STUDIES IN POPULATION

RELIGIOUS ASSORTATIVE MARRIAGE

in the United States

ROBERT ALAN JOHNSON

Departments of Sociology
and Statistics
Iowa State University
Ames, Iowa

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This is a volume in

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To my parents and sister

Foreword

> Amid all the social confusion of the present day, with its clamour of conflicting voices, the churches also are making their voice heard. These social conflicts are due in part to the growth of large modern unified States, with their democratic tendencies and their party struggles. They are also the outcome of modern industrialization, the development of the proletariat, and the emancipation of the masses in many lands.[1]

So wrote Ernst Troeltsch in the opening paragraph of his massive work, *The Social Teaching of the Christian Churches*. Although published in 1911, this passage has a remarkably contemporary ring. Indeed, it has been conjectured that the final fifth of the twentieth century will witness a major recrudescense of religiously based political movements in which masses of people, disillusioned with the performance of secular parties and still ravaged by poverty and oppression in multiple forms, enter the political fray under the banner of ecclesiastical ideologies and arrayed within sacerdotal organizational structures. Whether or not this conjecture proves correct, serious students of modern society cannot blithely write off religious identity as an insignificant atavism of a benighted past.

From a very broad sociological perspective, we may divide the history of the world's great religions into relatively brief dynamic phases

[1] Ernst Troeltsch, *The Social Teaching of the Christian Churches* (two volumes). Translated by Olive Wyon (New York: Harper Torchbooks, 1960) Vol. I, p. 23.

during which they expand or contract rapidly, and far longer periods of stasis characterized by approximate demographic equilibrium in the religious composition of the population. This book concerns these periods of stasis, but to place it within a wider historical context let us briefly scan the development of humanity's major religions.

Of the religions that still marshal a major body of followers, Hinduism is the oldest. The word Hindu means belonging to the Indus River, and Hinduism is best conceived as a generic name for the religious beliefs of the people of India rather than a systematic body of thought. The virtual merging of Hinduism with the cultural identity of dwellers on the Indian subcontinent has rendered it relatively impervious to displacement and relatively ineffective at, or rather disinterested in, proselytizing beyond these geographical boundaries.

An interesting example of Hinduism's stability is provided by the history of Buddhism, which started in the fifth or sixth centuries B.C. as a movement for the reform of Hinduism, and which gained considerable momentum after the conversion of the Indian emperor Asoka in the third century B.C. Toward the west, Buddhism never made much progress, but Theravada Buddhism, emphasizing monasticism and rejecting theism in all forms, made great headway in Ceylon, Burma, and Thailand; while Mahayana Buddhism, organized in the form of personal cults, gained adherents in China and Japan. Despite its success outside of India, Buddhism never gained a permanent foothold in the land of its origin. Very few contemporary Indian citizens regard themselves as Buddhists. After its original penetration of China, Buddhism coexisted for many centuries with Taoism and Confucianism, the other two major religions of traditional China. Similarly, following its entry into Japan around the sixth century A.D., Buddhism coexisted with the traditional Shintoism (ancestor worship).

The history of Islam divides neatly into dynamic and static phases, and also shows coexistence between different variants of the Muslim faith. At the death of Mohammed, its founder, in 632 A.D., Islam held sway mainly in the western regions of the Arabian peninsula, called the Hejaz. Within a decade of Mohammed's death, the Islamic faith had spread throughout the peninsula; within a century, it had expanded westward across north Africa and into Spain, and eastward through Syria, Mesopotamia, Armenia, and Persia—reaching the Indus River by the early years of the eighth century A.D. In 732 A.D., exactly one century after the death of Mohammed, the Franks decisively defeated the Arabs at Poitiers which, together with the emerging political conflicts within the Muslim world, halted the first great phase of Islamic expansion.

Even more remarkable than the rapid expansion of Islam, which closely paralleled the political expansion of the Umayyad Caliphate, is its continuing dominance in most of the regions to which it originally spread, a dominance which has lasted over 13 centuries, long surviving the decline and fall of the Caliphate. Soon after the death of Mohammed, two branches of Islam emerged. The Sunni branch, which presently constitutes the majority of the world's Muslim population, recognized the caliphs or secular rulers as the successors of Mohammed, while the Shia branch identified the imams or prayer leaders as Mohammed's legitimate successors.

At least two waves of Islamic expansion occurred subsequent to the eighth century. One wave, during the eleventh and twelfth centuries, brought the Muslim faith to northern India. Another, unfolding in the fifteenth and sixteenth centuries, spread Islam through Indonesia and as far as the Philippines.

Christianity, like Buddhism and Islam, has experienced brief dynamic phases and longer intervals of relative demographic equilibrium. While the first two centuries of the Christian era witnessed important doctrinal and organizational developments, the major expansion of Christianity in classical times occurred during the third and fourth centuries, with the decisive event being the conversion of the Emperor Constantine early in the fourth century and his promulgation of the Edict of Milan (313 A.D.) which granted official toleration to adherents of the Christian faith. Thereafter Christianity rapidly became the official religion of the Roman Empire.

During the classical period, Christianity did not transcend the limits of the Roman Empire in any significant way. It did, however, manifest that tendency toward doctrinal controversy which ultimately exploded the unity of Christendom. Between the second and fifth centuries, serious doctrinal challenges to Church authority included Gnosticism (emphasizing mystical religious insights), Montanism (claiming the Holy Spirit resided within the individual), Manichaeanism (radical division of the world between good and evil, with matter regarded as evil), Arianism (denial that Christ was fully God), Donatism (regarding the validity of the sacraments contingent upon the spiritual state of the minister), Pelagianism (denial of original sin and assertion of individual's free will), and Nestorianism (refusal to consider Mary the Mother of God).[2] These doctrines, which upon defeat were stigmatized as heretical, might have spawned post–Reformation-type Christian denominations but for the powerful

[2] The explanation given after each heresy presents its most salient or controversial point. Many relevant features of the great classical heresies are necessarily omitted.

nexus between church and state during the late Roman Empire, a unity which underwrote the integration of the faith. As it was, the struggles with heretical tendencies exercised a strong influence on the organizational development of the Catholic Church.

The fall of the Roman Empire in the West created major difficulties for Christianity. Many of the Germanic invaders had already been converted to Christianity but were under the sway of the Arian heresy and consequently rejected the authority of the Catholic Church. The rapid expansion of Islam wrested North Africa, Spain, and large sectors of the Middle East—including such major centers of Church activity as Alexandria, Antioch, and Jerusalem—from the Christian fold. Moreover the Church itself gradually bifurcated into a western or Catholic sector centered at Rome, and an eastern or Orthodox sector centered at Constantinople; the cause of the split was organizational authority conflicts at least as much as any doctrinal disagreements.

In the millenium between the fall of Rome and the Reformation, Christianity expanded slowly, partly through missionary work among heathen peoples and partly through a process of political and military expansion. By 1387, every state in Europe was at least formally Christian. On the other hand, extensive missionary activity in Africa and Asia ranging all the way to China bore little permanent fruit, especially after the onset of the Crusades in 1096, which greatly hardened the resistance of Islamic powers to the penetration of Christian doctrines.

The disputes surrounding the emergence of Protestantism and the relations of this process to the rise of capitalism served to create an intellectual crucible within which were forged some of the most seminal notions of modern social science. Without passing upon the merits of the contending positions, we note that, in northwestern Europe especially, a population with intensified spiritual requirements confronted a generally complacent, often corrupt, yet highly acquisitive Church. The religious turmoil occasioned by this conjuncture was further nourished by the willingness of German principalities to weaken their obligations under the Holy Roman Empire, and the corresponding eagerness of some emerging absolute monarchies for autonomy from Rome.

The ideas of Martin Luther (1483–1546) gained adherents in Germany and Scandinavia, while those of another reformer, Huldreich Zwingli (1484–1531), held sway in Zurich (which in 1520 became the first state to formally renounce its allegiance to Rome). John Calvin (1509–1564), the most influential of all Protestant reformers, found followers in Switzerland, Scotland, France, the Netherlands, Germany, Poland, Hungary, and even northern Italy. By 1570, perhaps 40% of the European population considered itself Protestant.

There existed, to be sure, considerable doctrinal variation between the Protestant reformers. Their main principles, however, included justification by faith, the priesthood of all believers, the sufficiency of the Bible on issues of Christian doctrine, and the duty of individual judgment on matters of faith. Both in the nature of its origins and in the character of its doctrine, the Protestant Reformation worked against the ideal of a monolithic Christian Church and for a polycentric denominational organization of Christianity.

The Catholic Church responded to the Reformation with a Counter Reformation, in which Ignatius Loyola (1491–1556), founder of the Jesuit order, emerges as the most outstanding figure. The political and military climax of the struggle between Protestants and Catholics was the Thirty Years War (1618–1648), which devastated central Europe, exhausted the sectarian energies of the participants, and ended by granting religious toleration to Catholics, Lutherans, and Calvinists throughout the Holy Roman Empire. By 1650, the Protestant sector of Europe had fallen to 20%, but the religious boundaries emerging from the Peace of Westphalia (1648) have remained largely intact since that time.

Troeltsch, in his study of the Christian church quoted at the outset, distinguishes three forms of religious adaptation which have been present in the Christian religion since its very beginnings. The church, as conceived by Troeltsch, is an institution which receives the masses, which adjusts itself to the world, and which may forego subjective spirituality in favor of maintaining the continuity of ritual and preserving its institutional existence. The sect exists as a voluntary society of strict believers, separating itself from the everyday world and awaiting the advent of a qualitatively higher mode of reality. Mysticism means preoccupation with the inward experience of faith, in contrast to the external forms of worship.[3] This simple trichotomy permeates both the Catholic and the Protestant branches of Christianity, but is also relevant to the doctrinal and organizational distinctions between them. A fuller understanding of the differences between Catholic and Protestant Christianity is directly germane to the ordering of religions identifications that is so prominent a feature of this work.

Troeltsch summarizes the organizational disparities between Catholic and Protestant Christianity as follows:

> Roman Catholicism is the pure and logical form of the Church-type; to an ever increasing degree it has sacrificed the inwardness, individuality, and plasticity of religion to the fixed determination to make religion objective in doctrine, Sacrament, hierarchy, the Papacy and Papal infallibility; the only outlet it gives to the sect-type

[3] Troeltsch, pp. 994–995.

> and to mysticism is through the Religious Orders and the devotions of the Church. . . . Protestantism, on the other hand, has developed in the opposite direction, seeking to make the idea of the Church more subjective and inward, by placing the objective organizing element in the Holy Scriptures and in the spiritual power that dwells within them, and also in the ministry which expounds the word.[4]

In this statement, Troeltsch adopts something like a Weberian ideal-typical approach to the issue, disregarding temporal, regional, and, in the case of Protestantism, denominational variations. Nevertheless, the motif expressed here surfaces as the principle behind Johnson's R order, which we shall discuss below.

Scanning the ebb and flow of the world's great religions suggests several interesting propositions. Individual conversions between Hinduism, Buddhism, Islam, and Christianity seem frequent enough, but rarely has one of these religions captured—either through conversion or via demographic processes like those analyzed in this book—a population previously committed to one of the others. This remains so even in the face of political domination by states emanating from a different religious culture. French penetration of North Africa did not displace Islam. British rule in India did not significantly curtail Hinduism. The combined efforts of Western missionaries and colonial powers did not uproot Buddhism from China. The expansion of the world's major religions, we submit, has not been at the expense of each other, but either through normal demographic processes or by raiding adherents of theistic belief systems outside the "Big Four."

We may go still further. Not only the major religions themselves, but even the important subdivisions within these religions, appear remarkably stable over long periods of time. Certainly the identities of the subdivisions change—old denominations perish and new ones are born—and certainly the distribution of population among the branches of a religion changes; but structural alterations of the former sort are few and far between under ordinary circumstances, while the latter distributional shifts occur slowly. Seldom does a process of wholesale conversion cause massive redistribution among branches of a single family of religions.

Considered in the aggregate, religious identity seems to be a quite durable thing. This is not to say that the future of religion is secure. Religions may indeed face serious challenges in the years ahead. Judging from historical experience, however, these challenges (if they materialize) will not stem from the overpowering attractions of alternative religious identifications, but rather from the appeals of secularized belief systems, such as science or socialism, which might erode the salience if not the fact of religious identity.

[4] Troeltsch, pp. 1007–1008.

These observations underline the relevance of Robert Johnson's penetrating study of religious assortative marriage not only for the contemporary United States, but for the general trends in religious history outlined above. Johnson scrupulously points out the assumptions (and hence the limitations) of his own analysis, among which are assumptions excluding new religious identifications and treating religion as a familially ascribed characteristic (thus ignoring the process of conversion). He regards these as serious empirical weaknesses of his religious replacement model sharply limiting its historical veracity. Johnson is being unnecessarily modest. Our reading of the historical evidence suggests that a serious failure of either assumption would be quite exceptional, and that Johnson's religious replacement model can give good results more broadly than he imagines.

Johnson's general approach may be usefully contrasted with that emanating from the Durkheimian tradition. In his famous work, *Elementary Forms of Religious Life,* Durkheim argued that the objects deemed sacred by a religion were in fact symbols of society itself. If so, there ought to be isomorphisms between the structure of religion and the organization of societies in which that religion takes hold. Pursuing this line of thought, Swanson, analyzing data from a sample of 50 societies, finds that monotheism occurs in societies having a hierarchy of three or more sovereign groups, while class-divided social formations are likely to believe in what he calls superior gods.[5] Lenski's more recent results, based upon a larger sample of societies, emphasize the importance of economic technology in addition to political structure in generating religious belief systems.[6] Underhill carries Lenski's argument still further, contending that economic complexity is the decisive factor in explaining monotheism,[7] an argument which Swanson had explicitly rejected in his earlier work and which he continues to reject after subjecting Underhill's evidence to a critical analysis.[8]

Johnson formulates the problem of religion in an entirely different way. His concern is not to explain the structural origins of religious belief systems, but to provide an account of the demographic processes through which religious identifications are perpetuated from one generation to the next. The guiding thought is that the distribution of religious identification

[5] Guy E. Swanson, *The Birth of the Gods* (Ann Arbor, Mich.: Univ. of Michigan Press, 1960), pp. 81, 96.

[6] Gerhard Lenski, *Human Societies: An Introduction to Macrosociology* (New York: McGraw-Hill, 1970).

[7] R. Underhill, "Economic and Political Antecedents of Monotheism: A Cross-Cultural Study," *American Journal of Sociology,* Vol. 80 (1975), pp. 841–862.

[8] G. E. Swanson, "Monotheism, Materialism, and Collective Purpose: An Analysis of Underhill's Correlations," *American Journal of Sociology,* Vol. 80 (1975), pp. 862–869.

may reflect not an esoteric congruence between religious doctrine and social structure, but rather such commonplace human activities as marriage, giving birth, and religious socialization.

The process of religious replacement is decomposed by Johnson into five parts: (*a*) marital selection, (*b*) conversion of spouses to establish religious uniformity within the family, (*c*) differential fertility, (*d*) differential religious socialization, and (*e*) differential marital dissolution. A complete representation of intergenerational religious replacement would require modeling all five parts of the process. Johnson does not attempt to provide complete representation of religious replacement. He shows how the five components fit together, but he concentrates analytic attention on the first component: marital selection according to the religious identifications of the spouses, that is, religious assortative marriage.

How does Johnson explain religious assortative marriage? Essentially he uses three explanatory variables: (*a*) the population proportions of eligible spouses, (*b*) the social distances separating various religious groups, and (*c*) the intrinsic endogamies of religious groups. The distinction between social distances and intrinsic endogamies, and the measurement of both, are among the most important analytic achievements of this work. Using this distinction, Johnson can give a far more subtle interpretation of the changing nature of assortative marriage than was previously possible. He can, among other things, make sense of apparently contradictory evidence regarding the famous "melting pot" hypothesis. For example, he is able to show that the social distances separating American Catholics from each non-Catholic group in the marriage market declined considerably between 1930 and 1975, but the intrinsic endogamy of Catholics—the tendency of Catholics to choose Catholic mates—has not.

The basic form of empirical data used in this work is a contingency table that cross-classifies religion of one spouse against religion of the other. We refer to this as the religious marriage matrix. It would be desirable to cross-classify religion of husband against religion of wife. However, the data available to Johnson does not render a sex-specific cross-classification methodologically defensible (Chapter 4).

The lack of differentiation between husband and wife has important consequences for the modeling process. While one could not safely assume that the distribution of husbands' religious origins is identical to the distribution of wives' religious origins, it does make sense to assume that the religious origin distributions of aggregated male and female respondents on the one hand and respondents' spouses on the other are identical. Similarly, one could not casually assume that the social distance—in the sense of accessibility or constraint upon interaction—between men of religion A and women of religion B equals the social distance between

women of religion A and men of religion B. However, the assumption that social distances between respondents of religion A and spouses of religion B equals the social distance between spouses of religion A and respondents of religion B does seem justified. As we shall see, both the assumption of identical origin distributions and the assumption of symmetric distances are crucial to Johnson's hypothesis of symmetry, which stipulates the main structural feature of his parametric models of marital selection.

Before considering these models more fully, let us mention the classification of religious origins used in the text. On the basis of logical, statistical, and taxonomic considerations, Johnson arrives at a sixfold classification scheme: Baptists and other fundamentalists, Methodists, "Liberal" Protestants (i.e., Presbyterians, Episcopalians, and Congregationalists), Lutherans, Catholics, and others (including Jews, Eastern Orthodox, Quakers, persons of no religious preference, etc.). While this classification scheme is coarser than one might wish, it does capture the overriding morphology of religious identification in America.

More controversially, Johnson claims that there exists a linear ordering among the categories of religion he uses (excluding the residual other category), the ordering being exactly the sequence listed above. This linear ordering (mentioned earlier in the discussion of differences between the Catholic and Protestant churches) is designated as R order and interpreted in several different ways, including as an ordering of prescribed ritual (e.g., from the Baptist Church, which has low prescribed ritual, to the Catholic Church, in which the form of worship is prescribed in minute detail), or alternatively as an ordering of regional concentration on a South–North gradient (e.g., Baptists being concentrated in the South and Catholics in the Northeast).

The linear ordering of religion proposed by Johnson is closely related to his interpretation of social distance. Adapting an idea originally suggested by Leo Goodman, Johnson proposes a "crossings" metaphor of social distance. According to this simile, the five positively defined religions are arrayed in a specific sequence so that between each successive pair in the sequence lies something akin to a barrier that must be crossed in order to move from one to the other. Crossing the barrier in either direction is equally difficult, and in order to transfer from one religious category to another, one must cross all the barriers between them. For example, in order to transfer from Methodist to Lutheran, one must cross the barrier between Methodist and "Liberal" Protestant and also the barrier between "Liberal" Protestant and Lutheran. The crossings metaphor is more or less tantamount to assuming that the religions under consideration are arrayed within a one-dimensional space. Such an as-

sumption may work very well in dealing with a small number of highly aggregated categories (the process of aggregation can itself collapse dimensions), but—in view of Glock's work proposing five dimensions of religiosity,[9] and the more recent factor analytic studies of King and Hunt extending the number of identifiable dimensions to ten[10]—one questions whether the one-dimensional interpretation could be sustained in a more finely grained classification system.

These concepts and hypotheses are embedded by the author within a log linear modeling framework. Among its other virtues, this book contains a remarkably clear and concise exposition of the logic of log linear modeling. Without duplicating that exposition, let us note that the log linear approach attempts to reproduce a cross-classification (in this case, the religious marriage matrix) through the multiplication of parameters representing: (*a*) the total number of cases recorded within the cross-classification (N), (*b*) the categories of the row variable ($a_1, \ldots, a_k$), (*c*) the categories of the column variable ($b_1, \ldots, b_j$), and (*d*) interactions between the row and column variables ($c_{ij}; i = 1, \ldots, k; j = 1, \ldots, L$). Thus the expected frequency in the cell on the ith row and jth column of the cross-classification would be $Na_ib_jc_{ij}$.

In terms of Johnson's models for religious marriage matrices, the row parameters ($a_1, \ldots, a_k$) represent the effects of the population proportions of respondents, while the column parameters ($b_1, \ldots, b_k$) represent the effects of population proportions of respondents spouses. Because Johnson assumes the religious origins distributions of respondents and respondents' spouses are identical, he sets $a_i = b_i, i = 1, \ldots, k$.

The really interesting effects show up among the interaction parameters ($c_{ij}; i, j = 1, \ldots, k$). It is here that both the intrinsic endogamies of religious groups and social distances separating them become manifest. The hypothesis of symmetry mentioned above enables Johnson to set $c_{ij} = c_{ji}; i, j = 1, \ldots, k$. Intrinsic endogamies should increase the number of marriages falling on the main diagonal of the religious marriage matrix, and hence Johnson measures intrinsic endogamies by means of the main diagonal interaction terms $c_{ii}; i = 1, \ldots, k$.

Social distances between religious groups, on the other hand, are measured by the off-diagonal interaction terms $c_{ij}; i \neq j; i, j = 1, \ldots, k$. The barrier-crossing interpretation enables Johnson to reduce the number of social distance parameters in the following way. Let ν_i index the crossing between categories i and $i + 1$ (where $i = 1, \ldots, k - 1$). Since a

[9] Charles Y. Glock, "The Religious Revival in America?" in J. Zahn (ed.), *Religion and the Face of America* (Berkeley, Calif.: Univ. of California Press, 1959), pp. 25–42.

[10] M. G. King and R. A. Hunt, *Measuring Religious Dimensions* (Dallas: Southern Methodist Univ. Printing Dept., 1972).

transformation from religious category i to religious category $i + j$ requires crossing all the barriers separating the two categories, and since in log linear models parameters are combined by multiplication, it follows that the index for crossing between categories i and $i + j$ (in either direction) should be the product $\nu_i \nu_{i+1} \cdots \nu_{i+j} - 1$. Thus we have

$$c_{i,i+j} = c_{i+j,i} = \nu_i \nu_{i+1} \cdots \nu_{i+j-1}$$

Without the barrier crossing interpretation, but assuming distance symmetry, $\frac{1}{2} k (k - 1)$ distance parameters would be required (if $k = 6$ this implies 15 distance parameters). The barrier crossing assumption reduces the number of parameters needed to model the effects of social distance to $k - 1$, namely, $\nu_1, \ldots, \nu_{k-1}$.

Using these fundamental concepts, Johnson formulates and tests a number of different log linear models. In one of these models, social distance effects are not considered (the parameters ν_i are set equal to one). This generates a quasi-independent array, quasi-independent in that terms off the main diagonal are merely the product of the corresponding row and column parameters. In a second formulation, Johnson assumes that all religious groups have identical intrinsic endogamies. Yet a third model places no particular constraints on either the endogamy or the barrier crossing parameters.

This preliminary exposition must now be halted. A mere foreword cannot, and fortunately need not, do justice to the enormous methodological resourcefulness of this book. It fully rewards the painstaking efforts needed to comprehend its substance. Students of religion, students of marriage, students of demography, and students of methodology can profit in roughly equal measure from the pages that follow.

There is, however, a danger. In the mass of standardized tables, maximum likelihood parameters, partial derivatives, crossing algebras, Riemannian geometries, nonlinear equations, and multivariate Taylor expansions, one can easily lose sight of the broader social issues to which this volume is ultimately addressed. This would be unfortunate. Johnson has indeed produced a work of great technical virtuosity; but he has also produced something else. He has constructed an analytic framework that anchors the perpetuation of transcendental belief systems in the humdrum realities of everyday life.

To appreciate the significance of this achievement, we may consider still another passage from Troeltsch's great work on the social gospel of the Christian churches. Troeltsch, writing in his final chapter, somewhat grudgingly admits that the Marxist method—which he understands as a systematic effort to debunk religion as the ideological reflection of eco-