World Christian Encyclopedia

THIRD EDITION

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The following essay is adapted from the *World Christian Encyclopedia*, first edition, 1982 (pp. 45–56), which was later updated for *World Christian Trends*, 2001 (pp. 468–76). In 2013, a more comprehensive treatment was presented in *The World's Religions in Figures: An Introduction to International Religious Demography*. This short text, adapted primarily from these three sources, is intended to give the reader of this *Encyclopedia* some ideas on how the data in the maps, tables and graphs were compiled and analysed.

International Religious Demography

Demography is the statistical study of human population characteristics, such as size, fertility, mortality, migration, net growth and location. Social demography focuses on a broader array of human characteristics related to populations, ranging from health and economic indicators to language and religion. Religious demography is the scientific and statistical study of the demographic characteristics of religious populations, primarily with respect to their size, age-sex structure, density, growth, distribution, development, migration and vital statistics, including the change of religious identity within human populations and how these characteristics relate to other social and economic indicators. Since the middle of the 20th century, all of these aspects of demography have been burgeoning fields of study.

Social scientists generally recognise that demography is essential to understanding the human condition, especially for policy makers. Understanding changes in human populations (and the reasons for such changes) includes taking into consideration factors such as births, deaths, fertility, migration, population density, male to female ratios and other issues that aid social scientists in understanding how society as a whole functions, on both the individual and institutional levels. The importance of demography also extends beyond the scientific community, to people who are simply interested in how these factors affect their daily lives as local and global citizens.

Although census data have been collected since ancient times (for example, in Egypt, Babylon, Persia, India and China), only with the rise of the nation state in 19th-century Europe, and subsequently, the United States, have more comprehensive censuses emerged. More recently, in the past 50 years, demographers (largely in the Western world) have analysed an enormous body of data out of concern regarding worldwide population growth. This includes the monumental United Nations work on tracking changes in population, which results in a comprehensive survey of human populations published every two years as *World Population Prospects*. The work of the United Nations, a pioneer in the field, was largely Eurocentric and heavily influenced by Western ideas upon its founding in 1945. However, it has since helped to establish demographic research centres in Africa, Asia and Latin America, a significant shift in the study of demography.

By the end of World War II, demography had matured as an institutionalised, scientific field of inquiry. It did so by taking pieces of other fields (such as fertility studies from biology and sociology, migration studies from economics and geography and mortality studies from health sciences) and relating them directly to demographic trends. Demographers accurately foresaw the huge population changes that occurred in the 20th century (high fertility rates in the non-Western world and lower mortality rates around the world), which in a way legitimised the field among scholars and academics (Riley and McCarthy 2003, 66).

The origins of the field of religious demography lie in the church censuses conducted in most European societies. For many years and in many countries, churches produced the most complete censuses of the population. They achieved this largely by recording baptisms and funerals. These data, however, were seen not as referring to specific religious communities, but rather to the larger homogeneous societies. With the decline of national churches in Europe beginning in the 19th and continuing into the 20th century, secular governments began tracking births and deaths, eventually replacing churches as the main bodies collecting detailed information on human populations.

Although thousands of sources for international religious demography are available, ranging from censuses and demographic surveys to statistics collected and reported by religious groups themselves, little has been done by scholars in religion, sociology or other disciplines to collect, collate and analyse these data over the past decades. Consequently, there is much confusion over the status of religion and its adherents around the world. Secondary sources for religious demographics, such as Wikipedia or the *CIA Factbook*, are woefully inadequate and riddled with contradictions and errors. For instance, the *CIA Factbook*, using 30-year-old census data, inaccurately reported the population of Afghanistan to be millions more than the best estimates from the United Nations Population Division until the *Factbook* was updated in 2009.

The lack of emphasis on religious demography also negatively impacts the ability of the media to provide accurate figures when reporting news. For example, in November 2007 the *BBC* reported on denials by Kenyan Muslims that introducing Sharia was one of their political goals. As part of the story, the *BBC* stated that one-third of Kenya's population was Muslim. The correct figure was only approximately 8%, significantly changing the importance of the story. Such mistakes are common.

Positive developments in religious demography

Two recent efforts in religious demography deserve consideration. One, the Pew Research Center (Washington, DC), has been active in analysing religious data from around the world. Pew utilizes surveys, demographic analyses and other social science research on important aspects of religion and public life, both in the United States and around the world, to promote a deeper understanding of issues that bear upon both religion and public affairs. Pew also seeks to provide a neutral space for briefings, round tables and other discussions of contemporary issues. Among the fields of interest to Pew are religion and its role in American society (such as the changing religious composition of the United States and the influence of religion on politics), policy issues with a religious component (abortion, same-sex marriage, stem cell research, church-state controversies) and the role of religion in global affairs. A wide range of research products, many of them available online, includes both large public opinion surveys (for example, on religion and society) and in-depth demographic analyses (such as of the current distribution and future growth trajectory of major religious groups). Research conducted by Pew also documents the extent of restrictions on religion, both government and social, around the world.

Second, the pioneering demographic work of David B. Barrett in Africa resulted, in 1982, in the publication of the *World Christian Encyclopedia* (*WCE*) which was immediately recognised as the authoritative, definitive work in what would become the field of international religious demography (Barrett 1982). Its oversized 1,000 pages embodied the most extensive empirical investigation of Christianity and world religions attempted up to that time. In emphasising its significance, *Time* magazine devoted a full two-page spread to its review, claiming it to be 'a benchmark for our

Universal declaration of human rights

The starting point of quantifying religious affiliation of all kinds is the United Nations 1948 Universal Declaration of Human Rights, Article 18: 'Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his [sic] religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his [sic] religion or belief in teaching, practice, worship and observance.' Since its promulgation, this group of phrases has been incorporated into the state constitutions of a large number of countries across the world. This fundamental right also includes the right to claim the religion of one's choice, and the right to be called a follower of that religion and to be enumerated as such. The section on religious freedom in the constitutions of many nations uses the exact words of the Universal Declaration, and many countries instruct their census personnel to observe this principle. Public declaration must therefore be taken seriously when endeavouring to survey the extent of religious and nonreligious affiliation around the world.

understanding of the true religious state of the planet.' The heart of the *WCE* was a series of 223 chapters on the status of religion and Christianity in every country in the world, with statistical tables showing, in great detail, the religious and denominational breakdown of each country's population. In 2001, the authors produced a second edition of the work, updating every data point to the year 2000 and adding new areas of scholarship, such as the status of Christianity and evangelisation in the world's people groups, cities, provinces and languages (for more on Barrett and the *WCE*, see Zurlo 2017).

In 2003, the data on Christian denominations underlying the *WCE* were updated from 1995 to 2000 and put online in the *World Christian Database* (*WCD*; Brill). This first version included data on all religions for every country, with data on all Christians for every language, people, city and province. In 2007, the Christian data were updated to 2005 and Brill became the publisher. The *WCD* brought together an updated and cohesive religious data set with robust database architecture. Information was readily available on religious activities, growth rates, religious literature and worker activity. The online *WCD* included detailed information on thousands of Christian denominations and on religions in every country of the world. In addition, extensive data were available on 233 countries and 13,000 ethnolinguistic peoples, as well as information on 7,000 cities and 3,000 provinces. The accuracy of the *WCD* was assessed by a team of researchers at Princeton University, who tested its reliability by comparing its religious composition estimates to four other data sources (World Values Survey, Pew Global Assessment Project, *CIA World Factbook*, and the US Department of State), finding that estimates are highly correlated (Hsu, Reynolds, Hackett and Gibbon 2008).

In late 2008, a separate project was launched, the *World Religion Database* (*WRD*), at Boston University's Institute on Culture, Religion and World Affairs. The *WRD* specifically included data on world religions from the first two sets of major sources on religious demography already described – censuses and surveys. The *WRD* was substantively distinct from the *WCD*, as it focused on sourcing estimates for all religions (not primarily Christianity, as was the focus of the *WCD*) and provided a clear methodology for reconciling differences between religious organisation and social scientific estimates. The *WRD* also made estimates of religious affiliation over time, available from censuses and surveys. It also provides its own estimates for religious change for all countries from 1900 through the present, with projections to 2050. The *WRD* aimed to provide the academic community with the most comprehensive and current information on religious demography on all major religions.

In 2014, the *Yearbook of International Religious Demography* (Brill) annual series was launched by International Religious Demography Project at Boston University. Five volumes appeared over the next five years covering a wide variety of religions in every region of the world. The *Yearbook* presented an annual snapshot of the state of religious statistics around the world in sets of tables and scholarly articles. Disciplines represented in the volumes included social science, demography, history and geography. Each issue provided summaries of findings, sources, methods and implications surrounding international religious demography. In 2019, the yearbook became the peer-reviewed *Journal of Religion and Demography* edited by Vegard Skirbekk and Gina Zurlo, published twice a year.

Defining religion and religious identity

A starting point in pursuing religious demography is defining what is meant by 'religion'. While an entire field of study has been dedicated to this subject, a few observations here will at the very least set the subject in its wider context. In one sense, the answer is simple and straightforward, with helpful definitions offered by luminaries such as Émile Durkheim, who stated in his most popular definition of religion, 'A religion is a unified system of beliefs and practices relative to sacred things, that is to say, things set apart and forbidden—beliefs and practices which unite into one single moral community called a Church, all those who adhere to them' (Durkheim 1915, 47). More recent scholarship has admitted that definitions are not put forth without context or perspective. In fact, the Durkheimian definition of religion, while important as a historical foundation, has been almost universally set aside because it seems not to fit modern circumstances. Organised religion simply does not function according to Durkheim's imagined dichotomy of sacred and profane (Christiano, Swatos and Kivisto 2008, 36). Scholars of religion ask the question about who is demanding a definition of religion, why and with what consequences. With this in mind it is easy to see that efforts to define religion ultimately will be fraught with limitations, thus making explicit statements of underlying assumptions critical.

Religion is defined as an organised group of committed individuals that adhere to and propagate a specific interpretation of explanations of existence based on supernatural assumptions through statements about the nature and workings of the supernatural and about ultimate meaning. In this *Encyclopedia*, religion as used in a demographic sense includes the nonreligious (i.e., agnostics and atheists).

For demographers of religion, the main challenge is to generate a definition of religion and to build a taxonomy based on that definition that allows for a comparative quantitative analysis of categories. Religion scholar Catherine Albanese suggests that trying to describe religion might be better than attempting to define it. Defining religion would involve identifying territorial boundaries, temporal boundaries and language boundaries, among others. She also observes that included in most definitions of religion are the '4 C's': creed (explanations of human life), code (rules that govern everyday behaviour), cultus (rituals for acting out insights gleaned from creeds and codes) and community (groups of people formally or informally bound together by creed, code, and cultus) (Albanese 1992, 2–16).

Knowing how to differentiate among elements that distinguish populations is critical for identifying religious groups that can be enumerated. Religious identity is typically established early in life and often reinforced throughout adulthood. It provides a comprehensive worldview that allows individuals to make sense of daily life. In doing so, individuals develop a cultural framework and boundaries for right and wrong, which ultimately play an important role in the shaping societal attitudes. Sociologist Clifford Geertz also claimed that religion demarcates group boundaries that define who is 'in' and who is not (Geertz 1993). Furthermore, religious identity can become intertwined with national and/or social identity, making it even more difficult to establish boundaries. These points are important for demographers of religion as they attempt to define their own boundaries for what religion is and is not.

Even with these caveats, it is necessary to go forward in establishing a definition of religion to utilise the thousands of sources of quantitative information on religion. It is also important to recognise that the challenge of defining religious categories is faced first by those who produce source material on a national or regional basis. For example, the Australian government admits that it is difficult, if not impossible, to give a precise definition for 'religion' in preparing categories for the census. Nonetheless, they conclude that 'generally, a religion is regarded as a set of beliefs and practices, usually involving acknowledgment of a divine or higher being or power, by which people order the conduct of their lives both practically and in a moral sense' (Australia Bureau of Statistics 2016). Under this kind of pragmatic definition, Buddhism is universally accepted as a religion despite its lack of a personal God, and Confucianism is regarded as religion despite its lack of teaching on the supernatural (it provides a moral code for adherents). In contrast, political philosophies are excluded from the definition of religion not only in the Australian census but also in most discussions of religion in general.

Knowing that no single definition of religion is sufficient, the following serves as an operational definition. The definition requires that religion be more than just a single person's idiosyncratic beliefs. Religion is defined as an organised group of committed individuals that adhere to and propagate a specific interpretation of explanations of existence based on supernatural assumptions through statements about the nature and workings of the supernatural and about ultimate meaning. In this *Encyclopedia*, religion as used in a demographic sense includes the nonreligious (i.e., agnostics and atheists).

How many religions, and which are world religions?
Social scientists usually describe the world of religions numerically by listing the seven or eight largest or best-known world religions, along with the number of followers for each. This is valuable as a succinct global summary, but if it is not expanded further, such listings become gross oversimplifications of what is in fact a vast global complex of thousands of distinct and different religions. Accurately portraying the world's religious landscape requires a comprehensive global investigation, description, typology and classification of all religions. With this in mind, defining, describing and classifying religions can be accomplished in a myriad of ways. Typically, definitions are based on beliefs, systems of belief, dogmas, doctrines, philosophies, origins, histories, founders and current personalities. Such a comparative approach is intensely interesting and valuable for the understanding of religion that it provides. Unfortunately, this approach often ignores statistical enumeration as of little value in understanding religious issues.

Size, however, is not the only consideration when determining what makes a religion a 'world' religion. Religious movements that define themselves as world religions are very likely to become world religions, more so than religious movements that do *not* make such claims about themselves. A case in point is the Baha'i faith: although normally considered a world religion by religious scholars, it currently has only around eight million adherents globally. Despite its comparatively small size, however, the Baha'i faith is more widespread than any other religion except Christianity. The Baha'i faith fulfils the self-identifying 'world religion' claim quite well. In a sense, then, the making of a 'world' religion can be something of a self-fulfilling prophecy.

Defining new religions
Another challenge relates to the difficulty in defining new religions. How does one differentiate between a 'new' religion and 'old' or established ones? Curiously, even publicly available data that might be useful in answering this question have gone largely unanalysed. James Lewis, a scholar specialising in new religious movements, notes, for example, that no one has attempted a taxonomical analysis of the four censuses of English-speaking countries (New Zealand, Australia, Canada and the United Kingdom) that collected information on religious membership, including select new religions (Lewis 2004). Further complicating the picture is the perennial problem of classifying movements. For example, scholars tend to classify Soka Gakkai, a movement dating from 1930 within Nichiren Buddhism, as a New Religion rather than Buddhist. At the same time, however, they classify many newer churches, such as the Church of Latter-day Saints of Jesus Christ or the Brazilian Igreja Universal do Reino de Deus, as Christian rather than as New Religions.

Defining folk religion and ethnic religion
Defining and enumerating popular, ethnic or folk religion can be difficult as well. Scholars have offered definitions such as '…religion of ordinary folk, [lying] to some extent outside the realms of institutional, established beliefs and practices' (Fowler and Fowler 2008, 224). Another, more detailed, definition states, 'The religious life of ordinary people who are not primarily oriented toward their religion as it is presented by its formal history, but who know and practice it as it is communicated and performed on family, village, or popular levels' (Ellwood and Alles 2007, 153). Ethnic religion (also known as tribal religion, traditional religion, animism or shamanism) fits this description as well. People who practice these religions tend to be under-counted in national censuses because they use 'world religion' categories. One well-known example is ethnic religion in Indonesia, which is not accepted as one of the seven official religions in the country. In 2020, these are estimated at nearly six million people.

In theory, the definitions above are straightforward. The difficulty lies in the reality that so much folk religious practice is intertwined with practices and beliefs of other world religions. An example of this is Daoism and folk religion in Taiwan. Daoists could in theory be defined according to historical rituals, theology and organisational structure, but under this definition there would technically be no Daoists in Taiwan. Such a definition helps delineate between Daoists and folk religionists but does not give an adequate picture of religious practice in Taiwan. China is an interesting example in this regard. The country experienced fierce anti-religious reforms in the 20th century, and as a consequence the majority of the population identifies as nonreligious (atheist or agnostic). However, China is actually a religious country by virtue of its rich and widespread traditions of religious practice. Many of China's nonreligious actually recognise beliefs and practices of many of the world's religions.

Doubly-affiliated
A taxonomy of religion should confront the issue of mutually exclusive categories. A burgeoning literature already is available on people who specifically identify themselves as adherents of more than one religion, a phenomenon known as multiple religious belonging or double belonging. According to Catherine Cornille, a prominent scholar on the subject, this religious phenomenon may be understood in three primary ways (Cornille 2002). The first works off the assumption of unity among all the world's religions, making all religions expressions of the same reality and same experience. A second view requires, as she states, 'remaining faithful to the symbolic framework of one tradition while adopting the hermeneutical frame of another' (Cornille 2002, 5). Paul Knitter's double affiliation to Buddhism and Catholicism, described in his 2009 book *Without Buddha I Could not be a Christian*, exemplifies this second view (Knitter 2009). The third approach is a general acknowledgment of the complementarity of religions; that is, all religions existing alongside one another, equally authentic and containing truth. This last view generally aligns with religious life in an Asian context. To be Asian is in many ways to be interreligious (Phan 2004). Some scholars hold that monotheistic religions are outside the scope of multiple religious belonging, claiming that the beliefs of each are mutually exclusive. Others, however, have made claims of Muslim-Christian double belonging, not to mention the issue of Messianic Jews sharing traditions, beliefs and theology from both Judaism and Christianity.

The best statistical approach to the question of multiple religious belonging would be to introduce double counting in the numbers (such as people who self-identify as both Buddhist and Christian) and then utilise a negative number to reconcile totals back to 100%. However, the data on these categories are not complete enough to allow for such a comprehensive picture at this time.

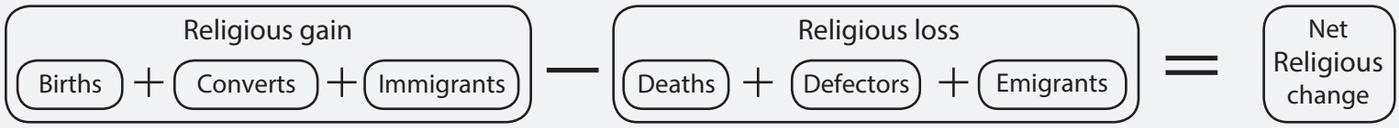
Defining not 'religion' but 'a religion'
One's area of interest will determine whether the object of study is the abstract category 'religion' or the more specific category 'a religion'. For any scientific study of the latter, concrete aspects such as size, language, race, ethnicity, location, age and relation to other religions are as important as the more philosophical considerations. This section therefore attempts to present a taxonomy in which all religions can be listed with comparable variables that can be contrasted, listed, ranked, added and totalled to give the overall global situation. For this purpose, a religion is compared and analysed here not by its dogmas, beliefs, or practices, but primarily by its followers or adherents.

The basic unit of study and analysis here is a specific religion with its adherents, with a short list of features that can be described and measured. Note also that although the preferred terms for those belonging to a religion are followers or adherents, these terms are used here as exact synonyms, with wide use of 'adherents' as a slightly more technical sociological term. A distinct religion is defined here by its adherents' loyalty to it. They accept it as in some sense unique (and, sometimes, superior) to all other religions, even those closely related to it. In practice, adherents ignore other religions, not necessarily wilfully or deliberately. In practice, they can get along without depending on the existence of any or all other religions or their adherents. They do not need each other's existence, and get along well without it. In this definition, therefore, they are all distinct religions – however, this does not necessitate poor relations to exist between them all.

The largest single specific family of religions in the world today is 'ethnic religions' (also called elsewhere 'traditional religions'). These are religions each confined to members of one single ethnolinguistic people or culture. No persons outside the group may join; no members may leave (although in this present analysis members who have joined another religion, for example, Christianity or Islam, are no longer enumerated in an ethnic religion's demographic totals). In most cases an ethnic religion has a unique name for God or the Creator, or a complex of names for God or of the gods. An ethnic religion is also likely to have unique creation and/or flood and related stories, unique ethics and practices and usually its own unique language, all of which function to exclude outsiders from other people groups.

Thus, in the quest to find a practical way to measure religionists, an instrumental view of religion is utilised, in which followers or adherents are not only the main focus but the starting place for definitions and dividing lines, both between religions (such as Christianity and Islam) and

Figure 1. Net religious change formula



Religious gain
Birth, conversion and immigration are positive dynamics, in that they add religious people to a population. The sum of the three constitutes religious gain. Every population experiences religious gain unless all three of these dynamics are zero.

Religious loss
Death, defection and emigration are negative dynamics, in that they remove religious people from a population. The sum of the three constitutes religious loss. Every population also experiences religious loss unless all three of these dynamics are zero.

Religious change
The difference between religious gain and religious loss is the net religious change for the population. While gain and loss are always positive numbers, net religious change can be either positive or negative.

within religions (such as the Buddhist schools of Theravada and Mahayana). This approach aligns most closely with the major sources: government censuses, surveys and reports from religious communities themselves. In taking this approach, the important discussions taking place among scholars about definitions and classification in religion are not minimised. It is simply a practical approach that makes good use of an ongoing international collection of data.

Dynamics of change in religious populations

The question of how and why the number of religious adherents change over time is critical to the study of international religious demography. It is more complex than simply 'counting heads' via births and deaths – a well-established area in quantitative sociological studies – but in addition involves the multifaceted areas of religious conversion and migration. The migration of religious people is only in the past few years become a more researched area of demographic study, such the Pew Research Center's report, *Faith on the Move: The Religious Affiliation of International Migrants*, and issues surrounding religious conversion continue to be under-represented in the field. Data on religion from a wide range of sources – including from the religious communities themselves, as well as governments and scholars – must be employed to understand the total scope of religious affiliation. Given data on a particular religion from two separate points in time, the question can be raised, 'What are the dynamics by which the number of adherents changes over time?' The dynamics of change in religious affiliation can be reduced to three sets of empirical population data that together enable enumeration of the increase or decrease in adherents over time. To measure overall change, these three sets can be defined as follows: (1) births minus deaths; (2) converts to minus converts from; and (3) immigrants minus emigrants. The first variable in each of these three sets (births, converts to, immigrants) measures increase, whereas the second (deaths, converts from, emigrants) measures decrease. All future (and current) projections of religious affiliation, within any subset of the global population (normally a country or region), will account for these dynamics, and the changes themselves are dependent on these dynamics. This relationship is shown in the diagram above.

Births

The primary mechanism of global religious demographic change is (live) births. Children are almost always counted as having the religion of their parents (as is the law in Norway, for example). In simple terms, if populations that are predominantly Muslim, for example, have more children on average than those that are predominantly Christian or Hindu, then over time (all other things being equal) Muslims will become an increasingly larger percentage of that population. This means that the relative size of a religious population has a close statistical relationship to birth rates. The two extremes are illustrated on the one side by Shakers, who practiced celibacy as preparation for the kingdom of God, and on the other side by Latter-day Saints, who place a high value on having large families. In general, it is important for the continuation of religion that children are raised in the faith. While this is true, it is also important to realise that raising children in the faith and retaining them in the faith arguably are, or at least seem to be, two different things.

Fertility rates can be compared across different religions or across different traditions within religions. The Indian census suggests that Muslims have higher fertility rates than Hindus, and that this may outweigh differences in mortality. Thus, the demographic transition (to replacement levels) started earlier for Hindus than Muslims and now Muslim women are bearing a larger number of children at earlier ages than either Hindu or Christian women. One study of fertility among different Christian denominations in Australia compared data from the 1911 and 1921 censuses. The results suggested that women immigrants born in England and Wales (Church of England, Methodists, Presbyterians) were the first to begin limiting family size. Later, Catholic women from Ireland and Lutheran women from Germany also began limiting their family sizes. In addition, the most rapid decline in fertility occurred between 1911 and 1966, largely among non-Catholics. Fertility rates often vary between religious and nonreligious communities as well. Scott Thomas observes that, 'religiosity is now one of the most accurate indicators of fertility, far more telling than denominational or ethnic identity, since religious people tend to have more children than their secular counterparts' (Thomas 2010, 93).

One of the more profound differences in fertility found within a religious community is that of ultra-Orthodox Jews in Israel. While the wider Jewish community has seen failing fertility rates, ultra-Orthodox Jews continue to have large families. Eric Kaufmann explains, 'Between 1950 and 1980, Jewish immigrants [to Israel] from high-fertility Muslim countries reduced their TFR [total fertility rate] from over 6 to just over 3 children per woman, only slightly above the Jewish average. Israeli Arab TFR fell from 8.5 in 1950 to around 4 by the late 1980s. But Haredi [ultra-Orthodox] fertility remained stuck in a time warp, at 6.49 children per woman in 1980–82. This subsequently *rose* to 7.61 during 1990–96 and has remained at that level ever since. During the same period, the TFR of other Jews declined from 2.61 to 2.27' (Kaufmann 2010, 226).

Another important dynamic is how levels of religiosity impact fertility. Several studies have shown that increased religiosity correlates with higher fertility rates among women. This is true in Europe, where a woman's level of education traditionally has been considered the main determinant of her fertility. In Spain, for example, women who are practicing Catholics have more children than non-practicing Catholic women, across all income and education levels (Kaufmann 2010, 159–60). Religious Jewish women in Europe have twice the fertility rate of non-religious Jewish women, as was reported in the European Values Surveys of 1981, 1990 and 1997 (Kaufmann 2010, 160). High fertility rates are often seen in small, isolated religious groups as well. The Old Order Amish in the United States, for example, have doubled in population roughly every 20 years: from only 5,000 in 1900, they have grown to over 200,000 (Kaufmann 2010, xi–xii). Other endogenous fundamentalist groups with high birth rates include the Laestadian Lutherans of Finland and Holland's Orthodox Calvinists.

It is also important to realise that fertility rates within religious communities are not static, nor do they always continue without interruption. One example of their volatility is shown in Kaufmann's analysis of Iran's family planning over a 50-year period. Kaufmann observes that in the 1960s and 70s, Iran's westernisation policy focused on encouraging and enabling women to study or work outside the home. Contraception became available, resulting in a fertility decline. Following the Iranian Revolution of 1979, however, family planning clinics were seen as an imperialist plot against Islam. The government closed them, segregated the sexes and discouraged women from working. At the same time, the minimum age for marriage was lowered from 14 years to 9 years. The loss of life in the Iran-Iraq war in 1980s added to the emphasis on higher fertility. Thus, fertility rates in Iran dropped from 7.7 to 6.3 children per woman between 1966 and 1976, and then rebounded to 7

children after the Revolution. In another reversal, as the population approached 60 million, the younger generation challenged the state budget, and religion gave way to accommodate secular demands. By the late 1980s, family planning in Iran had gone full circle, from pregnancy prevention to pronatalism and back again (Kaufmann 2010, 123–4).

Examining groups with extremely low fertility rates, which continue to shrink (and many of which have disappeared altogether), is as important as studying those with high fertility. The Hutterites, for example, were the only group to have survived from the 83 American communes that formed in the 19th century (including 30 religious ones); a high fertility rate was the reason. Celibate groups like the Shakers withered when flows of converts failed to materialise. Today, three adherents living in Sabbath-day Lake Shaker Village in New Gloucester, Maine are all that remain of the Shakers.

A larger, more ancient religious community suffering from demographic decline is the Zoroastrians. Their fertility rates have been well below replacement value for more than half a century in both Iran (where their numbers are also affected by emigration) and India. Endogamy and bans on conversion, combined with low birth rates, have made it nearly impossible for Zoroastrians to maintain demographic momentum. Zoroastrians grew at less than one-third of the world population growth rate from 1900–2020. Christian Science also has seen a steady decline since 1926, a result of lower fertility among the wealthy demographic the group attracted.

Globally, fertility rates have fallen in most Muslim-majority countries in recent decades. Among the many contributing factors are increasing education and economic well-being (especially of women), increased access to contraception and family planning and urbanisation. Yet Muslim fertility rates remain, on average, higher than in the rest of the developing world and considerably higher than in more-developed countries. This continued high fertility is one of the main reasons that the global Muslim population is projected to rise both in absolute numbers and as a share of all the people in the world. In addition, political scientists Pippa Norris and Ronald Inglehart document the fact that secularisation and human development have powerful, negative impact on fertility rates. Almost all countries with most advanced secularisation have fertility rates at or below replacement level while countries with traditional religious orientations are two or three times the replacement rate. They conclude, 'as a result of these two interlocking trends, rich nations are becoming more secular, but the world as a whole is becoming more religious' (Norris and Inglehart 2004, 6, 22–3).

Moreover, high fertility rates in the past create a certain demographic momentum. As a result of previously high fertility, large numbers of Muslim youth and young adults are now in (or entering) their prime childbearing years, all but ensuring that relatively rapid population growth will continue in the next two decades, even if the number of births per woman goes down.

Despite its significant role, however, the total impact of religion on fertility rates is difficult to assess and remains a subject of debate. One should not assume that because fertility tends to be higher in Muslim-majority countries than in other developing countries, Islamic teachings are the reason. Cultural, social, economic, political, historical and other factors may play equal or greater roles. For example, many Muslims live in countries with higher rates of poverty, less access to adequate health care, fewer educational opportunities and populations that are more rural than the global averages. These conditions are generally associated with higher fertility rates. As mentioned previously, there is also some evidence that, across a variety of religious traditions, women who are more religious have higher fertility rates than less-religious women. This suggests that religiosity in general, rather than Islam in particular, may boost the number of children per woman. In short, while Islamic beliefs might directly or indirectly influence the size of Muslim families, religion does not operate in isolation from other forces; fertility rates appear to be driven by a complex mixture of cultural, social, economic, religious and other factors.

Deaths

Even as births increase their memberships, religious communities experience constant loss through the deaths of members. Though this often includes tragic, unanticipated deaths of younger members, it most frequently affects the elderly members. Thus, changes in health care and technology can positively impact religious communities if members live longer.

Just as differences in birth rates contribute to the growth or decline of religious communities, death rates also have a similar impact. One example is the 1,000 Nazarene Christians in Somalia, who represent less than 0.05% of the country's total population. During the first decade of the 21st century, some 500 Christians, including many Nazarenes, reportedly were killed in Somalia. With high deaths rates as the major determinant of their group's change in size, the dwindling Nazarene community might soon disappear.

One of the most devastating combinations of factors for a religious group is a high death rate combined with a high emigration rate. This is the case for the Sabian Mandeans, an indigenous religious and ethnic community in Iraq, whose numbers have declined dramatically in recent years due to both of these factors. In 2003, prior to the US-led coalition invasion, some 60,000 Sabian Mandeans lived in Iraq. Today, only about 5,000 remain in the country. Out of a national population of about 31 million, they represent less than 0.02%. Iraq's Sabian Mandean community is at risk of imminent extinction in the face of violence at the hands of Sunni and Shi'a extremists – unpunished by the country's central and provincial authorities – and of massive emigration to neighbouring countries and across the globe. The name of the group derives from elements of its distinctive Aramaic language, heritage and beliefs. The Mandaic language itself appeared in UNESCO's *Atlas of the World's Languages in Danger of Disappearing* (Wum and Heyward 2001). Fearing mistreatment if they call attention to themselves, members of the community now use the language for liturgical purposes only.

Births minus deaths/total fertility rate

The change over time in any given population is most simply expressed as the number of births into the community minus the number of deaths out of it. Many religious communities around the world experience little else in the dynamics of their growth or decline. Detailed projections rely on a number of estimated measures, including life expectancy, population age structures and the total fertility rate. This means that any attempt to understand the dynamics of religious affiliation must be based firmly on demographic projections of births and deaths.

The impact of births and deaths on religious affiliation can, of course, change over time. For example, the 2001 Northern Ireland census revealed a continued closing of the population gap between Protestants and Catholics over the previous three decades. Protestants made up over 62% of the population in 1971, but by 2001 this had dropped to 53% (Northern Ireland Censuses, 1971, 1981, 1991, 2001). Catholics, in the meantime, had grown from nearly 37% to almost 44% of the population. This shift is due primarily to the higher birth rate among Catholic women. One would expect that, given time, Catholics would eventually claim over 50% of the population of Northern Ireland, but the 2001 census also revealed two counter-trends: (1) the death rate among Protestants is falling, and (2) the birth rate among Catholics is falling. Given these trends, forecasters believe that, barring unexpected changes from this pattern, Protestants will remain in the majority in the coming decades.

Another possible population dynamic is a falling death rate combined with a low birth rate. This is the case for Muslims in Finland, specifically Turkish Tatars. A 1996 survey among members of the Tatar community showed that 30% were over 60 years old. The proportion of elderly in this group is twice that of the general population in Finland. At the same time, the share of those under 20 years old is 16%, significantly lower than the Finnish average. The percentage of Tatars in the youngest group had dropped by 10% since May 1994. The report concludes, 'in light of the receding birth rate in the community, it was therefore estimated that, if the development proceeds at this rate, in 2050 there will be no members under twenty years in the community' (Sakaranaho 2006, 238).

Converts to

It is a common observation that individuals (or even whole villages or communities) change allegiance from one religion to another (or to no religion at all). Conversions in the 20th century were most pronounced in one general area: large numbers of traditional religionists who converted to Christianity, Islam, Hinduism and Buddhism. In the African Sahel (the semiarid region south of the Sahara Desert), many countries continue to experience competition between Islam and Christianity for those individuals and communities still adhering to tribal religions. Early in the 20th century it was assumed that within a generation all traditional religionists in Africa would become either Muslims or Christians. Although many conversions took place, over 96 million had not converted by 2000. In the 21st century, one might

project continued conversions to Christianity and Islam but be more modest about overall losses among traditional religionists.

Conversion is not a simple phenomenon. As a scholar of psychology and religion, Lewis Rambo identifies five different types of conversion: (1) apostasy/defection: a rejection of religious tradition that leads people away from religion to nonreligion; (2) intensification: a revitalised commitment to a particular religion (formal or informal); (3) affiliation: a movement from no or minimal commitment to full involvement with an institution or community; (4) institutional transition: change from one community or major tradition to another (e.g., Baptist to Presbyterian); and (5) tradition transition, movement from one religion to another (e.g., Christianity to Islam) (Rambo 1993). Rambo also states that conversion can take place within traditions, such as when Catholics become Protestants or when people shift allegiances among various Hindu traditions, castes and groups. This definition of conversion would also apply to Muslim, Buddhist, Jain and Sikh traditions as well as to shifting allegiances among tribal peoples. An analysis of religious affiliation by major religions however, does not reflect such internal changes.

Conversion, then, plays a vital role in the growth of religious communities. But as Kaufmann observes, conversion must be viewed in tandem with birth and death rates. He writes, 'No religion can grow without first enlisting converts from the wider society. Later, the two strategies for fundamentalist expansion are external proselytisation and endogenous growth. External proselytisation is quicker, but rapid conversion is often accompanied by rapid exit. Endogenous growth is often more enduring' (Kaufmann 2010, 30–1). Kaufmann then cites the growth of the Church of Jesus Christ of Latter-day Saints as an example of conversion growth accompanied by strong demographic growth. In other words, Latter-day Saints work hard at spreading their message as well as having large families.

In a similar way, Rodney Stark argues that the rise of Christianity in the Roman Empire owed a great deal to both conversion and demographics. He documents how a tiny band of 40 Christians in 30 CE, the 'Jesus movement,' could grow to six million by 300 CE. Conversion was central, but birth rates of Christians helped to drive and maintain growth. As identified by Stark, factors that fuelled Christian growth included family-centred evangelism, more female converts leading to more Christian children, higher Christian birth rates and Christians caring for the sick during plagues (reducing mortality) (Stark 1996).

Unfortunately, one of the problems in studying conversion is the paucity of information on it. Reliable data on conversions are hard to obtain for a number of reasons. Although some national censuses ask people about their religion, they do not directly ask whether people have converted to their present faith. A few cross-national surveys do contain questions about religious switching, but even in those surveys it is difficult to assess whether more people leave a religion than enter it. In some countries, legal and social consequences make conversion difficult, and survey respondents might be reluctant to speak honestly about the topic. In particular, Hinduism is for many Hindus (as is Islam for many Muslims) not just a religion but also an ethnic or cultural identity that does not depend on whether a person actively practices the faith. Thus even non-practicing or secular Hindus may still consider themselves, and be viewed by their neighbours, as Hindus.

Statistical data on conversion to and from Islam are particularly scarce. What little information is available suggests that there is no substantial net gain or loss through conversion in the number of Muslims globally; the number of people who become Muslims through conversion seems to be roughly equal to the number of Muslims who leave the faith. Pew's survey of 19 nations in sub-Saharan Africa, conducted in 2009, found that neither Christianity nor Islam is growing significantly at the expense of the other through religious conversion in those countries. Uganda was the only country surveyed where the number of people who identified themselves as Muslim was significantly different than the number of people who said they were raised Muslim: 18% of Ugandans surveyed said they were raised Muslim, while 13% now describe themselves as Muslim, a net loss of five percentage points. In every other sub-Saharan Africa country surveyed, the number of people who are currently Muslim is roughly equivalent to the number saying they were raised as Muslims. This does not mean that there is no religious switching taking place. Rather, it indicates that the number of people becoming Muslim roughly offsets the number of people leaving Islam (Pew 2009).

The most significant movements of conversion to and from religion in the 20th century were conversions of traditional religionists in Africa to Christianity or Islam and conversions from Christianity to agnosticism in the West.

Pew's US Religious Landscape Survey found a similar pattern in the United States (Pew 2007). In that survey, the number of respondents who described themselves as Muslim was roughly the same as the number who said they were raised as Muslims, and the portion of all US adults who have converted either to or from Islam was less than three-tenths of one percent (<0.3%). As a result of the relatively small number of Muslims in the nationally representative survey sample, however, it was not possible to calculate a precise retention rate for Muslims in the United States. An independent study published in 2010 that examined patterns of religious conversion among various religions in 40 countries, mainly in Europe, also found that the number of people who were raised Muslim in those countries, as a whole, roughly equalled the number who currently are Muslim. But again, the sample sizes for Muslims were so small that the results cannot reliably predict Muslim conversion trends.

Converts from

Conversion to a new religion, as mentioned above, also involves conversion from a previous one. Thus, a convert to Islam is, at the same time, a convert from another religion. In the 20th and 21st centuries, the most converts from Christianity were and continue to be found largely among those in the Western world who have decided to be agnostics or atheists.

Many case studies have examined why people leave religious communities. In particular, decline in the mainline Protestant churches in the United States has been vigorously studied. One such study identified five factors related to decline in mainline American Protestantism, including (1) the high point of membership was between 1963 and 1967, but the rate of growth had actually begun to decrease in the early 1960s; (2) decline was caused by underlying social factors rather than specific changes in leadership or policy (disproving the theory that decline was largely caused by denominational conflicts in the 1960s and 1970s); (3) denominations with the greatest decline since the 1960s were the ones with the highest levels of affluence and education; (4) decline was largely a result of reduced flow of young adults into church membership rather than an exodus of older members; and (5) studies that start analysis in the 1960s are misleading, since the 1950s was an unusual period of church growth, and decline in 1960s and 1970s shows a return to normalcy (Hoge, Johnson and Luidens 1998).

One should exercise caution when attempting to ascertain the statistical impact of conversion from religion. According to another study, 'most apostasy does not represent a "reversal" in the socialization process, but rather it might be characterized as a slight bend in the religious socialization line. That is, apostates tend to come from homes where religion was only weakly emphasized, if at all, and parental modeling of religion was not strong' (Hunsberger 2000, 234). In one sense, this supports the insistence that children be counted in the religion of their parents until they make a choice to switch to a different religion or to no religion.

Likewise, other studies show that second-generation immigrants are not abandoning their religion. In 2001, 71.4% of British-born Muslims said their Muslim identity was important to them, considerably more than the 64.7% of foreign-born Muslims who answered likewise. Among Bengalis and Pakistanis in Britain, 97% of both native and foreign-born respondents identified themselves as Muslims (Kaufmann 2010, 174).

Converts to minus converts from

The net conversion rate in a population is calculated by subtracting the number of converts from the number of converts to. The most significant movements of conversion to and from religion in the 20th century were conversions of traditional religionists in Africa to Christianity or Islam and conversions from Christianity to agnosticism in the West. However, both of these trends had slowed considerably by the dawn of the 21st century. In fact, emerging trends predict that traditional

religionist populations will remain relatively stable while world religions experience fewer conversions from, with corresponding decreases in the percentages of atheists and agnostics.

Conversion to and conversion from will likely continue to play a role in changing religious demographics in the future. Numerous studies are available on the impact of secularisation on the world's religious communities. Of course, many of these studies are now infamous for overestimating the numerical impact of secularisation, some foreseeing (or even encouraging) the imminent collapse of religion altogether. Notably, a few researchers have changed their minds and are now more cautious in their predictions. On the other hand, the resurgence of religions, the founding of new religions, and the continued rise of fundamentalism (all, in a sense, conversion factors) all seem to work in favour of a more religious future for the world.

Immigrants

Equally important at the international level is how the movement of people across national borders impacts religious affiliation. For example, in the United States, the immigration of non-Christian Asians has resulted in accelerated growth in religions such as Islam, Hinduism and Buddhism. In Europe, the demographic influence of the large numbers of Muslim immigrants has extended into national political arenas, notably in France, Germany, Austria and Italy, as well as into plans for European Union (EU) expansion. Turkey's desire for EU membership has brought out the interesting contrast of a European Union that is mainly 'Christian' with one that could extend to countries not predominantly Christian.

Examples of how immigration impacts religious demography abound. A case in point is the increasing Muslim presence in Sweden. From no discernible presence at all in the early 1930s, Muslims have become a significant minority in Sweden. The first Muslim immigrants were Tatar refugees and migrants who came from Finland and Estonia during World War II. In 1949, they formed an association in Stockholm, mainly for the purpose of Muslim religious education. The most significant changes have come beginning in the 1970s with large numbers of refugees and migrants from the Middle East, Somalia, Bosnia and Iraq. Estimating the numbers of Muslims is fraught with difficulty because religious affiliation is not registered in Sweden and there is no official census of religion. As a result, figures vary widely, because they depend on how religious affiliation is defined (for example, on the basis of activity, membership, practice, ethnicity and/or names). The analysis in the *World Religion Database*, based on estimates of the sizes of various ethnic groups, arrives at a figure of about 900,000 in 2020.

The study of specifically Christian migrant communities is in its infancy. Christian diaspora groups around the world today range from the large Hispanic Christian population in the United States, to Palestinian Christians outside of Palestine, to Korean Christian communities in Western and Central Asia. Diaspora communities face a series of common challenges in assimilation and differentiation with their host countries. In most cases, they are not content to keep their religious beliefs in the private sphere. The study of religion in migrant communities is important because religion can strongly influence behaviours; everyone must strive to adapt to these new situations for integration to be successful.

One significant historical and ongoing emigration of a religious community is that of the thousands of middle-class Coptic Orthodox from Egypt who have moved to the United States, Canada and Australia. Emigration rates were high in the 1950s and 1960s, though have experienced resurgence in recent years. In the 1980s, an estimated 90,000 Copts lived in North America and 20,000 in Australia, with smaller communities in Western Europe (Pennington 1982). In September 2011, the Egyptian Organization for Human Rights released a report stating that nearly 93,000 Coptic Christians have left Egypt since March 2011, soon after the start of the political revolution the previous January. Around 32,000 of these went to the United States, 14,000 to Canada and 20,000 to various European countries (Khalil 2011).

The largest single migration of a religious community in the 20th century was the movement of Jews from around the world to the newly-founded State of Israel. These migrants are largely secular, not religious, with the exception of Mizrachi Jews migrating in the 1950s and 60s. Immigration to Israel began to decrease in the 1950s as the economic attractiveness of Israel began to wane; by the late 1980s Israeli emigrants began to outnumber immigrants (Kaufmann 2010, 226). Since then, three migration trends have been shifting the religious landscape in Israel in favour of Orthodox Judaism: (1) Jews with more marketable skills tend to leave Israel (and also tend to be secular); (2) secular Jews tend to marry non-Jews more than Orthodox Jews do; and (3) many Jews who chose to immigrate to Israel now do so for religious reasons.

Another large migration since the latter part of the 20th century has been the movement of individuals from Africa and Asia into Europe. Roughly a million people a year have entered Western Europe since the 1980s. Roughly one-third of these arrive undocumented. Immigration brings with it new religious communities. As a result, the religious makeup of Europe will likely change over time, with the tide of (mostly religious) immigrants slowing or perhaps halting the rise of secularism. Once religious communities are established through immigration they often grow vigorously (for a time) via high birth rates. Research from the Pew Research Center presents one scenario concerning Hispanic Catholics in the United States. Standing at 68% in 2006, the percentage of Hispanics who are Catholic will decline to 61% by 2030. The proportion of US Catholics who are Hispanic will increase over the same period, however, from 33% to 41%. This is largely as a result of conversions among Hispanics to non-Catholic traditions within Christianity, yet Catholicism will continue to be the dominant religion among Hispanics in the United States. The combination of high immigration rates and high fertility with demographic decline of non-Hispanic populations ensure that Hispanics are on a trajectory to share an even greater proportion of US Catholics in years to come (Pew 2007).

Complexities surrounding immigrant religious communities are illustrated well by Martin Baumann's study of immigrant Hinduism in Germany. In 2005, there were around 100,000 Hindus in Germany, 90% of whom were immigrants who came as workers and refugees. In addition, there are small communities of Hindus found among refugees from Afghanistan (about 5,000 people), arriving from 1980 onward. Paralleling this immigration is the rising population of 'western Hindus' – German converts to Neo-Hindu groupings such as the International Society of Krishna Consciousness (ISKCON), Ananda Marga and Transcendental Meditation, estimated to number between 7,000 and 10,000 in 2005. Finally, there are Tamil Hindu immigrants from Sri Lanka, approximately 6,000 of whom came as asylum seekers during 1980s (Baumann and Salentin 2006). This study illustrates how migrant communities within a particular country are in no way monolithic, justifying the call for more research of migration viewed through the lens of religion.

In their research on the global Muslim population, Pew found that, on average, more people are leaving Muslim-majority countries than migrating to them. Although the rate of emigration has declined significantly since 1990–5, Muslim-majority countries are still losing part of their populations to emigration, and that trend is projected to continue over the next 20 years. Nonetheless, if economic conditions in developing countries – including Muslim-majority countries – continue to improve, there will be less economic motivation, or 'push' factors, encouraging emigration. Likewise, if economic conditions in more-developed countries worsen, there will be fewer 'pull' factors attracting new immigrants, including temporary workers. Of course, not all people who immigrate to the more-developed world from Muslim-majority countries are Muslims (or do so for economic reasons alone). Religious minorities – such as Christians living in majority-Muslim countries in the Middle East – sometimes emigrate in larger proportions than religious majorities (Pew 2009).

Pew also found that immigration is a key driver of Muslim population growth in Europe and Northern America. Muslim immigration to countries in more-developed parts of the world has risen steadily for decades as a result of evolving labour markets, changes in immigration laws, growing connections of immigrant families to communities abroad and increased globalisation. Muslim immigration has been an ongoing phenomenon for decades in a number of European countries. Pew's study assumed that Muslim populations in Europe are projected to increase less in the coming years.

Emigrants

In a reversal of 19th-century European colonisation of Africa, Asia and parts of the Americas, the late 20th century witnessed waves of emigration of people from these regions to the Western world. The impact on religious affiliation is significant. The earliest of these migrations was the movement of Arab-Berbers from Algeria to France in the 1960s and 1970s, including hundreds of thousands of North African Jews. By 1968, Sephardic North African Jews were the majority of Jews in France. Another example are the Central Asian countries of the former Soviet Union, where Christianity has declined significantly every year since 1990

as a result of the emigration of ethnic Russians, Germans and Ukrainians.

As mentioned previously, one of the largest emigration events of the 20th century was the movement of Jews in the period immediately after the Holocaust and the establishment of the State of Israel. This was especially true for Jews living in Arab lands, where extensive anti-Semitism in the forms of persecution and violence caused many Jews to seek better opportunities elsewhere. The First Freedom Center reported that between 1948 and the early 1970s, some 800,000 to 1,000,000 Jews left Arab countries and resettled in Israel, Europe, the United States and other countries, though movement has slowed since the early 1970s (First Freedom Center 2011). Looking at individual communities, the First Freedom Center's study showed that in 1948, Iraqi Jews numbered some 135,000 to 140,000, tracing that community's origins to the biblical Babylonian Captivity 2,500 years in the past. By 2010, there were fewer than 100 Jews to be found in Iraq. Some Iraqi Jews are reported to be living in hiding, unable to establish a properly functioning liturgical life. In Northern Africa, Jewish populations have shrunk from about 260,000 in Morocco (pre-1948) to only 2,300 in 2020; in Tunisia there were 100,000 Jews pre-1948 and in 2020 only 1,900. Jewish communities in these two countries are likely to survive the next ten years, but those in Egypt and Yemen might not have the same fortune.

The Jewish population in Venezuela grew with German refugees arriving after World War II, and experienced even more grown after the 1967 Six-Day War with refugees arriving from Morocco. The community peaked at 45,000, with a Jewish population nearly evenly split between Ashkenazi (Eastern European) and Sephardic (Iberian Peninsula) Jews. Research on the Jews of Venezuela has shown significant decline there during the last decade, similar to realities in Arab countries. Many Venezuelan Jews believe that Hugo Chavez's harsh anti-Israel stance promotes anti-Semitic violence, including attacks on prominent synagogues. Many wealthier Jews have settled in Florida (USA), Spain and Israel, and no longer maintain financial support for Venezuela.

Another religious community impacted by emigration is the Masalit Muslims of Sudan. The Masalit people converted to Islam in the 17th century, but differ from the more traditional Shi'a and Sunni Muslims in that they retain most of the practices from their former African tribal religion, save attendance at Friday prayers. These non-Arab people reside in Darfur Province, and have suffered great violence and persecution by other Muslims. There are as many as 145,000 ethnic Masalit in Sudan (pre-partition of Sudan and South Sudan) who exist as a homeless people, surviving in refugee camps. The rest of the Sudanese Masalit (about 60,000) fled to refugee camps in neighbouring Chad during the 2003–6 civil war, when all the Masalit villages of Sudan were destroyed.

Christian denominations are defined as an organised Christian church or tradition or religious group or community of people or aggregate of worship centre or congregations, usually within a specific country, whose component congregations and members are called by the same name in different areas, regarding themselves as an autonomous Christian church distinct from other churches and traditions.

Immigrants minus emigrants

In the 21st century, international migration continues to have a significant impact on the religious composition of individual countries. One can try to anticipate the way in which expected immigration and emigration trends will affect a country's population over time. One profound change to be expected is the increase of religious pluralism in most every country of the world. Increasing religious pluralism is not always welcomed and can be seen as a political, cultural, national or religious threat. Current debates in Israel, for example, are examining the difference between religious and secular Jews as it relates to immigration, especially the return of over a million Russians and other citizens of the former Soviet Union. The ultra-Orthodox want to limit the 'right of return' to religious Jews, whereas moderates want to welcome secular Jews to counter the rising numbers of Arabs (with their much higher birth rate). In light of these, and other, migration realities, by 2100 it might be difficult to find any country in which 90% or more of its population belong to any one single religion.

Immigration clearly has important political ramifications for the host country. In the United States, the total population of each state, including undocumented immigrants and other non-citizens, determines the distribution of seats in the House of Representatives. In 2000, the presence of undocumented immigrants caused Indiana, Michigan, and Mississippi to each lose one seat in the House (Poston, Camarota and Baumle 2003). Such political consequences directly affect the functioning of society as a whole, including religious bodies. Emigration also impacts ecclesiology. While at one time as many as 100,000 Greek Orthodox lived in Turkey, today, because of steady emigration, the population stands at less than 3,000. Many declining religious communities around the world face similar challenges, such as Tibetan Buddhists in both China and India and Zoroastrians in Iran.

The six dynamics discussed above determine changes in religious demographics. Gains are the result of three positive dynamics: births, conversions to and immigration. Losses are the result of three negative dynamics: deaths, conversions from and emigration. The net change in religious demographics is the result of gains minus losses. The balance of dynamics can be reflected in any proportions (for example, mainly births for gains, mainly conversions from for losses) but can also be represented by pairing the gains and losses by type: births vs. deaths, converts to vs. converts from and immigrants vs. emigrants. In each case, the net change (either positive or negative) will be the difference between the two. This means that any attempt to understand religious affiliation in the past, present or future must be firmly based on demographic dynamics. A proper awareness of these dynamics and their significance is thus vital both for undertaking and for interpreting studies of the future of religion.

Quantifying World Christianity

All those who profess to be Christians in government censuses or public-opinion polls are considered Christians. That is, people who declare or identify themselves as Christians, who say 'I am a Christian' or 'We are Christians' when asked the question 'What is your religion?' are Christians. However, not all those who profess to be Christians are affiliated to organised churches and denominations. Therefore, 'affiliated Christians' are those known to the churches or known to the clergy (usually by names and addresses) and claimed in their statistics, that is, those enrolled on the churches' books or records, with totals that can be substantiated. This usually means all known baptised Christians and their children, and other adherents; it is sometimes termed the 'total Christian community' (because affiliated Christians are those who are not primarily individual Christians but who primarily belong to the corporate community of Christ), or 'inclusive membership' (because affiliated Christians are church members). This definition of 'Christians' is what the churches usually mean by the term and statistics on such affiliated Christians are what the churches themselves collect and publish. In all countries, it may be assumed with confidence that the churches know better than the state how many Christians are affiliated to them. This therefore indicates a second measure of the total Christians that is quite independent of the first (government census figures of professing Christians).

Major Christian traditions

The most widely recognised Christian traditions are (1) Catholics; (2) Orthodox (both Eastern and Oriental); and (3) Protestants (including Anglicans). These are major groupings that have arisen during the course of Christian history among peoples of different cultural areas and nationalities. Although often regarded as worldwide spiritual traditions, these are not the result of merely religious or theological or spiritual affinities or differences; they incorporate deep nationalistic, ethnic, linguistic and cultural currents as well. These three traditions are in fact differentiated by many such complex factors. In any comprehensive survey of how Christians regard themselves, however, it soon becomes apparent that there are many large churches and denominations that do not define themselves under any of these three terms, and often reject all three. Since they thus cannot be fitted into the simple three-fold typology, it means that yet other categories must exist. Zion churches in South Africa do not regard themselves as part

of European Protestantism; Jehovah's Witnesses do not regard themselves as Protestants or as part of the mainline churches; and Old Catholics reject any identity with Roman Catholicism. Consequently, this survey recognises the existence of a further distinct worldwide stream of Christianity: (4) Independents, which refers to the many churches or movements that are independent of historic Christianity (categories 1–3 above), and include a broad range of movements including African Initiated Churches, Pentecostal, Charismatic, nondenominational, also Old Believers and other break-offs from Orthodoxy, and Old Catholics and other autocephalous Catholic churches; and Christians distinguished from mainline Christianity claiming a second or supplementary or ongoing source of divine revelation in addition to the Bible, either a new revealed Book, or angelic visitations; such churches date from 1566 to the present day and include Unitarians, Jehovah's Witnesses, Christian Scientists, Latter-day Saints and vast numbers of other more recent movements.

Christian families

Although these four traditions are a logical way to organise world Christianity, there is another layer of traditions immediately below this that are readily recognisable and therefore quite useful in organising Christianity. This category, here termed 'Christian families', identifies well-known groupings of Christians. Within Catholics, these further distinguish between Catholic rites, Roman, Byzantine, etc. Within the Orthodox, these separate the Eastern churches from the Oriental Orthodox. But it is within the Protestant and Independent traditions that these Christian families are most recognisable. Found across Protestants and Independents are Christian families such as Anglicans, Baptists, Lutherans, Methodists, Presbyterians and others. These families offer a more detailed look at the global Christian church.

World communions

Closely related to families are world Christian communions. The difference between these two is that the structures set up to bring Christian families together, such as the Baptist World Alliance, do not include everyone in the global Christian family known as Baptists. There are multiple communions that each attempt to cover the whole of their families but inevitably, leave out significant churches and denominations that identify with particular families. Consequently, a question such as 'How many Mennonites are there in the world?' cannot be answered by querying the World Mennonite Council about their global membership. Nonetheless, communions represent a good way to organise Christians of various kinds.

The 20th century witnessed a concerted effort to deal with the divisions among Christians. One major effort was the creation of the World Council of Churches (WCC) in 1948. By the year 2000, the WCC had grown to over 350 member churches. Creation of the WCC encouraged churches in nearly every country to come together in national church councils. The WCC has managed to pull together not only Protestants but Orthodox churches as well. However, many Evangelical traditions – which lean toward theological conservatism – have not been a part of WCC ecumenical efforts. Efforts to bring together Evangelicals from around the world were underway as early as the mid-19th century. The World Evangelical Fellowship (WEF) was founded in 1951 in response, but not in opposition to, the formation of the World Council of Churches. The WEF faced many financial and leadership challenges and in 2001, at a General Assembly in Kuala Lumpur, Malaysia, changed its name to the World Evangelical Alliance (WEA). Today, the WEA is active in over 100 countries. Another important global body is the World Pentecostal Fellowship, which represents some 600 million Christians. There are also dozens of global denominational councils of specific Protestant communities such as the Baptist World Alliance (BWA), World Methodist Council (WMC), Lutheran World Federation (LWF), World Communion of Reformed Churches (WCRC) and many others.

Despite these many umbrella groups for various churches, getting representatives of all Christian traditions to sit down together in a single meeting has been difficult. The Conference of Secretaries of Christian World Communions, which aims to do just that, began meeting in 1957. Participating communions include the following diverse representation: the Anglican Communion, Baptist World Alliance, Ecumenical Patriarchate (Eastern Orthodox), General Conference of Seventh-day Adventists, Lutheran World Federation, Mennonite World Conference, Pentecostals, Pontifical Council for Promoting Christian Unity (Catholic), World Communion of Reformed Churches, World Evangelical Alliance, World Methodist Council and several others. Each year, several of these report on activities within their communions. On the global level, a new initiative that addresses the major divisions in world Christianity is the Global Christian Forum, which aims to include both mainline Christian traditions as well as 'younger' churches, Evangelicals and Pentecostals. It arose out of the World Council of Churches at its Eighth Assembly in Harare, Zimbabwe, in 1998, and then became autonomous. The Pentecostal World Fellowship, the World Council of Churches, the World Evangelical Alliance and the Pontifical Council for Promoting Christian Unity at the Vatican are the four key organisations now jointly supporting the Global Christian Forum. Nearly all the Christian world communions – the Lutheran World Federation, the Mennonite World Conference, the World Communion of Reformed Churches, the Organization of African Instituted Churches and several others – also offer support in tangible ways.

Denominations

The next and most detailed level is that of Christian denominations, defined as an organised Christian church or tradition or religious group or community of people or aggregate of worship centre or congregations, usually within a specific country, whose component congregations and members are called by the same name in different areas, regarding themselves as an autonomous Christian church distinct from other churches and traditions. Denominations are defined and measured at the country level, creating a large number of separate denominations within Christian families and Christian traditions. For example, the presence of the Catholic Church in the world's 234 countries results in 234 Catholic 'denominations', though these can be further subdivided by rite (e.g., Byzantine or Latin). The typical way for Christians to count themselves is at the local congregational level and then aggregate these totals at the city, province, state, regional and finally, national level.

Children

The family is by far the most important instrumentality through which individuals acquire personal, cultural and social self-identification. Children of church members are more likely to remain members than those whose parents are not church members. Children of practising Christians usually are, to the extent that their years permit, also practising Christians. However, many churches do not enumerate children under 15 years. One reason is that it has been widely noted that most conversion crises occur in the 13–20-year age group in Christian families or in majority Christian contexts. On this view, therefore, children who have not yet reached 15 cannot reasonably be expected to be practising and believing Christians. This volume takes the opposite view: children and infants also can properly be called Christians, and can actively and regularly (to the extent of their ability) practise Christianity. Consequently, where Christian denominations do not count children in their membership rolls, their membership is reported in our adult category. A total community figure is calculated (in the absence of any additional information from the denomination) by adding in the average number of children reported in United Nations statistics for the given country. Thus, the total community figures are comparable from one denomination to the next whether or not they count children in their membership.

Counting Pentecostals

For the purpose of understanding the diverse global phenomenon of Pentecostalism, it is useful to divide the Pentecostal/Charismatic movement into three kinds, or types. First are denominational Pentecostals, organised into denominations in the early part of the 20th century. Second are Charismatics, individuals in the mainline denominations (primarily after the mid-20th century). Third are Independent Charismatics, those who broke free of denominational Pentecostalism or mainline denominations to form their own networks (Johnson 2014).

Pentecostals (type 1) are defined as Christians who are members of the explicitly Pentecostal denominations whose major characteristic is a new experience of the energising ministry of the Holy Spirit that most other Christians have considered to be highly unusual. This is interpreted as a rediscovery of the spiritual gifts of New Testament times and their restoration to ordinary Christian life and ministry. Classical Pentecostalism usually is held to have begun in the United States in 1901, although most scholars have moved to a 'multiple origins' theory of the birth of modern Pentecostalism, emphasising early activity outside of the Western World. For a brief period, Pentecostalism expected to remain an interdenominational movement within the existing churches, but from 1909 onward its members increasingly were ejected from mainline bodies and so forced to begin new organised denominations.

Pentecostal denominations hold the distinctive teachings that all Christians should seek a post-conversion religious experience called baptism in the Holy Spirit and that a Spirit-baptised Christian may receive one or more of the supernatural gifts known in the early church: the ability to prophesy; to practise divine healing through prayer; to speak (*glossolalia*), interpret or sing in tongues; to sing in the Spirit, dance in the Spirit, pray with upraised hands; to receive dreams, visions, words of wisdom, words of knowledge; to discern spirits; and to perform miracles, power encounters, exorcisms (casting out demons), resuscitations, deliverances or other signs and wonders. From 1906 onward, the hallmark of explicitly Pentecostal denominations, by comparison with Holiness/Perfectionist denominations, has been the single addition of speaking in other tongues as the 'initial evidence' of one's having received the baptism of the Holy Spirit, whether or not one subsequently experiences regularly the gift of tongues. Most Pentecostal denominations teach that tongues-speaking is mandatory for all members, but in reality today not all members have practised this gift, either initially or as an ongoing experience. Pentecostals (Type 1) are defined here as all associated with explicitly Pentecostal denominations that identify themselves in explicitly Pentecostal terms, or with other denominations that as a whole are phenomenologically Pentecostal in teaching and practice. Type 1 includes Pentecostal denominations such as the Assemblies of God and the International Church of the Foursquare Gospel. Sub-categories of Oneness, Baptistic, Holiness, Perfectionist and Apostolic are also included here in the taxonomy. Each minor tradition within Pentecostalism is considered to be 100% Pentecostal (all members of Pentecostal denominations are counted as Pentecostals).

Charismatics (type 2) are defined as Christians affiliated to non-Pentecostal denominations (Protestant, Catholic, Orthodox) who receive the experiences above in what has been termed the Charismatic movement. The Charismatic movement's roots go back to early Pentecostalism, but its rapid expansion has been mainly since 1960 (later called the Charismatic renewal). Charismatics usually describe themselves as having been 'renewed in the Spirit' and as experiencing the Spirit's supernatural and miraculous and energising power. They remain within, and form organised renewal groups within, their older mainline non-Pentecostal denominations (instead of leaving to join Pentecostal denominations). They demonstrate any or all of the *charismata pneumatika* (gifts of the Spirit), including signs and wonders (but with *glossolalia* regarded as optional).

Type 2 recognises the existence of Pentecostal individuals within the Catholic, Orthodox and Protestant traditions. These are designated 'Charismatic' and evaluated by country as Catholic Charismatics, Anglican Charismatics and so on, designating renewal within an existing tradition. Traditions are assessed to determine what percentage of adherents identify themselves as Charismatics, ranging from 0% to 100%. Self-identification percentages for Charismatics were calculated by contacting renewal agencies working within denominations.

While the classification and chronology of the first two types is straightforward, there are thousands of churches and movements that 'resemble' the first two types but do not fit their definitions. These constitute a third type and often pre-date the first two types. For lack of a better term, these are called 'Independent Charismatics' (type 3). Part of the rationale for this term is the fact that they are largely found in the Independent category of the overall taxonomy of Christians. Thus, type 3 includes Pentecostal or semi-Pentecostal members of the 250-year-old Independent movement of Christians, primarily in the Global South, of churches founded without reference to Western Christianity. These indigenous movements, although not all explicitly Pentecostal, nevertheless have the main features of Pentecostalism. In addition, since Azusa Street, thousands of schismatic or other Independent Charismatic churches have come out of type 1 Pentecostals and type 2 Charismatic movements. They consist of Christians who, unrelated to or no longer related to the Pentecostal or Charismatic denominations, have become filled with the Spirit, or empowered by the Spirit and have experienced the Spirit's ministry (although usually without recognising a baptism in the Spirit separate from conversion); who exercise gifts of the Spirit (with much less emphasis on tongues, as optional or even absent or unnecessary) and emphasise signs and wonders, supernatural miracles and power encounters; but also do not identify themselves as either Pentecostals (type 1) or Charismatics (type 2). In a number of countries, they exhibit Pentecostal and Charismatic phenomena but combine this with rejection of Pentecostal terminology. These Christians frequently are identified by their leadership as Independent, Postdenominationalist, Restorationist, Radical, Neo-Apostolic or 'Third Wave.'

Thus, the third type is Independent Charismatics (also known in the literature as neo-Charismatics or neo-Pentecostals) who are not in Protestant Pentecostal denominations (type 1) nor are they individual Charismatics in the traditional churches (type 2). Type 3 is the most diverse of the three types and ranges from house churches in China to African Initiated Churches to white-led Charismatic networks in the Western world. It includes Pentecostals who had split off from established Protestant denominations (type 1) and who were then labelled as Independent. Independent churches formed by Charismatic leaders (type 2) who founded new congregations and networks are also included. Some Independent Charismatics speak in tongues, but healing and power evangelism are more prominent in this type than in the other two.

One difficulty that has plagued all researchers and historians of Pentecostalism is what to call the overarching movement. Some have used 'Pentecostalism' or 'Global Pentecostalism', while others have used 'Charismatic'. Still others have used 'Pentecostal and Charismatic'. David Barrett originally used the lengthy phrase 'the Pentecostal and Charismatic Renewal of the Holy Spirit', which he later shortened to 'Renewal'. He then coined the term 'Renewalist' to refer to all three waves or types. In this volume, the term 'Pentecostals/Charismatics' is used to refer to all three types.

A demographic overview of Pentecostals/Charismatics (all types) illustrates the complexities of both the spread of the movement across the countries of the world and the striking diversity of the churches themselves. While current ways of understanding Pentecostals, Charismatics and Independent Charismatics reveal a global movement of immense proportions, perspectives on classification, counting and assessment of the movement are likely to continue to evolve. In the meantime, hundreds of millions of Christians across all traditions will continue to participate in the movement – bringing vitality in some denominations and schism in others. They will also promote social transformation in some communities and show little participation in others. What is certain is that, for the foreseeable future, Christianity as a whole will continue to experience the growth pains of this global phenomenon.

Counting Evangelicals

The 16th-century Protestant Reformation was highly generative in the fragmentation of Christianity. Its emphasis on individual reading and interpretation of Scripture, combined with renewed religious freedom, resulted in the development of new Christian groups, each an attempt to capture a more 'pure' Christianity. As the Reformation expanded throughout Europe, the beginning of what is known today as denominationalism began. Quantifying Evangelicals depends on Christian affiliation to denominational structures, combined with self-identification and theology.

The historical origins of Evangelicalism lie in 18th-century Europe, when English-speaking Protestants experienced a series of religious revivals, flamed by prominent evangelists like George Whitefield and John Wesley but supported by ordinary Christians. Initially, the term 'Evangelical' was synonymous with 'Protestant', especially in Germany. Over time, however, the term 'Evangelical' came to describe the network of Protestant Christian movements in the 18th-century Britain and its colonies, individuals associated with those movements and a larger pattern of theological convictions and religious attitudes.

David Bebbington's 1989 fourfold set of Evangelical descriptors – conversionism, activism, Biblicism and crucicentrism – continues to dominate theological definition of Evangelicalism. It is argued that these characteristics are the common features defining the movement over time, despite the many changes Evangelicalism has undergone since its inception in the 18th century. While some of the particulars within each of these descriptors vary among denominations, the general scope and importance of each remains the same for the broader Evangelical movement.

Any effective and comprehensive method for counting Evangelicals must take into consideration denominational affiliation, self-identification and theology. The results of counting Evangelicals are directly related to denominational membership figures. Strictly speaking, denominational affiliation means official membership on a church roll (Zurlo 2015).

The first approach is to identify Evangelicals as individuals who are found in denominations that are coded 100% Evangelical. That is, membership

of an Evangelical council (national, regional or global) is assessed for every denomination and those denominations that have Evangelical affiliations are classed as 100% Evangelical. Consequently, 100% of the members of these denominations are considered Evangelical. Using this method alone, the *World Christian Database* estimates there are 150 million Evangelicals in the world. The top ten largest 100% Evangelical denominations in the world are all Protestant and found in Brazil, Ethiopia, Nigeria, Indonesia and Kenya, reflecting the global scope of the movement.

For those denominations not identified as 100% Evangelical, an estimate is made of the percentage (0–99%) of members who self-identify as Evangelical. Self-identification percentages for Evangelicals in non-100% Evangelical denominations are verified by contacting key figures within each denomination, and each estimate is sourced in documentation housed at the Center for the Study of Global Christianity. Adding together figures from both 100% and partially Evangelical denominations gives a total of 386 million Evangelicals worldwide in 2020. Looking at both 100% and non-100% Evangelical denominations reveals that the movement has a significant presence beyond Western Protestantism. Some of the denominations with the most Evangelicals are within Anglicanism in the global South, such as the Anglican Church of Nigeria and the Church of Uganda. The United Kingdom (the Church of England) and the United States (the Southern Baptist Convention), however, are still important locations of the movement.

To date, no studies have addressed directly how many Evangelicals are denominationally unaffiliated. However, two well-known realities (in Western Christianity, in particular) appear to provide indirect evidence for this undocumented trend. The first is reflected in recent research indicating the unaffiliated are not uniformly non-religious. The Pew Research Center reported that 68% of America's unaffiliated believe in God. It is reasonable to assume that a notable proportion of Christians is among the ranks of the unaffiliated by virtue of Christianity being the largest religion in many of the countries studied. The second reality is the acknowledged fact that unaffiliated Christians often attend and are active in churches, including Evangelical churches, without becoming official members. These unaffiliated Christians profess allegiance and commitment to Christ but do not maintain church affiliation.

Major sources and collections of data

Vast efforts are put into the collection of statistics relating to religion in today's world. The process of doing so is uncoordinated between scholars and uneven across religious traditions, but nonetheless a wealth of data is available for religious demographic analysis. The data fall broadly under 13 headings, with six under the heading primary sources and seven under secondary sources:

Primary sources

1. Censuses in which a religious question is asked
2. Censuses in which an ethnicity or language question is asked
3. Surveys and polls
4. Scholarly monographs
5. Religion statistics in yearbooks and handbooks
6. Governmental statistical reports

Secondary sources

7. Questionnaires and reports from collaborators
8. Field surveys and interviews
9. Correspondence with national informants
10. Unpublished documentation
11. Encyclopedia, dictionaries and directories of religions
12. Print and web-based contemporary descriptions of religions
13. Dissertations and theses on religion

The strengths and limitations of each of these sources of data on religion are examined below. While each has its place in the constellation of data on religious demography, ideally all or most of these would be used in calculating the best estimate for the number of religionists in a particular country or other geographic area.

1. Censuses in which a religion question is asked

Since the twelfth century, many governments around the world have collected information on religious populations and their practices. In the 20th century, approximately half the world's countries asked a question related to religion in their official national population censuses. Since 1990, however, this number has been declining as developing countries have dropped the question, deeming it too expensive (in many countries each question in a census costs well over $1 million USD), uninteresting or controversial. As a result, some countries that historically included a religion question have not included the question in their censuses since 1990. In several countries, such as Nigeria and Sudan, the decision was for political expediency, to avoid offending particular religious constituencies. In other countries, such as Malta and Turkey, governments simply assume that the population is essentially 100% of a single religion (Catholic or Muslim, respectively) and therefore justify the question's removal. France rejected the use of a religion question as early as the 1872 census. By the 21st century, however, this trend began to reverse itself somewhat. For instance, the United Kingdom – which produced the world's first national census of religious affiliation (the Compton Census in 1676), and later had a religion question in the national census of 1851 (though none thereafter) – reintroduced the question in their 2001 census as the best way to obtain firm data on all religious minorities.

The primary drawback of relying on census data for data on religion is that approximately half of recent country censuses do not include a question on religious affiliation.

Whether to include a question on a census can be a heavily politicised decision, as illustrated by India's choice to add questions on caste to its 2011 census. This was the first time such questions had been asked since the 1931 Indian census. Even so, answering the questions on caste was optional.

Censuses are one of the most comprehensive ways in which people are counted. From its historical usage with regard to population counting, the term 'census' is implicitly reserved for total or complete analysis of a population, although several governments now include partial surveys through various sampling procedures. The term always uniquely refers to an official government population census. In a number of cases, religion data collected from these censuses were never published. A major problem has been the use of non-standardised terms and categories, which makes comparison between censuses (whether within a single country or among multiple countries) difficult or impossible. Thus, many censuses omit certain minorities, such as tribal peoples, nomads, aliens, refugees or military personnel. A classic example is the legally defined statistical 'population of Australia', which comprised only non-Aboriginal peoples until 1967.

National censuses are the best starting point for the identification of religious adherents, because they generally cover the entire population. Some censuses, such as South Africa's, even provide information on subgroups of major religious traditions (such as Protestant/Catholic or Sunni/Shia). Governments typically take major population censuses around the end of every decade and then require three to five years to publish the complete data. In addition to the complete results from a single census date, obtaining these data every ten years enable the calculation of relatively accurate growth rates.

Whether respondents feel free to be completely truthful in answering census questions can be affected by methodological decisions, political biases and social concerns over how the data will be managed. In addition, problems with comparability of census data can arise when the methods of collection vary (even, and perhaps especially, within a single census). Seemingly mundane issues, like the time of the year when the census is taken, are not irrelevant, because the associated environmental and social factors (such as the weather on enumeration days) can influence the results.

As observed previously, the primary drawback of relying on census data for data on religion is that approximately half of recent country censuses do not include a question on religious affiliation. Taking, for example, the specific case of the European Union, 16 of 28 EU recent country censuses included a religious affiliation question: Bulgaria, 2011; Croatia, 2011; Cyprus, 2011; Czechia, 2011; Estonia, 2011; Finland, 2010; Germany, 2011; Hungary, 2011; Ireland, 2016; Lithuania, 2011; Netherlands, 2011; Poland, 2011; Portugal, 2011; Romania, 2011; Slovakia, 2011; United Kingdom, 2011.

There are many other issues involved in counting individuals in censuses, one of which primarily revolves around who is and is not considered a legitimate resident of the state. Sociologist Calvin Goldscheider raises questions about how non-legal

residents and temporary workers are treated in government statistics, and what exactly 'residence' means in this context (limited to *de facto* residents, or also includes those temporarily living abroad?). He states that such inquiries 'appear on the surface to be straightforward questions, but are at the center of some of the most complex and politically torturous issues facing old and new states' (Goldscheider 2002, 71). In any analysis of religious demography, it is crucial that the entire population is accounted for. This is especially important when 'official' statistics leave out an 'undocumented' religious minority, which would be the case with Muslim immigrants in several European countries.

Another shortcoming of censuses is that they sometimes force people to select their religion or their ethnicity from among a set list. This can result in over-estimates, when everyone picks a religion regardless of whether they actually practice it. It also has the potential to miss religions that are not recognised by the government, such as the Baha'i faith in Egypt, or that are considered illegal, as is the case with atheism in Indonesia. Yet, even asking a straightforward question about religion can be hazardous. According to Alan Aldridge, terms such as 'religion' and 'religious' are contentious; as he states, 'asking people such questions as "are you religious?" is not only hopelessly imprecise but also likely to provoke unfavourable reactions and a negative response even from some of the most committed and active churchgoers' (Aldridge 2007, 21).

Issues related to religious self-identification can be particularly challenging in the West. For example, critics of the 2001 and 2011 United Kingdom censuses charge that even people who in other circumstances would not identify themselves as religious will select 'Christian' (because they were baptised as infants) when presented with that choice on a list. On the other hand, pollsters note that making absolute measurements of religious adherence is difficult, because for many people religious identity and religious practice are separate matters. The question is not without economic consequence. If more of the population identifies as Christian, more money goes to Christian groups (schools, for example) and needs of nonreligious groups are not taken into account because they appear statistically fewer.

The UK's 2001 census was the first time since 1851 that a religious question was asked outside of Northern Ireland. Unfortunately (for demographers), the question was not asked consistently across the countries of the United Kingdom. The censuses in Northern Ireland and Scotland included options for response relating to various Christian denominations, but this was not the case in England and Wales, making comparisons difficult. Furthermore, in an effort to addresses criticisms of the 2001 questions on religion, the formats have been changed for 2011, thus complicating comparisons between the two.

The previous discussion reveals yet another problem: censuses are not free from political and social bias and controversy. David Abramson writes, 'Censuses are somewhat like opinion polls in that they create public opinion, except that in the case of the census, its results also shape public constructions of the state' (Abramson 2002, 178). In 2008, for example, Nigerian officials removed the religious affiliation question from the census questionnaire in response to violent and deadly social protests before the census had even started. The country is nearly equally divided between Christians and Muslims, and various constituencies felt that the census results would be biased and show that one or the other religion predominated. Another challenge is distinguishing between the religion of one's birth and one's political or social outlook later in life. This is the case in Egypt, where many 'secularists' are Muslims who are expressing a particular political point of view that is 'decidedly secular'.

In addition, official census and survey figures often are in need of revision (or at least qualification). For example, Georgia's 2003 population census showed that 83% of the population were Orthodox Christians, but analyst Ziza Piralishvili writes, 'I doubt, however, that the census figures accounted for the high level of labor migration, primarily Azeris and Armenians, therefore I compared these figures with expert assessments' (Piralishvili 2006, 152). In this case, large numbers of Azeris would raise the Muslim population, while immigrant Armenians would introduce a different variety of Orthodox Christians.

The wording of questions related to religion in censuses is not neutral. For example, much controversy has surrounded the 2011 Irish census and its question on religion. The question asks, 'What is your religion?' and provides options for Roman Catholic, Church of Ireland (Anglican), Islam, Presbyterian, Orthodox, two rows for 'other' (write-in) and then 'no religion.' The Humanist Association of Ireland (following an invitation by the Central Statistics Office) suggested replacing that question with 'Do you have a religion?' This suggestion was rejected on the basis it would make historical comparisons difficult. Using the substitute question, however, would maximize the unaffiliated and nonreligious count. Census respondents tend to fill in the religion box according to the religion into which they were born (as advised by census enumerators), not the one they actually practice (or do not practice). On the other hand, asking 'What is your religion?' makes data more comparable cross-nationally and has the advantage of picking up 'weak ties' that have some significance, while other measures (such as surveys) can better pick up the strength of those weak ties.

Assessing the sizes of religious communities in newly independent countries is also a challenge for demographers. Kosovo declared independence on 17 February 2008, and while Muslim Kosovo Albanians are the vast majority, significant religious minorities are found there as well. These include both Muslim (Egyptians, Turks and Kosovo Serbs) and Christian minorities (such as Bosniacs, Croats, Gorani, Roma and Ashkali). In this particular case, assessing both the sizes of these communities and the shares of the current total population are difficult because ethnic Albanians largely boycotted the last census of Kosovo (in 1991, when it was part of Serbia). In addition, many Christians (especially Serbs) were displaced in the 1998–9 war, and have found it difficult to return to their homes. As a result, current demographics for the Kosovo population can only be estimated. As a general estimate, approximately 90% of the 2 million people in Kosovo are ethnic Albanian Muslims, while 5–6% are Orthodox Christian Serbs (Stevens 2009). Only a few hundred Croats remain, most of whom maintain a strong Catholic identity. According to the 1991 census, about 43,000 identified as Roma, although some consider this an underestimate.

In some tragic cases, censuses have been used to discriminate by deliberately under-counting certain populations within a country. Historical examples include discrimination against Blacks and Native Americans in the United States, following the 'one-drop rule', and similarly against Jews in Nazi Germany. In addition, early censuses around the world did not seek so much to enumerate populations as to register the part of most direct interest to state authorities (that is, the household unit and not the individual). This can be the case for ethnicity, language, social status and religion. The first enumeration of population in the Ottoman Empire in the 15th and 16th centuries, for example, included only religious orders, the military and judges (that is, only those exempted from taxation, which included relatively few, if any, non-Muslims). In the 20th century, Belgian colonial authorities in Rwanda legitimised ethnic Tutsi dominance by creating a racial distinction in the census, making Tutsis superior Africans due to an alleged 'Hamitic' origin, while Hutus were relegated to the bottom of the racial scale. In other cases authorities of one ethnic background refuse to count certain groups, such as Tutsis in Burundi and Kewri in Mauritania, for fear of having their majority status diminished (or even being shown to be in the minority) and thus losing political power. Even in the well-organised and massive colonial censuses in British India, the British government entreated people to make particular choices in the census.

Who does the enumerating also greatly affects the outcome of censuses. In Macedonia at the end of the 20th century, four different ethnic groups conducted four different surveys identifying ethnicities in the country, with four different results. In 2000, the Greek government decided to omit the 'religion' line from the country's identity cards, causing uproar from the Greek Orthodox Church, who argued that the move would 'imperil Greek identity' as the only (at that time) Orthodox state in the European Union. The Russian census of 1897 (in an officially and culturally Orthodox country) did not provide the option of selecting 'non-believer' on the religion question; later Soviet censuses forced participants to answer a question on nationality but did not allow for belonging to more than one.

In Uzbekistan (as in many other Central Asian nations), nationality and religion are bound together under the assumption that to be Uzbek is to be Muslim, thus providing no need for a census question on religion. The reverse, however ('to be Muslim is to be Uzbek'), is acknowledged not necessarily to be true. This raises the issue of whether, and how, to design census questions to reflect other nationalities in the country that are also Muslim (such as Tajiks, Kazakhs and Turks). The outcome of the debate is likely to influence Uzbek attitudes on the relationship of Islam to both Uzbek nationalism and national culture. Some

also postulate that the lack of a religion question on Uzbekistan's census indicates the government's desire to keep Muslim and Uzbek identity intertwined (that is, a person who identifies as Uzbek must then, by definition, also be Muslim).

The issue of who does the enumerating for censuses is really one of power and legitimacy. This was certainly the case in much of colonised Africa in the 20th century. Both Burundi and Rwanda in the 1950s, for example, had relatively well-functioning civil registration systems. Originally managed by the Catholic Church, after independence the systems were brought under the control of the state. This transfer – from the colonial religious hierarchy to the new civil authorities – involved more than simply responsibilities for certain bureaucratic functions. According to Peter Uvin, this illustrates 'the enterprise of the powers-that-be—missionaries and colonial administrators first, the independent government and the development enterprise later—to count and categorise in order to control, to extend power, but also to obtain legitimacy (Uvin 2002, 170).

2. Censuses where an ethnicity or language question is asked

In the absence of a question on religion, another helpful piece of information from a census is ethnicity or language. This is especially true when a particular ethnic group can be equated with a particular religion. For example, over 99% of Somalis are Muslim, so the number of Somalis in, say, Sweden is an indication of a part of the Muslim community there. Similarly, a question that asks for country of birth can use useful. If the answer is 'Nepal' there is a significant chance that the individual or community is Hindu. In each of these cases the assumption is made (if there is no further information) that the religion of the transplanted ethnic or linguistic community is the same as that in the home country.

Using ethnic or language data as surrogates for religion can be helpful when such information is lacking, but it can also be risky. The most common problem, of course, is that the underlying assumption – that people abroad adhere to a particular religion in the same proportion as those their home country – is not always true. For example, the Palestinian Arab population, now less than 2% Christian in Palestine, offers considerable variety in the global diaspora. In neighbouring Jordan, they are also 2% Christian, but in the United States they are about 30% Christian and in Australia, 70% Christian.

3. Surveys and polls

In the absence of census data on religion, large-scale demographic surveys, such as the MEASURE (Monitoring and Evaluation to Assess and Use Results) Demographic and Health Surveys (DHS), often include a question about the respondent's religious affiliation. In some instances, demographic surveys by groups such as UNICEF (United Nations Children's Fund) include a religious affiliation question. Demographic surveys, though less comprehensive than a national census, have several advantages over other types of general population surveys and polls. As with most reputable general surveys, a demographic survey bases its sample on population parameters from the most recent census. In contrast to other general surveys, a demographic survey completes sufficient household interviews to produce an accurate demographic profile not only of the country as a whole but also of its major states, provinces and/or regions. To provide this coverage, demographic surveys have larger sample sizes and choose more random locations for samples. Sample sizes for demographic surveys range from more than 5,000 to 100,000, depending on the population and complexity of the country. Early demographic surveys, however, generally included women (and later also men) only in the reproductive ages (15–49 for women and 15–59 for men).

Demographic and Health Surveys (DHS) are highly-regarded by demographers and social scientists, and provide valuable nationally-representative data on religion. The surveys target people ages 15–49 and usually sample at least 7,000 households, at multiple time points; these surveys often oversample (and sometimes only sample) women. This sampling strategy is, however, a limitation, because religious adherence sometimes differs by sex and age.

General population surveys also provide valuable information on the percentage of the population belonging to major religious groups. Such surveys include the General Social Survey, the World Values Survey, the Gallup World Poll, the European Social Survey, the International Social Survey Programme, the Afrobarometer as well as other regional Barometer surveys and cross-national surveys by the Pew Research Center. However, because general population surveys typically involve only 1,000 to 2,000 respondents, they cannot provide accurate detail on the sizes of smaller religious groups.

While survey research is a widely-accepted method for assessing public attitudes on religion and other topics, the validity of poll findings has been questioned by a variety of commentators who argue that the limitations of polls are given short shrift.

Survey results can be used to search for correlations between different variables. For example, Eric Kaufmann discovered an interesting link between Islam and fertility in his study of World Values Survey data. He states, 'The proportion of Muslims favoring sharia was an impressive two-thirds, ranging from over 80 per cent in Egypt and Jordan to around half in Indonesia, Nigeria and Bangladesh. Mapping people's attitudes to sharia on to their fertility patterns, I discovered a strong association between Islamism and fertility, which is statistically significant even when controlling for age, education and income. On the other hand, the small minority who claimed not to be religious had markedly lower fertility' (Kaufmann 2010, 130). Much care, however, is required in interpreting such results, particularly in light of the well-known aphorism, 'Correlation is not causation'!

As stated earlier, because general population surveys typically involve only 1,000 to 2,000 respondents, they cannot provide accurate detail on the sizes of smaller religious populations that might number too few to be picked up in a general survey. General population surveys typically have smaller sample sizes than demographic surveys and are not designed to measure the sizes of small minority populations. This can lead to undercounts of religionists in countries where they represent a small minority of the population and to over counts where they represent the vast majority of the population. Also, such surveys are sometimes conducted only in urban areas or areas that are easily accessible to pollsters, and therefore they might present a distorted picture of the country's religious composition. Because religious adherence can differ by age and gender, this is another potential limitation of such data.

While survey research is a widely-accepted method for assessing public attitudes on religion and other topics, the validity of poll findings has been questioned by a variety of commentators who argue that the limitations of polls are given short shrift. State-of-the-art survey methodology in the United States perennially wrestles with a host of challenges ranging from satisficing and social desirability response bias, to nonresponse, to a growing population who use only cellular telephones. Cross-national survey work has its own set of serious challenges. Moreover, less is known about the shortcomings of cross-national polling because less research has been done in this area. Given these criticisms and uncertainties, the limitations of polling must be taken seriously and poll results measured against other data sources when possible.

The United States produces no official government statistics on the numbers of religionists because the census does not ask a religion question. Instead estimates are made mostly by national polls, which, as already discussed, tend to be inaccurate for small religious communities (Wuthnow 2015). For example, the 'soundest approach' for identifying the number of Hindus in the United States has been equating that population with people in America of Indian origin. Some say, without evidence, that a large number of emigrants from India to the United States are Christians. As India's population is only 4.9% Christian (also a disputed figure), however, even doubling that percentage would make only a slight difference. A more thorough assessment, including monographs, informants, and other studies, suggests that there are 1.65 million Hindus in the United States in 2020.

4. Scholarly monographs

Every year, scholars publish hundreds of monographs on particular religions or religions in particular countries or regions. One example is *Globalization and the Re-Shaping of Christianity in the Pacific Islands,* edited by Manfred Ernst, director for Projects and Research at the Pacific Theological College in Suva, Fiji. This massive, nearly-900-page tome contains details on all religions in Oceania, drawn from a wide variety of sources, including recent censuses. Such monographs differ from other sources in that they attempt to provide an overall profile of religion in

an area or country, bringing to light local quantitative data sources as well as qualitative information that provides layers of context and background. In that sense, the *World Christian Encyclopedia* is the largest such monograph produced on Christianity, combining quantitative data with qualitative description and background on the expressions of Christianity in each country of the world. The unique contribution of such monographs to scholars of religion is their provision of quantitative data in relevant contexts with meaningful analysis.

Books on country-based analysis of a particular religion or of religion in general can also be useful. Examples include *A History of Christianity in Indonesia* (Aritonang and Steenbrink 2008), *Religious Demography in Southeast Asia and the Pacific* (Bouma, Ling and Pratt 2010), and *Zoroastrians in Britain* (Hinnells 1996).

The perspective of an author can potentially bias a scholarly monograph. In religious studies, the conventional wisdom held that non-objectivity in the field was limited to members of religious communities, who might exhibit a bias toward either a particular religion or religion in general. More extensive examination, however, has found that the so-called 'objective' position of the nonreligious or anti-religious scholar has in fact been a major area of bias. In his 1989 presidential address to the American Academy of Religion, Robert Wilken defended the position of the scholar from the religious community when he stated that to dismiss the great religious thinkers of the past is 'not only a loss of depth but also a sacrifice of memory' (Wilken 1995).

5. Religion statistics in yearbooks and handbooks

Religious communities keep track of their members, using everything from simple lists to elaborate membership reports. The most detailed data collection and analysis is undertaken each year by some 45,000 Christian denominations and their 4 million constituent churches and congregations of Christians. The latter invest over $1.1 billion USD annually for a massive, decentralised, and largely uncoordinated global census of Christians. In sum, they send out around 10 million printed questionnaires in 3,000 different languages, covering 180 major religious subjects reporting on 2,000 socio-religious variables. This collection of data provides a year-by-year snapshot of the progress or decline of Christianity's diverse movements, offering an enormous body of data from which researchers can track trends and make projections.

The Catholic Church does the most extensive of these inquiries. Parallel to the obligation of many other religious leaders, all Catholic bishops are required to answer, by a fixed date every year, a 21-page schedule in Latin and one other language asking 140 precise statistical questions concerning their work in the previous 2 months. Results are then published in *Annuario Pontificio* (Citta del Vaticano: Tipografia Poliglotta Vaticana) the following January. Other kinds of handbooks focus on a particular country, such as J.N. Amanze's (1994) *Botswana Handbook of Churches,* which carries the subtitle *A Handbook of Churches, Ecumenical Organisations, Theological Institutions, and Other World Religions in Botswana*. This handbook is well-organised, with data sources clearly displayed, and offers the reader a large amount of information on most of the Christian denominations and other religions in Botswana. Another example is the more wide-ranging *Guía de Entidades Religiosas de España (Iglesias, Confesiones y Comunidades Minoritarias)* published by the Ministry of Justice in Spain. This book covers all the religious minorities besides the majority Catholic Church, with entries on Hinduism, Buddhism and Islam.

At least seven varieties of religious statistics are compiled and kept by religious communities, mainly at the national level. These are (1) demographic and sociographic statistics on religious populations in particular areas and among particular peoples; (2) statistics of religious behaviour and practice; (3) statistics of religious and ecclesiastical jurisdiction and structures; (4) statistics of personnel and lay workers; (5) statistics of social and cultural institutions (such as schools and hospitals); (6) statistics of prosperity and finance; and (7) statistics of religious psychology, beliefs, motivation and attitudes.

Statistics collected by religious communities often enable researchers to distinguish between two categories of religionists – practicing and non-practising – based on whether or not they take part in the ongoing organised life of the religion. In relation to Islam, especially in Europe, much of the focus is on Muslim identity as it is both promoted and developed by Muslim youth organisations. In relation to Christianity, practicing Christians are affiliated Christians who are involved in or active in or participate in the institutional life of the churches they are affiliated to (or members of); or who are regarded by their churches as practicing members because they fulfil their churches' minimum annual attendance obligations or other membership requirements; or who in some way take a recognised part in the churches' ongoing practice of Christianity. Thus, in the Church of Scotland, for example, 'active communicants' are defined as persons who communicate (receive communion) at least once a year. In 1939, this was 76.8% of all communicants on the rolls, 56.7% in 1943, 72.0% in 1946, and 71.3% in 1959. In the Coptic Orthodox Church (Egypt), a 'practicing Copt' is one who receives communion at least once every 40 days. Sometimes there is a financial connotation as well; some denominations count as practicing adult members only those who contribute each year to local or central church funds. Certain denominations publish detailed definitions: the Christian Church (Disciples of Christ) in the United States explains, 'A "participating" member is one who exercises a continuing interest in one or more of the following ways: attendance, giving, activity, spiritual concern for the fellowship of the congregation regardless of the place of residence' (Christian Church (Disciples of Christ) 1964).

Membership figures for major Japanese religious bodies are presented in the Heisei 17 (2006) *Shukyo Nenkan* (Religion Annual) assembled by the Japanese Government Bunkacho (Agency for Cultural Affairs) from figures provided by the organisations themselves. These figures should be used carefully, especially in comparison with Western religious statistics, because many are based on different understandings of membership. Some of the discrepancies arise because many Japanese count themselves adherents to two or more religions. In addition, Japanese count membership by household or families; as a result, the number of individual 'members' includes many who are inactive or who might even deny any connect to that particular religion (as, for example, a Christian living in a Shintoist household). Additionally, despite the high membership figures reported for some major world religions, many Japanese would say they have no religion at all. For example, many Japanese view a Buddhist temple only as a place to perform religious and life-cycle ceremonies; thus, temple membership is more an 'entry pass' to the site of ritual duties than a sign of religious devotion. Note as well that various studies can produce differing results for the same religion, depending on how they are conducted.

Such differences in adherent numbers contribute to the popular misconception that religious communities tend to exaggerate their membership figures. Perhaps the most convincing evidence comes from two of the most aggressively evangelistic groups in Christianity. The Church of Jesus Christ of Latter-day Saints is diligent in assembling accurate statistics of membership, an indication of its efficiency as a thoroughly modern organisation. The same is true for the Watch Tower Society (Jehovah's Witnesses). Aldridge states that there is 'no reason to doubt that these [Watch Tower statistics] are accurate. They are in line with estimates produced by government agencies and independent scholars. The society reports poor results as well as good ones, which may well be a sign of honesty' (Aldridge 2007, 21). In addition, no organisation (religious or otherwise) can realistically sustain the reporting of inflated numbers. Eventually, there will either be a ceasing of 'growth' or the fraud will be exposed as the numbers reach obviously impossible levels.

6. Government statistical reports

Governments often collect statistics on religion beyond those collected in censuses. For example, every year the *Statistical Yearbook of Norway* publishes figures collected by the Church of Norway as well as from all other religious communities, including groups such as Buddhists and Baha'is. The added value of this type of publication is the greater granularity on religion when compared to censuses, such as marriages within churches, financial data, and worship service participation, all of which are reported in the *Statistical Yearbook of Norway*.

Different departments within governments also issue reports on religion. One extensive example is the United States State Department's reports on religious freedom around the world. The State Department reports are comprehensive and draw upon the extensive country-specific knowledge of Department personnel. In fulfilment of US law, each US embassy prepares an annual report on its host country. Embassy staff are trained to investigate the state of religious freedom and to prepare the reports according to a common set of guidelines. Expert analysis by trained staff resident in each country in which the United States has an embassy can be a definite strength. Following completion, each report is vetted by State Department offices with expertise in the affairs of that country and in universal human

rights. The reports incorporate information from other human rights reports (such as from non-governmental organisations) as well. As such, the data reflect a positive balance between nearness and remoteness.

The US Commission on Religious Freedom assists the State Department by conducting research that feeds into the religious freedom reports; research and data from both the commission and the embassy are then arranged and critically examined under the supervision of the special US Ambassador for International Religious Freedom. Theoretically, having observers culturally separate from the society being studied has merit. The reports cover the following standard reporting fields for each country: religious demography, legal/policy issues, restrictions of religious freedom, abuses of religious freedom, forced conversions, improvements in respect for religious freedom, societal attitudes and the United States Government's actions concerning that particular country. The resulting reports contain loosely structured, retrospective, qualitative analyses of most countries of the world, with embedded quantitative data.

The US State Department has been compiling such annual reports since 1997, taking on the reporting format described above in 2001. Though the reports are bounded (for example, 1 July 2002 to 30 June 2003), they include retrospective information on events that have been systematically monitored since 1997. Therefore, the data in these reports approximate a trend study, which captures both recurring and specific problems that occurred during the reporting period. The reports do not have a systematic interview or survey component, but some multi-modality is approximated in that, for example, embassies are directly involved in interfaith dialogues in various countries. At times, the reports draw on local survey data unavailable to Western researchers.

Problems such as bias in the responses, and non-response are serious issues for data collected and presented in government reports. For international surveys that include data from several nations, these problems might have special and/or unidentified dimensions. For example, both the number and truthfulness of survey responses are likely to be higher in countries where trust of strangers is generally high, like the United States, than in countries where trust of strangers is lower, like Japan. A serious problem facing international survey research is the lack of statistically proven methods to account for such cultural differences within and between countries. Trust, or lack of trust, in a government can also impact survey results, though it has not been studied as a measurable phenomenon.

In the case of the US State Department's religious freedom reports, although they seek to be comprehensive, they are produced primarily by embassy officials in country capitals and other cities with US consulates, which limits their scope and can be a potential source of error. Reliance upon (or catering to) groups with the loudest national voices might also bias the reports. However, the practice of incorporating multiple sources of information (as mentioned above) can help attenuate these problems. The varying length of country reports should also be noted. For example, the 2003 report for Indonesia is 14 pages long (single-spaced, with 10-point font) when printed from the State Department's website, while the reports for many countries in the Caribbean are less than three pages long when printed in the same format. Rather than view the shorter reports as a problem of missing data, a more helpful assumption might be that if abuses or restrictions were not reported, then they were negligible or non-existent.

Another source of bias might be the over-reporting of problems in countries where information is readily accessible. For example, firm statistics on anti-Semitism are more likely to be available in countries with active Jewish human rights groups than in countries without such organisations. Therefore, it is possible that freer countries will appear worse than they really are (in comparison to less-free countries) because abuses are freely reported. Finally, while analysis can benefit from scholars with considerable knowledge, in many cases, expert opinion has been shown to be notoriously inaccurate.

Informants have been used to supply missing data or to enable reconciliation of conflicting figures in some of the most difficult assessments of religious demographics, such as the number of Christians in China, the number of Muslims in the United States, and the number of religious minorities in Saudi Arabia.

7. Questionnaires and reports from collaborators

Researchers sometimes initiate queries related to religious demography that result in brief reports. Most of these are never published but are available in the headquarters or national study centres of many religious groups or denominations. One example is a special questionnaire that was designed to verify Pentecostal and Charismatic demographics for a major report prepared on global Christianity by the Pew Research Center. The questionnaire asked about the size of Pentecostal denominations, but it also asked three questions to determine whether or not the denomination was actually Pentecostal. The three questions were (1) Does your church believe in a second and/or third experience subsequent to conversion, which is understood to be the baptism or filling of the Holy Spirit?; (2) Does your church recognise and practice speaking in tongues as a personal prayer language?; and (3) Does your church recognise and practice the spiritual gifts such as speaking in and interpretation of tongues, healing power, word of wisdom/knowledge, prophecy and deliverance? A series of additional questions were asked to ascertain with which tradition within Pentecostalism each denomination was affiliated. Finally, three further questions were asked about Pentecostal practices within the denomination.

Another example of this kind of report is the self-assessment performed by the Jain community in the United Kingdom after the 2001 census. The census does not include 'Jain' as one of the official religions but requires Jains to write in the name of their religion. As a result, the Jain community claims that their community was vastly under-counted (7,000 instead of 35,000), with most ticking the 'Hindu' box or professing 'no religion'. Leading up to the 2011 census, the Institute of Jainology launched a campaign to get Jains to write in their religion, in part to break the 10,000 barrier that would allow them 'minority religion' status, giving them access to jobs and other benefits.

Assessing the quality of data obtained through informal questionnaires can be difficult because information about the source(s) is often very limited. If one is dependent on these answers as primary data, there is often no additional source to corroborate them. Thus, this type of data is more useful for verifying other results, or at least in giving an impression as to whether one's first source can be corroborated.

8. Field surveys and interviews

For the past 50 years, scholars have visited virtually every country in the world to conduct interviews with religionists. Most of these are never published but, once again, are available in private collections in many countries of the world. In the Pentecostal project mentioned above, investigators conducted a series of interviews at the Third Lausanne Congress on World Evangelization, held in Cape Town, South Africa, in October 2010. Researchers identified Pentecostal attendees from around the world who were invited to the Congress and made appointments with them. In most interviews, the researchers presented existing data on the demographics of Pentecostalism in the interviewee's home country and asked for comments and corrections. In some cases, such as that of house churches in China, important adjustments to the data were made based on the interviews.

As with questionnaires, the accuracy of the data collected in these interviews can be difficult to assess. Sometimes the information on the interviewees is limited (for example, are there known biases?). Nonetheless, information obtained through interviews can be critical in determining the context or accuracy of other sources. For example, survey data might not register the existence of a small group of religionists, whereas an interviewee might have first-hand knowledge of the community. Asking for a rough approximation of the community's size is an important step along the way in documenting its existence.

9. Correspondence with national informants

Scholars and others who have extensive knowledge of a particular religious community can be a source of critical information on religious demographics. Correspondence with informants is often most helpful when trying to clear up discrepancies in existing data, such as when figures reported by government entities and those of religious

communities disagree significantly; when no recent data have been collected, for example, as a result of ongoing political or economic instability; or when political or social pressures inhibit collection or publication of data on religions, especially minority religions. Informants have been used to supply missing data or to enable reconciliation of conflicting figures in some of the most difficult assessments of religious demographics, such as the number of Christians in China, the number of Muslims in the United States, and the number of religious minorities in Saudi Arabia.

As with other types of information collected in interviews, it is difficult to assess the reliability of individual informants. Outsiders (usually the case with researchers collecting data) cannot easily discern how an informant might be biased. Consequently, this kind of information needs to be correlated with other sources. It is also common for multiple respondents to give contradictory answers to the same question. For example, in assessing the number of Muslims in the United States, there is a broad range of opinions (from informants and from more robust surveys and methodologies) from 1 million to over 10 million.

10. Unpublished documentation
These documents are collected in the field and include reports, memoranda, facsimiles, photocopies, photographs, maps, statistical summaries and historical documents. For example, in 2000 the Christian Research Association published and distributed a limited-edition CD-ROM titled *Australia's Religious Communities*. Updated in 2004 and again in 2010, the multimedia disc contains information on all of Australia's Christian denominations as well as other religions, including history, beliefs and practices and current statistics.

The quality of the data in these documents is highly variable and often difficult to assess. In the example of *Australia's Religious Communities* above, professional researchers produced the report with a high level of accuracy and methodological transparency. In other cases, however, the sources of data (never mind the reliability) can be hard to ascertain or verify. Less-robust reports can still be used as markers, such as for verifying the existence of a religious community. More in-depth investigations can then lead to better documentation.

11. Encyclopedias, dictionaries and directories
Numerous encyclopedias, dictionaries and directories describing religions in different countries are available as secondary sources. Unlike yearbooks, these compilations are not normally the products of a single religious community or church. Two of the most comprehensive multi-volume encyclopedias are *The Encyclopedia of Religion* (Eliade 1986) and *The Religions of the World* (Melton 2010). *The HarperCollins Dictionary of Religion* (Smith 1995) is also quite comprehensive as a single-volume dictionary.

Directories often focus on contact information but often contain data as well. One of the most comprehensive related to Christianity is the *Handbook of Churches and Councils: Profiles of Ecumenical Relationships,* which reports on churches related to the World Council of Churches, covering nearly 150 countries with summary data on hundreds of thousands of local congregations and the nearly 590 million people affiliated with those churches (van Beek 2006).

However, these works do not reference original source material directly but usually rely on existing sources, especially in citing statistics. For example, an article on religion in a particular country will cite census or survey figures when reporting on the size of the religious community. On the other hand, because individual scholars often author these entries, they often contain original insights related to the demography of a religious community (for example, whether or not the community is growing or shrinking over time). In addition, one might encounter the world's expert on a particular religious community via an encyclopedia entry, with references to more expansive works.

12. Printed and web-based descriptions of religions
There are numerous descriptions of religious communities around the world that are produced for a particular purpose (often a conference or meeting) that are circulated but never published. In more recent years, web sites related to religion have proliferated. Scholar Rosalind Hackett performed a study of the web sites of major Nigerian megachurches (Hackett 2009). Her work highlights how quickly the sites change and how they tend to have a high level of sophistication. Most of these web sites contain detailed histories of the churches and often make reference to the size of the community, sometimes offering comparative statistics of change over time.

These kind of print materials are difficult to assess in part because most of the authors are not identified. For example, does a rival Sunni community produce a particular 'fact sheet' describing a Shia group or is it promotional material created by the Shia group itself? In addition, web sites range widely in their reliability and accuracy and almost always must be evaluated by other sources. In addition, web sites are not permanent and are constantly changing. Consequently, most research centres have a specific policy for printing web source material.

13. Doctoral dissertations and master's theses
Unpublished theses and dissertations often contain tables, charts and graphs on religious demographics, either from primary sources listed above or from original research done for the dissertation itself. These can be searched by subject and (in cases where they have been scanned) by key words. Often such searches can be performed via the Internet. Yale Divinity School Library, for example, has compiled a database of over 6,000 dissertations related to Christianity outside the Western World. Yale University Library has a more expansive portal to dissertations on religion.

Dissertations have their greatest value for very focused or specific descriptions of religious communities. For general statistics of national religious demography, dissertations tend to be too narrow, limited to a particular village or city or on only one tradition within a religion (for example, Mahayana Buddhists in a Theravada majority in one village in Thailand).

Physical and electronic collections of data
While information on religious demography is found in various government offices, in survey companies, at religious headquarters, and in the offices and homes of scholars, there are a few collections of data on religion that have recently emerged. As a general source of census material, the most complete international collections of census data are found at the United Nations in New York and at the US Census Bureau in Washington, DC. In addition, most governments around the world have physical collections in their administrative centres as well as an online presence. A more comprehensive collection of data on religion is found in the library at the headquarters of *Encyclopedia Britannica* in Chicago. Specific data on religion is found in three major collections, (1) the *World Christian Database* and the *World Religion Database*, (2) the Pew Research Center, and (3) the Association of Religion Data Archives (ARDA).

Religious demography must attempt to be comprehensive. In certain countries where no hard statistical data or reliable surveys are available, researchers have to rely on the informed estimates of experts in the area and subject. Researchers make no detailed attempt at a critique of each nation's censuses and polls or each church's statistical operations. After examining what is available, researchers then select the best data available until such time as better data come into existence. In addition, there are a number of areas of religious life where it is impossible to obtain accurate statistics, usually because of state opposition to particular tradition(s). Thus, it will probably never be possible to get exact numbers of, for example, atheists in Indonesia or the Baha'i in Iran. Where such information is necessary, reasonable and somewhat conservative estimates are made.

Reconciling discrepancies in survey data
There are post-survey strategies that help general population surveys better represent the actual composition of a particular country. For instance, if in a survey of 1,000 people, 60% were women and 40% were men, but we know that women and men are each 50% of the country's total population based on a recent census, then each woman's response on the general population survey would be weighted down by a factor of 500/600 and each man's response would be weighted up by a factor of 500/400. Such adjustments are called weighting.

Other adjustments made to general population surveys may require taking into account that they are meant to be representative of only adult populations. Therefore their results require adjustments, particularly if some religious groups have more children than others in the same country. This requires either a complete roster of members of each household or some other way to estimate of the number of children living in the household with the adults. When a complete roster is unavailable, most estimates of religious affiliation of children assume that they have the same religion as their one of their parents (usually assumed by demographers to be the religion of the mother). Differences in fertility rates between religious groups are particularly useful in estimating religious differentials among children. This is because demographic projections carry forward children born to women. It may introduce

some bias to the degree that the father's religion is more likely to be the religion of the children than the mother.

Example: Coptic Church in Egypt

At times, the results from government censuses and information from religious communities can be strikingly different. For example, in Egypt, where the vast majority of the population is Muslim, government censuses taken every 10 years have shown consistently for the past 100 years that a declining share of the population declare themselves as or profess to be Christians. In the most recent census, some 5% identified as Christian. However, church estimates point to a percentage figure three times larger (15%). This discrepancy may be due to overestimates by the churches or attributed, at least in part, to social pressure on some Christians to record themselves as Muslims. Further, according to news reports, some Egyptian Christians have complained that they are listed on official identity cards as Muslims. It also might be that church reports include Egyptian Christians working as expatriates outside of Egypt, while the census does not, or that the churches simply overestimate their numbers.

Such a lack of clarity is compounded by media reports and even Egyptian government announcements repeatedly claiming that Christians make up 10% or more of the country's approximately 80 million people, despite the fact that the census repeatedly reports only 5%. The highest share of Christians found in an Egyptian census was in 1927 (8.3%). Figures for Egyptian Christians declined in each subsequent census, with Christians seemingly making up 5.7% of the Egyptian population in 1996. The report from the most recent census, conducted in 2006, does not, however, provide data on religious affiliation, but a sample of the 2006 census data is available through the Integrated Public Use Microdata Series, International (IPUMS). They sample the same Christian share (about 5%) as the latest Egyptian Demographic and Health Survey, with a sample size of 16,527 women aged 15–49 years.

According to Pew's analysis of Global Restrictions on Religion, Egypt has very high scores for government restrictions on religion as well as high scores for social hostilities involving religion. These factors might lead some Christians to be cautious about revealing their identity. Regardless of the actual number, it is very likely that Christians are declining as a proportion of Egypt's population, even if their absolute numbers are not falling. On the one hand, Christian fertility in Egypt has been lower than Muslim fertility. On the other, is possible that large numbers of Christians have left the country, although a 2012 Pew study on the religious affiliation of migrants around the world has not found evidence of an especially large Egyptian Christian diaspora.

There are a variety of issues related to finding and choosing the best data sources of religious affiliation. Censuses are generally accepted as the most reliable, but there are times when they fail to present the full picture, for example because they omit certain regions of a country or because they do not ask clear or detailed questions about religion. General population surveys can often fill the gap, but, depending on their quality, they may also have some bias. At times, religious groups may have very different estimates of their sizes than are found by censuses and surveys, but for some types of data, such as denominations of Protestantism, estimates by the groups may be the best information available. Finally, for religions such as Islam, Hinduism, Buddhism and Judaism, subgroup information is routinely missing from censuses and surveys. Estimates for the subgroups of these religions often rely on indirect measures, such as ethnic groups likely to adhere to a particular subgroup or expert analysis of multiple ethnological and anthropological sources. Thus, it is important to take into consideration many different kinds of data in order to arrive at the best estimate of a particular religious population in a country.

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