

Methodology and Sources of Christian and Religious Affiliation Todd M. Johnson and Gina A. Zurlo

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 religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his 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 very 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 endeavoring to survey the extent of religious and non-religious affiliation around the world. ¹

Defining religion and religious identity

A starting point in pursuing religious demography is defining what is meant by "religion." 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

¹ Part of this essay are adapted from longer treatments in Todd M. Johnson and Gina A. Zurlo, *World Christian Encyclopedia*, 3rd edition (Edinburgh: Edinburgh University Press, 2019); Todd M. Johnson and Brian J. Grim, *The World's Religions in Figures: An Introduction to International Religious Demography* (Oxford: Wiley-Blackwell, 2013); and David B. Barrett and Todd M. Johnson, *World Christian Trends* (Pasadena, CA: William Carey Library, 2001).

categories. Knowing how to differentiate among elements that distinguish populations is critical for identifying religious groups that can be enumerated. Religious identity is 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. Religious identity can become intertwined with national and/or social identity, making it even more difficult to establish boundaries. All of these points are important for religious demographers as they attempt to define their own boundaries for what religion is and is not.

Knowing that no single definition of religion is sufficient, we use the following as our operational definition. Our definition requires that religion be more than just a single person's idiosyncratic beliefs: Religion is defined as an organized 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.

There are at least two different perspectives on what it means to be a Christian: professing Christians and affiliated Christians. Utilizing the United Nations Universal Declaration of Human Rights as a foundation, "professing Christians" means all those who profess to be Christians in government censuses or public-opinion polls, that is, 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?"

However, not all those who profess to be Christians are affiliated to organized 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 baptized 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 thus the *World Christian Database*, the source of data for these dossiers), 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).

The most widely recognized Christian traditions are (1) Roman Catholicism, (2)

Orthodoxy (both Eastern and Oriental), and (3) Protestantism (including Anglicanism). These are major de facto groupings which 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 which do not define themselves under any of these three terms, and often reject all three. Since they thus cannot be fitted into the simple 3-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 main-line Protestantism; and Old Catholics reject any identity with Roman Catholicism. Consequently our survey recognizes the existence of 1 further distinct worldwide stream of Christianity: (4) Independency, 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, African Instituted Churches, Pentecostal, Charismatic, nondenominational, also Old Believers and other schisms 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. These date from 1566 to the present day and include Unitarians, Jehovah's Witnesses, Christian Scientists, Mormons and vast numbers of other more recent movements. Christian denominations are defined and measured at the country level, creating a large number of separate denominations within Christian families and Christian traditions. The normal 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.

The family is by far the most important instrumentality through which individuals acquire personal, cultural and social self-identification. In consequence, children of church members are more likely to remain members than those whose parents are not church members. Children of ardent and practicing Christians usually are, to the extent that their years permit, ardent and practicing 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 practicing and believing Christians. The *WCD* takes the opposite view: children and infants also can properly be called Christians and can actively and regularly (to the extent of their ability) practice the Christian faith. 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.

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. Three major sources for demographic information on religion are censuses in which a religion question is asked, social scientific surveys and polls, and data from religious communities themselves.

Government censuses

Since the twelfth century, many governments around the world have collected information on religious populations and their practices. In the twentieth 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 U.S. dollars), 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 or Turkey, governments simply assume that the population is essentially 100% of a single religion (Roman Catholic and Muslim, respectively) and therefore justify the question's removal. France rejected the use of a religion question as early as the 1872 census. Instead its "efforts centered on clarifying 'national membership,' particularly on the basis of the distinctions formulated for foreigners recorded in the census." By the twenty-first century, however, this trend had begun to reverse itself somewhat. For instance, Britain—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 2000 census as the best way to obtain firm data on all religious minorities. Whether to include a question on a census can be a heavily politicized 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. Pragmatists argued that the goal was to improve affirmative action among India's most socially disadvantaged peoples, but modernists saw it as regressive, exacerbating divisions in Indian society.

Censuses are one of the most comprehensive ways in which people are counted. From its

² For example, the 29 questions asked in the 2011 Indian Census cost approximately \$440 million U.S. dollars, or \$15 million U.S. dollars per question. See C. Chandramouli, "Census of India 2011 – A Story of Innovations," Press Information Bureau, Government of India, http://pib.nic.in/newsite/efeatures.aspx?relid=74556.

³ Alain Blum, "Resistance to Identity Categorization in France," in *Census and Identity: The Politics of Race, Ethnicity, and Language in National Censuses*, ed. David I. Kertzer and Dominique Arel (Cambridge: Cambridge University Press, 2002), 128. See Catherine Gousseff, "L'élaboration des catégories des nationales dans les recensements: décalages entre legislation et outils de measure," *Revue française des affaires sociales* 2 (1997): 53–70.

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-standardized 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 Shia/Sunni). 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 (EU), only 14 of 27 EU recent country censuses included a religious affiliation question whose results were reported to the United Nations statistical office. The 14 countries in the European Union that included a religious identification question on their censuses are the Netherlands, 2013; Romania, 2012; Slovenia, 2012; Estonia, 2011; Finland, 2010; Austria, 2011; Bulgaria, 2011; Czech Republic, 2011; Hungary, 2011; Lithuania, 2011; Portugal, 2011; Slovakia, 2011; United Kingdom, 2011; and Ireland, 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." 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

⁴ See Calvin Goldscheider, "Ethnic Categorizations in Censuses: Comparative Observations from Israel, Canada, and the United States," in *Census and Identity: The Politics of Race, Ethnicity, and Language in National Censuses*, ed. David I. Kertzer and Dominique Arel (Cambridge: Cambridge University Press, 2002), 71.

religions that are not recognized 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."⁵

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 baptized as children) 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 non-religious groups aren't 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.

⁵ Alan Aldridge, *Religion in the Contemporary World: A Sociological Introduction*, 2nd ed. (Cambridge: Polity Press, 2007), 21.

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." In addition, Abramson agrees with political scientist Dominique Colas that the opinion poll—and in Abramson's opinion, the census as well—is "a universalizing process of abstraction that metamorphoses ethical questions into political ones, fabricating a reality that doesn't exist and which in turn legitimates the existing order, for is not what characterizes power relations precisely what gives them their 'power' in the first place?"⁷ 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." In this case, large

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⁶ David Abramson, "Identity Counts: The Soviet Legacy and the Census in Uzbekistan," in *Census and Identity: The Politics of Race, Ethnicity, and Language in National Censuses*, ed. David I. Kertzer and Dominique Arel (Cambridge: Cambridge University Press, 2002), 178.

⁷ Dominique Colas, *Civil Society and Fanaticism: Conjoined Histories*, trans. Amy Jacobs (Stanford: Stanford University Press, 1997), xxix. Cited in Abramson, "Identity Counts," 178.

⁸ Zaza Piralishvili, "Religion," Central Eurasia 2005 Analytical Annual: Georgia (Sweden: CA&CC Press, 2006), 152.

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 don't 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 February 17, 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. 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 undercounting 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 per se). This can be the case for ethnicity, language, social status, and religion as well. The first enumeration of population in the Ottoman Empire in the fifteenth and sixteenth 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 twentieth century, Belgian colonial authorities in Rwanda legitimized 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

⁹ Georgina Stevens, *Filling the Vacuum: Ensuring Protection and Legal Remedies for Minorities in Kosovo* (London: Minority Rights Group International, 2009), 8.

power. Even in the well-organized 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 twentieth 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, be Muslim also).

The issue of who does the enumerating for censuses is really one of power and legitimacy. This was certainly the case in much of colonized Africa in the twentieth 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 categorize in order to control, to extend power, but also to obtain legitimacy." ¹⁰

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

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¹⁰ Peter Uvin, "On Counting, Categorizing, and Violence in Burundi and Rwanda," in *Census and Identity: The Politics of Race, Ethnicity, and Language in National Censuses*, ed. David I. Kertzer and Dominique Arel (Cambridge: Cambridge University Press, 2002), 170.

neighboring Jordan, they are also 2% Christian, but in the United States they are about 30% Christian and in Australia, 70% Christian.

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, as did UNICEF's 2005 Multiple Indicator Cluster Survey in Albania. 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 differs, albeit slightly, 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 Pew Global Attitudes Project, 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 occasional cross-national surveys by the Pew Forum on Religion and Public Life, as well as single-nation surveys such as the Pew Forum's U.S. Religious Landscape Survey. 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.

Surveys can also be commissioned in light of a dearth of data on a particular subject. For example, few quantitative studies have been conducted on the religious, political, and civic views of Pentecostal Christians. To address this shortcoming, the Pew Forum on Religion and Public Life, with generous support from the Templeton Foundation, conducted surveys in ten countries with sizeable Pentecostal populations: the United States; Brazil, Chile, and Guatemala in Latin America; Kenya, Nigeria, and South Africa in Africa; and India, the Philippines, and South Korea in Asia. In each country, surveys were conducted among a random sample of the public at large, as well as among oversamples of Pentecostals (which included Charismatics).

Survey results can be used to search for correlations between different variables. For example, Eric Kaufmann discovered an interesting link between Islamism 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."¹¹ 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 overcounts 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

¹¹ Eric Kaufmann, *Shall the Religious Inherit the Earth? Demography and Politics in the Twenty-First Century* (London: Profile Books Ltd, 2010), 130.

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. 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 2.3% Christians (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 1.4 million Hindus out of 2.8 million people of Indian origin in the United States.

Religion statistics from communities

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 43,000 Christian denominations and their 4.7 million constituent churches and congregations of believers. The latter invest over 1.1 billion USD annually for a massive, decentralized, 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 Roman Catholic Church does the most extensive of these inquiries. Parallel to the obligation of many other religious leaders, all Roman 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 twelve 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 (1996) *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 organized, 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 Roman 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 behavior 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-practicing—based on whether or not they take part in the ongoing organized life of the religion. In relation to Islam, especially in Europe, much of the focus is on Islamic identity as it is both promoted and developed by Muslim youth organizations. 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 fulfill their churches' minimum annual attendance obligations or other membership requirements; or who in some way take a recognized 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."¹²

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 organizations 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

¹² Classification of church membership, General Assembly Resolution No. 57, Detroit 1964.

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. One study reports one million Christians in Japan, for example, while independent surveys give as many as 4.5 million Christians.

Such differences in adherent numbers contribute to the popular misperception that religious communities tend to exaggerate their membership figures. For example, Leslie Allen Paul stated that clergy reports of parish populations in the twentieth century were "notoriously exaggerated," but this is not necessarily the case. 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 (Mormons) is diligent in assembling accurate statistics of membership, an indication of its efficiency as a thoroughly modern organization. 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

¹³ Leslie Allen Paul, *The Deployment and Payment of the Clergy: A Report* (Westminster: Church Information Office for the Central Advisory Council for the Ministry, 1964).

well as good ones, which may well be a sign of honesty."¹⁴ In addition, no organization (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.

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 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 reflect 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

¹⁴ Aldridge., 118.

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 the Pew Forum's analysis of Global Restrictions on Religion (see www.pewforum.org), 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 study by the Pew Forum on the religious affiliation of migrants around the world has not found evidence of an especially large Egyptian Christian diaspora.

Conclusion

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.