

The Art of Counting: The Impact of Postmodernity on Mission Statistics

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When you can measure what you are speaking about and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind.¹

—Lord Kelvin, 1891

It is one thing to describe methods of measurement, and another to obtain and state results of measurement. But what we call “measuring” is partly determined by a certain constancy in results of measurement.²

—Wittgenstein, 1953

Several years ago I was sitting across a desk from a professor of philosophy at Fuller Theological Seminary. I had just explained to her that I was involved in the revision of an encyclopedia³ describing in detail the results of a massive “census” taken by Christian churches around the world. I then asked her what the impact of postmodern philosophical trends might be on such an encyclopedia project. She simply smiled.⁴ I had little appreciation for how monumental changes in the philosophical landscape might influence the documentation and analysis involved in “counting” Christians. That was the beginning of a personal quest that has led me to read voraciously on the subject of postmodernity while simultaneously producing an enormous statistical work on the current status of world mission.

This article is a modest attempt to trace a few important features of the shift from modern to postmodern thinking and how this impacts the discipline of counting. In particular, I draw on the work of philosopher Michael Polanyi, whose concept of personal knowing provides a middle way between positivism and relativism. A central concern for quantification is how notions of objectivity have changed over this period. I contend that the mission researcher in the postmodern era can make claims related to data but they are generally more nuanced and less confident. Quantification continues to have a role in the scientific method but assumptions must be made explicit and it should be placed in a broader continuum with qualitative research.

Modern foundations

The encyclopedia as a comprehensive research project has modern Enlightenment roots.⁵ Diderot, in his essay on the *Encyclopédie*, stated its overall purpose: “to collect all the knowledge scattered over the face of the earth to present its general outlines and structure to the men with whom we live, and to transmit this to those who will come after us, so that the work of the past centuries may be useful to the following centuries, that our children, by becoming more educated, may at the same time become more virtuous and happier, and that we may not die without having deserved well of the human race.”⁶ All encyclopedia projects since are indebted to Diderot for providing this overarching

framework, with the underlying assumption that, with patience and time, one could know a great deal and that knowing it would somehow make the world a better place to live. Despite their enthusiasm, eighteenth-century encyclopedia pioneers never could have foreseen just how much their successors would build on their ideas. Alasdair MacIntyre emphasizes how far their ideas had progressed by the ninth edition of *Encyclopaedia Britannica* in the late 19th century.⁷ The editors of that edition wrote, “The available facts of human history, collected over the widest areas, are carefully coordinated and grouped together, in the hope of ultimately evolving the laws of progress, moral and material, which underlie them, and which help to connect and interpret the whole movement of the race.” By the early twentieth century, modern scientific and religious sensibilities (Enlightenment objectivism; scientism) were largely built upon the encyclopedic principle of gathering knowledge. Their central requirement sought to eliminate the possibility of error by removing all personal aspects from their quest for objective truth.

Modern research and paradigm shifts

The modern researcher’s task was straightforward—uncover the facts about a given situation and report them in an objective manner. Cultural historian Mary Poovey summarizes, “because Western philosophy since the seventeenth century has insisted that the things we observe constitute legitimate objects of philosophical and practical knowledge, many people think of facts as particulars, isolated from their contexts and immune from the assumptions (or biases) implied by words like ‘theory,’ or ‘hypothesis,’ and ‘conjecture.’”⁸

One of the surprising findings of late twentieth-century philosophy is that even natural science is not carried out on objective foundations as assumed by modern thinkers. Perhaps unwittingly, American philosopher of science Thomas Kuhn provided a pivotal argument against scientific objectivism when he demonstrated, through the use of paradigm shifts, how scientific “facts” are dependent on theoretical interpretation.⁹ Furthermore, he uncovered how even the apparatuses used in scientific experiments required theoretical knowledge. Thus, the scientist brought much unacknowledged “bias” to the realm of observation and discovery.

Kuhn’s paradigm shifts were utilized by theologian Hans Küng in his book *Theology for the Third Millennium*,¹⁰ where he produced a taxonomy of six major paradigms as an overlay on Christian history. This taxonomy was then adapted by missiologist David Bosch in *Transforming Mission: Paradigm Shifts in Theology of Mission*.¹¹ The shift from the fifth paradigm “Enlightenment modern” to the sixth “Emerging ecumenical postmodern” is the most relevant to my analysis. In summarizing Kuhn, Bosch writes, “It is widely accepted today, in all the sciences (natural as well as social), that total objectivity is an illusion, and that knowledge belongs to a community and is influenced by the dynamics operative in such a community. This means that not only ‘scientific data’ are tested, but also the researchers themselves” (p. 185).

What does all this mean for the researcher working on an encyclopedic project on the status of Christianity in every country of the world? The individual researcher’s perspective, as well as the interpretive framework of his/her culture and community, has

a powerful impact on the direction of the project.¹² This surely begins with which “facts” are chosen to be collected and analyzed. In the case of Christian churches, over 10 million “census” forms are collected each year at a cost of more than \$1 billion USD. These forms represent actual counting of some 1,000 unique variables. Most of these are archived with little or no attention given to them.¹³ The modern approach would be to simply report the “facts” as they are found in these reports. But the reports contain massive inconsistencies and contradictions. The researcher has to bring some form to the chaos.

One of the profound differences between the first edition of the *World Christian Encyclopedia* (published in 1982) and the second edition (2001) was the way in which churches no longer seemed to fit into the neat categories of major Christian ecclesiastical blocs. In the first edition, churches outside of the major traditions (Roman Catholic, Orthodox, Anglican, and Protestant) were labeled “Non-white indigenous” but by 1995 this label was no longer sufficient since so many “White-led” movements had grown significantly. Noting their antipathy toward denominationalism, it seemed that “Independent” was the most appropriate label. There turned out to be nearly 22,000 para-denominations or networks with 386 million members in AD 2000,¹⁴ making Independents the second largest category of Christians worldwide, after Roman Catholics. Thus, as researchers, we had to impose our own category—these Christians do not generally identify themselves as Independents.

Furthermore, movements that run across Christianity’s major traditions have become more significant in the past 30 years. Thus, for every country in the second edition of the *WCE*, we added these movements under the Christian rubric. We labeled these “Trans-megabloc groupings” (but since have used “Movements”) to emphasize their ability to range across denominational and traditional boundaries. The movements are “Evangelicals” (Christians belonging to bodies like the World Evangelical Fellowship), and “Pentecostals/Charismatics/Independent Charismatics” (Christians involved in one of three waves of renewal). In 2015 these number 329 million, and 644 million respectively.¹⁵

Between the 2nd edition of the *WCE* and the anticipated 3rd edition (c. 2020), we have made a number of changes. We re-categorized Marginal Christians as Independents¹⁶ and dropped the term “Great Commission Christians” altogether.¹⁷

These difficulties with categorizing Christians illustrate the tension missiologist Paul Hiebert highlights in his discussion of intrinsic well-formed bounded sets and extrinsic well-formed centered sets.¹⁸ The careful enumeration of the world’s Christians by its major traditions lends itself to bounded sets—those sets where a Christian is defined by membership requirements. The two movements within Christianity (Evangelicalism and Pentecostalism), on the other hand, are defined by their relationship to a “center,” that is, to certain practices that define these communities.¹⁹

Personal knowing

Hungarian scientist and philosopher Michael Polanyi’s reflections on how one compiles information adds additional context to the role of the researcher.²⁰ Whereas modern scholars accepted the idea that one simply identifies the particulars (objective facts on a

given subject) and brings them all together in some kind of natural arrangement, Polanyi believed quite the opposite. He saw that we do not work our way from the parts to the whole, but rather from the whole to the parts. Just as in language, individual words gain their context in whole sentences; therefore individual parts can best be understood in the context of the whole. More significantly, there must be someone perceiving the whole. Obviously different people will perceive the whole differently. Polanyi develops this idea into something he calls “personal knowing”. Personal knowing has two dimensions: “explicit knowing,” which is based on observation, and “tacit knowing,” which provides the framework or context within which and out of which explicit knowing takes shape. Whereas the modern scientist tried to eliminate all personal bias, Polanyi celebrates it and considers it the very thing that makes “knowing” something interesting and valuable. Furthermore, he asserts that it was both inappropriate and arrogant to try to eliminate the human or social dimension of cognitive activity.

In the case of mission research, long-standing interest in receptivity to the gospel message led to a number of remarkable conclusions. The first was that it was possible to quantify the number of hours of evangelism directed at a particular people or city. The second was that this data, coupled with the baptism rate of the same people or city, yielded a measure of responsiveness to the gospel. The third was that the results of our global survey of peoples consistently showed that the least-evangelized were the most responsive.²¹ None of these conclusions would have been reached without a strong personal interest (bias?) in Christian evangelization and its relative effectiveness. We relentlessly pursued these measurements because we believed this information was essential for Christian mission strategy.

Furthermore, Polanyi was critical of the Western epistemological tradition’s exclusive reliance on visual perception as paradigmatic of all cognitive experience. As a result, seeing is equated with understanding. But seeing is a passive undertaking which, when applied to science (observation), gives a strong impression of objectivity. In reality, even scientific experiments must be actively designed and then implemented in a much more interactive mode.

What Western observers (of mission) “saw” in the 20th century was the inevitable decline of tribal religionists. For much of that century, analysis followed this line of thinking until African researchers began to write about their traditional religions and the deep impact they had on African society. As Western observers, we had to give up on this preconceived notion and accept the fact that tribal religionists were reasserting their religious roots. The wider result of this analysis was the demographic “rediscovery” (in the *WCE*) of 228 million ethnoreligionists in 5,800 peoples, growing rapidly by 2.8 million each year.²²

Art and counting

As an extension of his idea of tacit knowledge Polanyi believed that certain skills (hunches or intuition of a scientist) could not be articulated but were nonetheless crucial. He stated, “An art which cannot be specified in detail cannot be transmitted by prescription, since no prescription for it exists. It can be passed on only by example from master to apprentice.”²³

In a similar vein, some years ago I read through *Zen and the Art of Motorcycle Maintenance* by Robert Pirsig.²⁴ What particularly impressed me about this book is Pirsig's insistence that motorcycle maintenance (scientific method) can not be done with a purely objective approach. In one telling passage his motorcycle has broken down and he has torn the slot out of the one screw that stands in his way of repairing his bike (p. 278-287). In a seemingly impossible situation he reflects on how quality (or art) is necessary to solve the problem. As long as one focuses on the screw alone there is no solution to the problem. Pirsig points out how subjective reflection presents dozens of creative solutions.

Many such "screws" found their way into the *World Christian Encyclopedia*. Perhaps one of the most significant was the presence of believers in Christ who do not join Christian churches. In the first edition, a category "crypto-Christians" was designed to cover Christians hidden from governments but known to the churches. What does one do with secret believers? Objective analysis only led to dead ends—people could only be counted in one religion. We had to think outside of our current categories and create a new concept altogether—that of "doubly-professing religionists". Under those conditions a person could be counted as a Christian and a Hindu, or as a Christian and a Muslim. In the *World Christian Encyclopedia*, we estimated that over 30 million people were doubly-professing in AD 2000.²⁵ Nonetheless, a few years later, we had to abandon this category when we realized that, to be consistent, we would have to estimate all possible cases of double-counting (e.g. Jews who are Buddhist).

If some skills cannot be articulated, how is knowledge effectively passed on to others? Polanyi was concerned that an overemphasis on individualistic rationalist thought would ultimately lead to a loss of skills and consequently deprecation of tradition. In missionary research, the proliferation of computers and the Internet have made it easier for anyone to jump in and claim to be doing research. But the skills needed have to be passed on through direct daily contact with someone who knows and understands what he or she is doing. In my own pilgrimage I can see a long line of "mentors" stretching from (1) those early Lutheran Sunday school teachers who passed on their sense of God's grace in the world through (2) my early experiences overseas with sensitive missionaries who taught me to look for opportunities for biblical compassion to (3) mentors who taught me to love Christian history (with a heartfelt suspicion of all things "new") and finally (4) over the last 25 years, working with someone who applies quantitative methods to the many areas of Christian experience that deserve this kind of attention.²⁶ In any case, one can only expect that a vocation that attempts to survey Christian history and its worldwide spread would require a lifelong learning approach (and hopefully, many mentors and collaborators).

Postmodern is relative?

Remarkably, even with his strong affirmation of the personal dimension of knowing, Polanyi was no relativist. He spoke of "universal intent" in that "the freedom of the subjective person to do as he pleases is overruled by the freedom of the responsible person to act as he must."²⁷ Polanyi found himself mediating the two extreme positions of cognitive anarchy and authoritarian dogmatism. Against the former he argued for the

possibility of truth, that cognitive claims are intended to be taken as universally true.²⁸ Against the latter he argued that there was no such thing as “an absolutely established truth within the range of human possibility. Our search for truth takes place within a human social context that allows for, indeed insists upon, continual dialogue among its participants.”²⁹ American philosopher Jerry Gill argues that Polanyi is best understood as a “symbiotic realist” because although he insists that the world is there to be discovered, he also acknowledges that (1) it can only be known through interaction, (2) it is the human scientific community that decides what is true and real, and (3) since we are finite and reality is inexhaustible, we can never claim to possess the final truth.³⁰ In this way, Polanyi argued for a middle position between the modern and postmodern understanding of truth.

One application of Polanyi’s ideas to missionary research is to move toward a middle position in what can and cannot be known about the world. For example, there are many examples of the top custodians of Christian organizations embezzling large sums of money. The problem is that most of these are never caught. One cannot simply total up all of the known cases and pretend that this somehow represents the total situation. Instead, one is forced to make some kind of estimate of what percentage these known cases are of the total. In our analysis of ecclesiastical crime we assumed early on that it must be a very small percentage that are actually found out (and an even smaller percentage that are convicted). In the end, interviewing experts on fraud, we estimated the annual total of embezzlements over \$16 billion³¹ in AD 2000 (or about 6% of global Christian organizational income). Coincidentally, the total amount given by Christians for the global missionary enterprise in the same year was \$15 billion. We updated these studies in 2015 where the totals had grown to \$50 billion and \$45 billion, respectively.³²

Impact on the audience

The researcher is not the only one caught between modern and postmodern. The way in which the audience perceives and understands research is a second application of the impact of shifting cultural values. The modern idea of uncovering objective facts and acting on them was probably always just a mirage. Conversely, strong arguments are increasingly set forth to abandon the use of numbers altogether.

One fascinating aspect of the contemporary audience is that in the overload of numbers and information, most people are innumerate or mathematically illiterate.³³ This carries with it the strong tendency for people to personalize their understanding of numbers and statistics. According to Gina Kolata of the *New York Times*, innumeracy “encourages the view that every opinion is equally valid and that when there is disagreement, the truth lies in the middle.”³⁴ This is particularly a temptation in journalism. In missionary research, one constantly runs into the practice of pitting two experts on opposite sides of an issue.

One could argue that the misuse of numbers is an unfortunate but essentially harmless enterprise. In *The Tyranny of Numbers: Mismeasurement and Misrule*, Nicholas Eberstadt demonstrates that this is quite mistaken.³⁵ He gathers evidence from hundreds of U.S. government statistical reports and shows how damaging the misuse of these statistics can be. Investigating the use of statistics related to poverty, he illustrates how

an over-simplistic application of these has resulted in poor public policy—exacerbating the problem instead of solving it.

In the missions community similar problems emerge. Countless stories reach our office of how agencies have initiated work in what were thought to be completely unreached peoples, only to find that others had been at work there for decades, and in some cases, the peoples were already baptized Christians (usually of some other tradition). Yet, at the same time, others are profoundly impacted by statistics. In his book *From Every Tribe and Nation: A Historian's Discovery of the Global Christian Story*, Mark Noll devotes a whole chapter titled “By the Numbers” to the debt he owes to the quantification of world Christianity and missions. He believes “the numbers have a sounding-board effect” and “announce changes of great significance.”³⁶

Where do we go from here?

It is generally recognized that objectivist modern views of knowledge were vastly overconfident. At the same time postmodern views can seem to be aimlessly relativistic. Polanyi's tacit knowing offers a middle road between these extremes. Others are now writing on the same subject. Nancey Murphy³⁷ charts out the opportunities beyond liberalism and fundamentalism, W.V.O Quine³⁸ posits a web of belief, Stephen Toulmin³⁹ looks to Renaissance toleration, Thomas Oden⁴⁰ points back to the church fathers for guidance, Stanley Grenz⁴¹ questions propositionalism, Paul Hiebert⁴² talks of a critical realism, Hans Frei⁴³ speaks of generous orthodoxy, and Grenz and Franke⁴⁴ set forth a chastened rationality. All of these represent attempts to go beyond Enlightenment approaches to truth. These attempts make it apparent that an encyclopedia is not necessarily bound by modern scientific objectivism.

For encyclopedists and their readers the message is clear. One should not be overconfident about what the gathering of knowledge can accomplish. For the audience, expectations of finding overarching explanations of truth should be lowered. But the remarkable thing that is retained is the human need for understanding. The gathering of vast amounts of data, analyzing and expounding it, and laying it all out in encyclopedic form is a task with a clear role in our postmodern context. Although much of the methodology can be laid out in analytic language, there is much that simply cannot be explained. Put simply, being in a post-modern context means we don't have to know everything. There is room for interpretation and even personal bias, as long as it is explained and accounted for. In this sense, an encyclopedia can be a celebration of diversity instead of a quest for overarching unity.

In addition, quantitative research is best understood as one way to investigate the truth, not the only way (or the best way). Isadore Newman and Carolyn Benz offer helpful guidance when they state, “In the ongoing debate between the positivists [quantitative] and the naturalists [qualitative] we tend to support the idea that the modern-day scientific method is both inductive and deductive, objective and subjective.”⁴⁵ So instead of asking which method is better, the better paradigm should be determined by the specific research question. The scientific method is a continuum, not an either-or construction.

Counting itself is best understood as both science and art. As science, a wealth of data and proven methods are available for immediate application. As art, personal bias and tacit knowledge provide the tools and insight to solve the toughest problems. Only with both of these aspects in operation will important subject areas related to Christian statistics be adequately investigated. As for the impact of postmodernity on counting and the reporting of statistics, we would do well to reach back some 1,600 years for advice from a North African bishop who wrote, “We must not despise the science of numbers. That science is of eminent service to the careful interpreter.”⁴⁶

¹ Sir William Thomson (Lord Kelvin). *Popular lectures and addresses*. New York: Macmillan, 1891.

² Ludwig Wittgenstein. *Philosophical investigations*, No. 242, 1953.

³ D.B. Barrett, G.T. Kurian, and T.M. Johnson, *World Christian encyclopedia: a comparative survey of churches and religions in the modern world*, 2nd edition (New York: Oxford University Press, 2001). This 1,800 page description of Christianity in 238 countries is hereafter referred to as *WCE*.

⁴ The professor was Nancey Murphy. More than anyone else she helped me to understand that changes going on around us represent opportunity. Her book *Beyond liberalism and fundamentalism: how modern and postmodern philosophy set the theological agenda* (Harrisburg, PA: Trinity International Press, 1996) was the subject of a lecture series she gave at Union Theological Seminary in Richmond, VA in May 1996. I was one of the organizers of that event. Murphy extended her argument in *Anglo-American postmodernity: philosophical perspectives on science, religion, and ethics* (Boulder, CO: Westview Press, 1997).

⁵ I use the adjective ‘modern’ throughout this paper to refer to the impact of the Enlightenment on ideas in the Western world—especially the quest for certainty. This is contrasted with ‘postmodern’—the loss of confidence in these Enlightenment ideas since World War II.

⁶ See Stephen J. Gendzier, editor of Denis Diderot *The Encyclopedia: Selections* (Harper Torchbooks, 1967). As a charter member of The Encyclopedists: an international society, I too owe a debt to Diderot.

⁷ *Three rival versions of moral enquiry: encyclopaedia, genealogy, and tradition* (Notre Dame: University of Notre Dame Press, 1990).

⁸ *A history of the modern fact: problems of knowledge in the sciences of wealth and society* (Chicago: University of Chicago Press, 1998) p. 1. Millard Erickson sums this up in a Christian context by stating “It is one thing to have absolute truth; quite another to understand it absolutely” in *Postmodernizing the faith: Evangelical responses to the challenge of postmodernism*. (Grand Rapids: Baker, 1998, p. 39).

⁹ *The structure of scientific revolutions* (Chicago: University of Chicago Press, 1962). Kuhn defined paradigm as “an entire constellation of beliefs, values, techniques which are shared by the members of a particular community.”

¹⁰ New York: Crossroad, 1987. He extended his analysis in *Christianity: essence, history, and future* (New York: Continuum, 1995). The six paradigms are as follows: Early Christian apocalyptic, Early church Hellenistic, Medieval Roman Catholic, Reformation Protestant, Enlightenment modern, and Contemporary ecumenical.

¹¹ Maryknoll, NY: Orbis, 1991. Whereas Kuhn applied paradigms to the history of church and theology, Bosch applied them to the history of mission.

¹² The fact that the authors are dedicated Christians would have formerly been thought of as an unacceptable bias. Rodney Stark points out that in the past in the field of social scientific study of religion, researchers were “far more concerned with discrediting religion than with understanding it.” See *The rise of Christianity: a sociologist reconsiders history* (Princeton: Princeton University Press, 1996, p. 166). Robert Wilken, in his presidential address before the American Academy of Religion in 1989, gives a convincing case for religious believers as potentially better researchers than nonreligious or atheist ones. See his address “Who will speak for the religious traditions?” in *Remembering the Christian past* (Grand Rapids: Eerdmans, 1995).

¹³ WCE, p. vi.

¹⁴ Schematized in WCE, p. 10, Global Diagram 5 “The rise of global Christianity across the 20th century showing the rise of global independency out of global denominationalism, AD 1900-2025” and enumerated in Table 1-5 “Organized Christianity: global membership ranked by 6 major ecclesiastico-cultural megablocs and 300 major traditions, AD 1970-2025”, p. 16-18.

¹⁵ Todd M. Johnson, Gina A. Zurlo, Albert W. Hickman, and Peter F. Crossing, “Status of Global Christianity, 2015, in the Context of 1900-2050” in *International Bulletin of Missionary Research*, Vol. 39, No. 1, January 2015, 29.

¹⁶ Described in Johnson, et. al., “Christianity 2014: Independent Christianity and Slum Dwellers,” in *International Bulletin of Missionary Research*, Vol. 38, No. 1, January 2014, 28.

¹⁷ IBMR, January 2015, 28.

¹⁸ Chapter 6 “The Category Christian in the Mission Task” in *Anthropological reflections on missiological issues* (Grand Rapids: Baker Books, 1994). Independent Christians are utilizing Hiebert’s “centered sets” to describe their ecclesiology.

¹⁹ Such as sharing your faith or speaking in tongues. For issues related to counting Pentecostals see Todd M. Johnson, “Counting Pentecostals Worldwide,” *Pneuma* Vol. 36, 2014, 265-288 and for counting Evangelicals see Gina A. Zurlo, “Demographics of Global Evangelicalism,” in Brian C. Stiller, Todd M. Johnson, Karen Stiller, and Mark Hutchinson, eds., *Evangelicals Around the World: A Global Handbook for the 21st Century* (Thomas Nelson, 2015), pages 34-47.

²⁰ I am indebted to Jerry H. Gill’s helpful introduction *The tacit mode: Michael Polanyi’s postmodern philosophy* (State University of New York Press, 2000).

²¹ WCE, Part 8, “Ethnosphere”, Table 8-2 “Cultures of the world, with 12,600 people profiles, each described in one line across 2 facing pages, with same reference number,” column 36 “Responsiveness”.

²² WCE, Part 8, “Ethnosphere”, *ibid*, column 38 “Additional descriptive data”. Here you will find notations such as “Animists 35%”. On the CD version you will be able to search on Ethnoreligionists.

²³ Michael Polanyi, *Personal knowledge: towards a post-critical philosophy* (University of Chicago Press, 1962), p.309.

²⁴ New York: William Morrow, 1974.

²⁵ 12 million of these are found in India. See WCE, Volume 1, “India”, pages 359-371.

²⁶ The latter being Anglican missionary David B. Barrett who passed away in August 2011. See my piece, “David B. Barrett: Missionary Statistician” in *International Bulletin of Missionary Research*, Vol. 36, No. 1, January 2012, 30-31).

²⁷ Polanyi, *Personal knowledge*, p. 53.

²⁸ Postmodernists, and particularly deconstructionists, have, for the most part, failed to see that “one cannot claim to be critiquing all other systems of thought or philosophies while standing outside of any system of thought oneself, and at the same time claim to be offering a constructive response or alternative to these philosophies that should be accepted as the proper understanding of the way things are” (Gill, p. 86-87).

²⁹ Gill, p. 98.

³⁰ Gill, p. 65.

³¹ See the context of this figure in WCE, Part 1 “World summary”, Table 1-7 “Current annual income and expenditures of both unorganized and organized global Christianity, with the latter viewed and analyzed under 3 standpoints.” Our 5% estimate was partly based on huge undetected sums in parallel cases of secular embezzlement. Note that \$810 million was spent by the churches and agencies on audits in the same year.

³² See Johnson, Zurlo, and Hickman, “Embezzlement in the Global Christian Community” in the *Review of Faith and International Affairs*, Vol. 13, No. 2, June 2015.

³³ The standard work on this subject is John Allen Paulos’ *Innumeracy: mathematical illiteracy and its consequences* (New York: Hill and Wang, 1988). Paulos followed this groundbreaking work with *Beyond numeracy: ruminations of a numbers man* (New York: Knopf, 1991) and *A mathematician reads the newspaper* (New York: Basic Books, 1995).

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- ³⁴ From her article "Understanding the News" in *Why numbers count: quantitative literacy for tomorrow's America* edited by Lynn Arthur Steen (New York: College Entrance Examination Board, 1997).
- ³⁵ American Enterprise Institute, Washington DC, 1995.
- ³⁶ Baker Academic, 2014, pages 129-137.
- ³⁷ *Beyond liberalism and fundamentalism: how modern and postmodern philosophy set the theological agenda* (Harrisburg, PA: Trinity International Press, 1996).
- ³⁸ Quine and J. S. Ullian, *The web of belief* (New York: Random House, 1970).
- ³⁹ *Cosmopolis: the hidden agenda of modernity* (New York: Free Press, 1990).
- ⁴⁰ See especially his projected 27-volume *Ancient Christian commentary on Scripture* (Downers Grove, IL: InterVarsity Press, 1998-).
- ⁴¹ *Revisioning Evangelical theology: a fresh agenda for the 21st century* (Downers Grove, IL: InterVarsity Press, 1993).
- ⁴² *Missiological implications of epistemological shifts: affirming truth in a modern/postmodern world* (Harrisburg, PA: Trinity Press International, 1999).
- ⁴³ "Response to 'Narrative theology: an Evangelical appraisal,'" *Trinity journal* Vol. 8, No. 1 (Spring 1987): 21-24.
- ⁴⁴ *Beyond foundationalism: shaping theology in a postmodern context* (Louisville, KY: Westminster John Knox Press, 2001).
- ⁴⁵ *Qualitative-quantitative research methodology: exploring the interactive continuum* (Carbondale, IL: Southern Illinois University Press, 1998), p. 11.
- ⁴⁶ Augustine of Hippo. For a careful treatise on the pre-modern origins of calculation and measurement see Alfred W. Crosby, *The measure of reality: quantification and Western society, 1250-1600* (Cambridge: Cambridge University Press, 1997).