods, his purpose in the world, and his moral code. Most of the mazeway is shared with members of the same group and is learned during childhood. Learning about specific beliefs depends on language. Therefore, the development of mazeways must have begun after our hominid ancestors split off from the chimpanzee line and we began to develop a symbolic vocal language. Then each group could get one or more unique symbols to define it—a name, a unique language or dialect, a myth of its origins, and maybe a flag or even a national anthem.

This development of group symbols must have greatly enhanced the cohesiveness of groups and as a result encouraged group competition. Group efficiency and solidarity were further enhanced by the adoption of a unique concept of God, together with a myth of origin and a prescription for moral behavior. Most writers on religion agree that such a group should have an advantage to outcompete any group lacking such beliefs.⁸

Anthropologists have found that each human group or tribe has such a system of shared beliefs about the world and its origins and the relation of each individual to the ancestors and the gods. The bulk of this mazeway is common to all members of the group, but differs from the mazeway of every other group. The elements of a mazeway—e.g., beliefs about God, purpose, moral code—are neither false nor true. They are unverifiable. They consist of what the late University of Michigan anthropologist Roy Rappaport⁹ has called sacred knowledge, to distinguish it from ordinary practical (profane) knowledge. The late Harvard evolutionary biologist Stephen Jay Gould¹⁰ spoke of two nonoverlapping "magisteria" of sacred and profane discourse, while Karen Armstrong,¹¹ former Roman Catholic nun and author of several books on comparative religion, distinguished between the sacred "mythos" and the profane "logos."

The existence of sacred knowledge makes it possible for every group to have a different mazeway. Each child learns the mazeway of his/her group, which then appears self-evident. One has no insight into the irrationality of one's own belief system, which can get compartmentalized away from other aspects of one's reasoning process. People who subscribe to different mazeways from one's own are regarded as infidels or heathen. The ubiquity of mazeways suggests that over the past few million years groups whose members lacked the capacity to develop a mazeway must have died out.¹²

CHANGE OF BELIEF SYSTEM (MAZEWAY RESYNTHESIS)

Even more remarkable than the development of unique sacred belief systems is the capacity for change of belief system. This has been observed over and over again by anthropologists in the formation of cults and New Religious Movements. The future prophet or cult leader undergoes an intense experience, sometimes accompanied by apparent physical illness and often by auditory hallucinations. As a result, a new mazeway is formed. It is as if the elements of the old mazeway were shaken in a kaleidoscope and a new and meaningful pattern emerges. There is a sense of mission and a compulsion to share the new mazeway with others. The reaction of those others is sharply divided between those who reject the new ideas, which are regarded as heresy, and those who accept them and regard them as being of supernatural origin. These latter undergo "conversion" to the new ideas of the prophet in what has been called "secondary mazeway resynthesis" (to distinguish it from the "primary mazeway resynthesis" of the prophet). They then become followers or cult members, and a new social unit with a new and unique mazeway has been formed.¹³

CHANGE OF BELIEF SYSTEM (PSYCHOTIC DELUSION)

In psychiatry one deals with situations where something has gone wrong, otherwise patients would not come or be brought to psychiatrists. Seeing something going wrong sometimes enables one to visualize how things would be if things went right. Changes of belief are common in psychiatric patients. When they are counterintuitive and counterfactual, we call them delusions. In psychiatry a delusion is a fixed false idea not shared by members of one's social group. For those who are not familiar with delusion formation, the description by Sir Martin Roth (former president of the British Royal College of Psychiatrists) may give the feel of what it is like for the delusional schizophrenic patient:

The patient may have already begun to see the outside world as transfigured by elements of threat, mystery, danger and unreality, the "delusional atmosphere" common in this disorder. It is at this

stage that an overwhelming idea of wide-ranging significance often erupts out of a clear sky in the minds of schizophrenic patients and leaves an indelible impression. It arrives direct and unmediated by any relevant or understandable antecedent even of experience. Such a "primary delusion" instils in the patient the total conviction that he is the new Messiah or the reincarnation of St John the Baptist or Mohammed or a delusion of similar character. The fear-laden perplexity and confusion of the patient abates for a period. The world is once again perceived as whole and authentic. The delusion explains it all. This symptom marks perhaps the most clear break in the continuity of psychic life of the schizophrenic patient.¹⁴

Melvin R. Lansky¹⁵ describes the reconstruction of reality and the change in world design that may be experienced by the psychotic patient. He observes that a delusion confers a sense of specialness on the holder. According to Los Angeles psychiatrist M. Goldwert, the patient may come to "consider himself as a specially ordained pillar of God, the messianic center around which all world phenomena are organised."¹⁶ The City of Jerusalem attracts patients with messianic delusions.¹⁷ It is reported to have induced such delusions in seemingly stable tourists.¹⁸

This experience is very similar to the mazeway resynthesis described by anthropologists in the prophets who start New Religious Movements. The new beliefs are held with utter conviction. They are not amenable to discussion or modification. In the case of the psychotic patient, this leads to management problems because the world views of the patient and doctor are different. In the case of the prophet, the strength of his conviction is attractive to followers and leads to the formation of a charismatic relationship between prophet and followers in which everybody attributes the new belief system to supernatural origin. Strength of conviction also makes the prophet and his followers unacceptable to the parent group, and tends to result in the prophet leading his followers to a "promised land."

A delusion has been defined as a fixed false belief that the social group as a whole does not share.¹⁹ What makes someone "ill" is the failure to persuade others of the truth of the belief. All the prophet is doing is asking potential converts to exchange one arbitrary belief system for another. Bigelow noted that "each group requires something intimate, unique to itself, around which its members can cohere. Irrational beliefs serve this purpose far better than rational ones: they are

not only easier to produce, but also less likely to be confused with enemy beliefs.”²⁰ It is the arbitrary character of the new belief system, like the arbitrary shapes and colors of a flag, that make it such a good “in-group marker.”

VIEWS FROM ANTHROPOLOGY

Many anthropologists have reported on New Religious Movements from around the world.²¹ They emphasize that they all begin in the revelatory experience of a single individual. According to H. B. M. Murphy, “It is noteworthy that many Messianic movements, both in Africa and the Pacific, are best interpreted as the cultural extension of individual delusions and that they arise in religious settings which emphasise the emotional or non-rational interchange of beliefs between members.”²² Contrary to what one might expect, new belief systems do not emerge as a consensus from group discussion. They arise in a single individual in what has been called “primary mazeway resynthesis.”

Roland Littlewood,²³ professor of anthropology and psychiatry at University College, London, argues that “individual delusions may be converted into a shared public culture by the manipulation of previously accepted symbolism.” In his study of “charisma,” the late Oxford sociologist Bryan Wilson points out that “If a man runs naked down the street proclaiming that he alone can save others from impending doom, and if he immediately wins a following, then he is a charismatic leader: a social relationship has come into being. If he does not win a following, then he is simply a lunatic.”²⁴ The late Denison University cultural anthropologist Felicitas D. Goodman and colleagues conclude:

Not infrequently in primitive societies the code, or the core of it, is formulated by one individual in the course of a hallucinatory revelation: such prophetic experiences are apt to launch religiously oriented movements, since the source of the revelation is apt to be regarded as a supernatural being.²⁵

Many studies of cults and revitalization movements have noted that the leaders are liable both to auditory hallucinations and to sudden changes in beliefs. Jungian psychiatrist Anthony Stevens and I have argued that the various features seen in psychosis are just what is

needed to produce the reversal of belief that is seen in the formation of a new religion.²⁶ In particular, we refer to the tendency to form well-articulated belief systems that are at odds with the beliefs of the majority and that are held with utter conviction. It is this unshakableness of belief that lends charisma to the prophet and unmanageability to the psychotic patient.

THE CHOICE BETWEEN PROPHECY AND MADNESS

What decides whether a person becomes a prophet or a psychotic? In some cases the new belief system is too bizarre or too unappealing to potential followers. However, commentators have pointed out that very bizarre belief systems have attracted a following. As Aldous Huxley put it, "There is no dogma so queer, no behaviour so eccentric or even outrageous, but a group of people can be found to think it divinely inspired."²⁷ However, it may be that the pool of potential followers may be too satisfied with life to desire change. Or they may be competing with another group and so be fully occupied with another main group process. If followers are obtained, the prophet becomes a cult leader, if they are not, he or she is likely to be labeled a psychotic patient. It is interesting to note the similar role of cult followers and psychiatric nurses: while the prophet or patient is preoccupied with supernatural matters, it is up to the followers or nurses to "chivvy" (remind or harass) him or her about the daily mundane matters of life such as washing and eating—the difference being that the followers work within the delusional system and the nurses outside it.

The Religious Experience Research Centre in Lampeter University (in Wales, United Kingdom) has documented many examples of people who have had supernatural experiences and are neither cult leaders nor psychiatric patients. They could go either way according to their social reception.²⁸ They are at a choice point, which leads either to religious behavior or to psychotic behavior. Religious behavior has been defined as "the communicated acceptance of a supernatural claim."²⁹ If person A says, "I am the Messiah," he is manifesting psychotic behavior; but if person B then says, "Yes, you are the Messiah," not only is this second statement in the category of religious behavior, but also it converts the statement of person A from psychotic behavior to religious behavior.

GROUP COMPETITION AND GROUP SELECTION

I pointed out above that group efficiency and solidarity are enhanced by the adoption of a unique God together with a myth of origin and a prescription for moral behavior. Such a group should out-compete any group lacking such beliefs. Other adaptations favor group cohesiveness. For instance, we have suggested that affective disorders are part of an appeasement system that reduces within-group conflict and permits a harmonious distribution of leader and follower roles within the group.³⁰ Cooperation within groups and aggression between groups appears to have been the rule during hominid evolution.³¹

Like the amoeba, a group needs to split in order to succeed in evolutionary terms. Therefore, in addition to the capacity to develop belief systems, human groups had to evolve the capacity for a change of belief system, expressed in a small proportion of individuals. They also needed to have the capacity to be converted to someone else's new belief system as expressed in a rather larger proportion of individuals.

Of course, a human social group can split without a new mazeway, as when colonization occurs. We have called this *homopistic* splitting (from the Greek for "same" and "belief"). But the *heteropistic* splitting associated with mazeway resynthesis must greatly enhance the rate of splitting. Rapid group splitting favors selection between groups as opposed to selection within groups. This is important for the evolution of group processes and for the coevolution of genes and culture.³² Most important of all, it selects for the capacity of a group to decide which of its members shall be fittest in terms of reproduction, and so to select people who put the interests of the group (i.e., the common good) before their own selfish interests. Such a capacity cannot evolve by means of within-group selection. Thus in the delusion formation of our psychotic patients we see the malfunction of a capacity that has very likely played a significant part in humankind becoming what it is.

THE CAPACITY TO BE CONVERTED TO A NEW BELIEF SYSTEM

In the formation of a cult, it is necessary to have not only a leader who has generated a new belief system but also a pool of potential followers who have the capacity to be converted to this new system.

The vast majority of human beings grow up with a belief system inculcated into them by parents and teachers—the human child appears designed to take for granted what it is told. We have an innate quality of indoctrinability.³³ What is surprising is that our firmly indoctrinated belief systems can be changed radically in what is known as religious conversion.

This conversion of the followers to the mazeway of the prophet has been called “secondary mazeway resynthesis” to distinguish it from the primary mazeway resynthesis undergone by the prophet. For one thing it is reversible. Those who have been converted often revert back to their original beliefs, whereas the new beliefs of the prophet and the madman are relatively permanent. This means that in the convert the new belief system is held together with the original belief system, which is split off or dissociated from conscious awareness. Also, the new belief system is swallowed whole and is not altered or added to. As a result, all the members of the cult share the belief system generated by the prophet. The converts or followers have the capacity for various dissociative behaviors like speaking with tongues, seizures, and possession by spirits. These characteristics are similar to the dissociation seen clinically in hysterical disorders such as fugues, paralyses, and sensory impairments.

Felicitas D. Goodman and colleagues³⁴ have given good descriptions of the information produced by the spirit guides of cults in Trinidad. These guides are followers rather than prophets. However, they have high standing in the social group. They are constantly sought to answer questions the answers to which are not available to the group. They provide answers from various spirits. The information they give is quite different from the revelatory experience of the prophet. It tends to be personal, and somewhat lacking in imagination; nor is it emotive or accompanied by a sense of mission. It is elicited, whereas the delusions and hallucinations of the prophet are spontaneous. It is similar to the material produced by Western mediums in séances. The shamans or magicoreligious practitioners who have been found in most primitive human groups are probably similar; they tend to increase group cohesion rather than cause fission. Canadian psychiatrists Joseph Polimeni and Jeffrey Reiss have suggested that shamanism may have a genetic relation to schizophrenia.³⁵ It seems likely that shamans, prophets, and cult followers all have a tendency to mystical and numinous experiences, described by English psychologist Michael Jackson as benign schizotypy.³⁶

What is clear is that the capacities for primary and secondary maze-way resynthesis are complementary. Both are required for the formation of new groups with new belief systems. We need both the prophet to generate the new belief and the convert to transform the prophet and potential madman into a cult leader. The splitting of a human group is more complex than the cell division of the amoeba. However, both are required for the rapid dispersion of the species over the available habitat.

ESCAPE FROM BOREDOM

Two groups of people have been noted to have escaped from boredom. They view most other people and also themselves in their previous lives as only half alive or half asleep, and not fully activated and functional. One such group is composed of fighting men, who are actively competing with another group. Anthony Stevens³⁷ has described the experience of such men who feel really alive for the first time in their lives. William Butler Yeats has written a poem about a similar experience in a fighter pilot.³⁸

The other group of escapees from boredom are cult members, both leaders and followers. They feel fully engaged in a divine mission. The female members, when they have sex with the cult leader, describe a transcendental experience, like mating with the Holy Ghost. The followers of the Russian mystic Georges Ivanovitch Gurdjieff are a good example, regarding the bulk of humanity as being like machines, or half asleep, while they themselves can be awakened by carrying out "the work."³⁹

This sense of wakefulness and mission in these two groups (fighters and cult members) may very well be due to the mobilization of one of the two great archetypal processes of group expansion and group splitting. Over the past few million years we, as individuals, have been selected to devote much of our individual energy to group functions. If we do not engage in them, we feel empty, bored, and unfulfilled.

DISPERSAL

Dispersal is important in biology. Many amazing biological devices have evolved to ensure it, such as the production of fruits and nectar by plants and the provision of tasty protuberances called elaiosomes by seeds to attract insects. Often a species will produce two forms:

(1) a maintenance *phenotype* (the outcome of genes and the structures they produce interacting with a specific environment) that is adapted to the environment in which it is born, and (2) a dispersal phenotype that is programmed to move to a new area and that often has the capacity to adapt to a new environment.⁴⁰

According to the present theory, humans have developed two dispersal phenotypes in the forms of the prophet and the follower. The coordinated action of these two phenotypes would serve to disperse us over the available habitat. This dispersal must have been aided by the major climatic changes over the past few million years in which vast areas of potential human habitat have repeatedly become available because of melting of ice sheets.

The dispersal phenotypes might have evolved through selection at the individual level, since the reproductive advantage of colonizing a new habitat would have been enormous. They would also promote selection between groups. This is important because selection at the group level can achieve results not possible at the level of selection between individuals. One result of the dispersal phenotype includes *ethnocentrism* (the tendency to favor one's own ethnic group over another) and the tendency to use "ethnic cleansing." The other result, as previously noted, is selection for cooperation, self-sacrifice, and a devotion to group rather than individual goals. Factors that promote selection at the group level are rapid splitting of groups, small size of daughter groups, heterogeneity (differences) of culture between groups, and reduction in gene flow between groups. These factors are all promoted by the breaking away of prophet-led groups with new belief systems.

One of the problems of selection at the group level is that of free-riders. These are people who take more than their share and contribute to the common good of the group less than their proper share.⁴¹ Selection at the group level gives free-riders their free ride. They potentially could increase until they destroy the cooperative fabric of the group.

However, the psychology of the free-rider, which is one of self-aggrandizement and neglect of group goals, is not likely to be indoctrinated with the maze of the group. Nor is it likely to be converted to the new belief system of the prophet. Therefore, theoretically one would predict that cults and New Religious Movements should be relatively free of free-riders. Such an absence of free-riders would further enhance selection at the group level. Moreover, this is a testable theoretical proposition.

Cult followers have been studied and found to be high on schizotypal traits, such as abnormal experiences and beliefs.⁴² They have not yet been tested for the sort of selfish attitudes and behavior that characterize free-riders. If a large cohort of people were tested for some measure of selfishness, it is predicted that those who subsequently joined cults would be low on such a measure. Predictions could also be made about future cult leaders. They would be likely to be ambitious males who were not at the top of the social hierarchy of their original group. If part of why human groups split in general is to give more reproductive opportunities to males in the new group, it can also be predicted that leaders of new religious movements would be males of reproductive age. Female cult leaders are not likely to be more fertile as a result of having many sexual partners, but their sons might be in an advantageous position for increased reproduction.

CONCLUSION

The biobehavioral science of ethology is about the movement of individuals. We have seen that change of belief system has been responsible for massive movements of individuals over the face of the earth. Religious belief systems appear to have manifest advantages both for the groups that espouse them and the individuals who share them. It is still controversial whether belief systems are adaptations or by-products of other evolutionary adaptive processes. Regardless of the answer to this question, the capacity for change of belief system, both that seen in the prophet and also that seen in the follower, may be adaptations because they have fostered the alternative life history strategies of dispersal from the natal habitat.

Moreover, change of belief system, when it is successful in the formation of a new social group and transfer of that group to a "promised land," accelerates many of the parameters that have been thought in the past to be too slow for significant selection at the group level, such as eliminating free-riders, rapid group splitting, heterogeneity between groups and reduction of gene transfer between groups. Natural selection at the group level would also favor the evolution of the capacity for change of belief system, so that during the past few million years we may have seen a positive feedback system leading to enhanced cult formation and accelerated splitting of groups. This may have contributed to the rapid development of language and culture in our lineage.

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