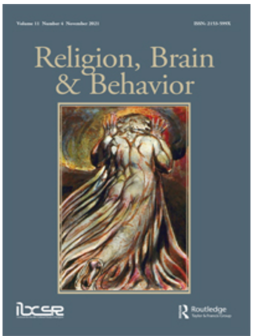

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Global fertility and the future of religion: addressing empirical and theoretical challenges

Nitzan Peri-Rotem

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BOOK SYMPOSIUM: *FERTILITY AND FAITH: THE DEMOGRAPHIC REVOLUTION AND THE TRANSFORMATION OF WORLD RELIGIONS* BY PHILIP JENKINS

COMMENTARIES

The agency of women in secularization

Callum G. Brown

School of Humanities, University of Glasgow, Glasgow, UK

Secularization confounds many faith scholars. Where once in the 1960s and 1970s it was accepted as a facet of modernization, the 1990s and 2000s witnessed the rise of a desperate religious assault on the concept as in itself secularist and atheist-inspired—an intellectual conspiracy of religions' enemies. New theories abounded from the churched community to contain the intellectual threat: people believed but had stopped belonging; the mainstream churches were in decline but not popular faith; the parish structure of old Europe was disintegrating and making way for diversity—house churches, megachurches, pick 'n' mix faith; religiosity was giving way to spirituality; new age religion was dismantling denominationalism; and the majority secular people were now expecting the minority faithful to conduct the moral work of the whole community (Berger et al., 2008; Davie, 1994, 2000; Heelas, 1996; Roof, 1993; Wuthnow, 2007). Though such ideas still keep coming, if truth be told, what is happening to faith now takes second place to what is happening with non-faith: the rise of morality without religion, growing proportions of people identifying as "nones," atheists, and agnostics, and declining churchgoing and membership (Brown et al., 2022). And most bittersweet for the churches in the west is the waning of the faith's most faithful: Christian women. Where once moral purity and sanctity of womanhood adorned the Christian family, feminist impulses have done much to de-sanctify morality.

Scholarship has been slow to perceive the concatenation of moral, cultural, and demographic dangers that are unraveling the religious moral system hung in western nations upon female purity. New scholarship has already been sculpting this replacement narrative, and now Philip Jenkins' book, *Fertility and Faith*, offers the latest and so far most comprehensive demographic understanding of secularization. The book inevitably must refocus attention upon the gender question in the declining social significance of Christianity and Judaism from the middle of the twentieth century onwards. We should all be grateful for his redeployment of a social-science lens upon the decline of faith in the western world—broadly Europe, North America, Australasia, and Japan, but his treatment also explores its consequences for other continents. But before considering the merits of Jenkins' monograph, it is important to restate firmly that the study of religious decline is not, should not, and cannot be a demographic science alone. Without the fusion of quantitative and qualitative (some would argue postmodernist) methodologies, there can be no full understanding of the direction of the faith change that started in the third quarter of the twentieth century and which is now advancing—as Jenkins notes—with vigorous speed.

It has taken scholarship some considerable time to place demography as a major conceptual tool with which to study secularization. The impetus began in the sociology of religion between the 1940s and 1960s, raising the prospect of understanding the changing constituencies of churchgoers by age, gender, social class, and ethnicity. It was social class upon which European scholars focused—arguably obsessed. Until the mid-twentieth century, the place of Christianity in the social and

CONTACT Callum G. Brown ✉ Callum.Brown@glasgow.ac.uk

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institutional fabric of the western world seemed secure, and it was taken for granted that the power of faith amongst the social elites guaranteed religion a stability that was, broadly speaking, undefeatable. Though research sometimes showed variations in the character of religion's hold amongst the social strata of western societies, the class-based understanding of religion's social position seemed irrefutable (McLeod, 1974). And, in the 1960s, as concern over indications of faltering growth, instability, and decline in the social significance of religion was discerned and conceptualized in modern versions of secularization theory, class-based analysis proved astonishingly resilient in the academy.

It took three decades, really until the 1990s and 2000s, before reconceptualization took root. Three things happened. First, in Europe it became evident that the steep decline in religiosity from the 1960s (broadly in northern Europe) and from the later 1970s and 1980s (in southern Europe) occurred at a time of spreading prosperity that undermined social-class explanations of secularization both then and, for historians, in challenges to understanding secularization in the previous two centuries (Brown, 2001, pp. 149–156). Second, the United States' experience of the 1960–1990 period awakened scholarship to a firm positive relationship between modernization (including urbanization) and rising religiosity dating back until the 1790s: big cities did not secularize faster than small ones, whilst agricultural populations could lose faith faster than commercial and industrial ones (Christiano, 1987). Third, on both sides of the Atlantic, new forms of historical and sociological explanation for religious change alighted upon cultural change. One was ethnicity in which, broadly, it became evident that secularization had been an overwhelmingly white phenomenon—in Europe in which recent black and Asian immigrants emerged as the least affected by religious decline arising from the 1960s, and in the USA where ethnicity proved a better predictor of secularization than modernization, prosperity, or urbanity. But a second cultural change became more interesting though controversial in secularization studies—gender. Study of gender as a major factor in variation in religiosity arose in large part because it was closely allied with the rise of feminism in the academy. The literature on gendered Christianity expanded considerably in the 1990s, 2000s, and 2010s, including notably in both the sociology of religion and in religious sociology (the latter being the faith-based study of the former). And from these studies, the levels of religiosity and religious culture have uniformly been found to be higher in the female rather than the male populations. In most Christian traditions, churchgoers have been shown by virtually every study from every period since the seventeenth to the twenty-first centuries to be between 55% and 85% female (Brown, 2011). In the Jewish tradition and other religions in which sex-divided ecclesiastical behavior rules have sometimes been in place, scholars have almost always found women (especially wives and mothers) to be the principal upholder of domestic religiosity and standards of outlook (Burman, 1982). Broadly, this position transcended ethnic groups, meaning that women were invariably the lead upholders of religious culture. In these ways, then, the processes of secularization started to be divorced from modernization theory and social class—though social science remained vital, especially in regard to quantification. At the heart of the new approaches was growing attention being paid to the place of women in Christian religion.

It is a deep irony that the infusion of gender into the reconceptualization of secularization had an initial consequence of affirming that religious decline had been led by white men; loss or neglect of religion and faith from the eighteenth to the mid-twentieth century (and, it was rather assumed, beyond then) had been led overwhelmingly by people of white ethnicity, whether observed via transnational or intranational gazes. However, by the 2000s evidence emerged in many western nations that the proportion of nonreligionism amongst white people was starting to become gender balanced: in other words, the proportion of women in the "nones" category was approaching parity with that of men (though most slowly in the USA) (Brown, 2011). In short, the evidence started to point to a further reconceptualization: that it was changes to female religiosity that triggered major decline in popular religiosity. When men had dominated the loss of faith, the decline in overall population religiosity had been restrained. But when loss of faith started to include women, the impact upon family religiosity—including children, grandchildren, and male partners—was far greater. Without women, men more rarely attended church on their own. Scholarship started to

isolate female experience as pivotal—demographically pivotal—to understanding the steep secularization that broke through in the 1990s and 2000s in much of the western world.

It has emerged for some scholars that the central determining factor has been fertility, or more specifically female fertility, but it was erected upon a whole series of issues which affected how women made their fertility choices. In short, a radical change arose in the narrative of religious change in the modern western world. This narrative has been subject to development from a variety of quarters. The history of fertility is the domain of demographers, initially in a concept of a demographic transition dated broadly from developments from the eighteenth century though more sharply from the 1860s when the western world started to move from high to low fertility. Then the concept of a second demographic transition, first coined in 1986 by Belgian demographer Ron Lesthaeghe, pointed to the start of a spreading abrupt change from low fertility to ultra-low fertility that had commenced in northern Europe in around 1960–1970 and spreading thereafter (Lesthaeghe, 2014). Though Lesthaeghe made a passing reference to a contributing cause being the faltering authority of the church over female fertility, the demographers were seemingly little interested in non-demographic factors. It took the intervention of historians. The present author was one, in *Religion and The Demographic Revolution* (Brown, 2012). Now, Philip Jenkins in *Fertility and Faith* (2020) fills out connections across a wide area of the globe.

In Brown's book, four case studies were developed for Canada, Ireland, UK, and the USA to show the sudden religious change that developed (at slightly different times for each nation) from the 1960s, taking the form of a rapid and sustained decline in the indices marking the social significance of religion: declining churchgoing, church membership rates, rates of religious marriage and baptism, religious identify, and belief. The book then introduced data that marked the conjunction of religious change with fertility, and data likely strongly determined by fertility change: rising rates of sex before marriage (notably with multiple partners), contraception use, illegitimacy ratios (indicative of the changing meaning from the late 1970s of birth outside of wedlock), decline of marriage rates, rising median age of marriage, and rise of the cohabitation rates. Thereby, the book argued that the family was reconstructed in the late twentieth century—through later marriage, later age of women having their first child, and the dramatic falling number of children to women. Also in the argument was the rising role of higher education and economic activity for women, which produced strong positive correlations between female degree-holding and female participation rate (in the job market) on the one hand and the proportion of women who proclaimed themselves of "no religion" on the other hand. In other words, this evidence suggested a changing cultural environment for women, in which the spread of higher education and the rise of sustained careers for women (before and after bearing a child, and in increasing cases without bearing a child) reoriented women's life stance away from church teach and, in increasing numbers, away from organized religion. The emphasis of this work was to show the cultural depth of the change to women's lives resulting from the association between the new fertility choice and the drift away from faith. Meanwhile, in a second book, Brown interviewed women and men of the sixties generation who had lost religion, drawing out the gendered characteristics of religion loss, and in a third book on Britain examined the 1960s collapse of the dominant discourse on the pious woman. By these methods, a comprehensive cultural context was researched to refashion understanding of the way in which organized Christianity started to suffer egregious decline in western nations from the 1960s onwards (Brown, 2012).

Philip Jenkins' book takes the task of narrating the relationship between secularization and fertility to another level of study (Jenkins, 2020). *Fertility and Faith* offers a distinctive contribution in the form of a worldwide survey of the timing and progress of fertility decline. Organized geographically and temporally, it explores the spread of ultra-low fertility and steep secularization, showing quite convincingly that the two have been activated in tandem. From his evidence, and from Lesthaeghe's work in particular, and notwithstanding the idiosyncrasies of ecclesiastical formation and establishment in different nations and territories, there seems little that casts doubt on the idea that symbiotic relations exist between religiosity and fertility.

But, what comes first—fertility or secularization? Jenkins finds this an itch he is compelled to scratch repeatedly in this book. But all the while he veers to the inevitable conclusion that they are inter-causally connected. He writes of Europe: "Changing social ideologies [like feminism] conditioned the demographic change and also accelerated it: fertility rates are thus both cause and effect." (Jenkins, 2020, p. 39). The chapter on Europe's revolution is the most convincing and textured on the nature of the connections, with an underlying philosophy that ideology, culture, and social trends galore contribute to the context in which fertility and faith are positively correlated—in the statistical jargon, associatively but not causatively related. Yet the author is justifiably bold. Whilst noting faith scholarship that denies that secularization has been underway in a large portion of the world, he does note that "'Europe' became something like global normality." (Jenkins, 2020, p. 77). Ranging widely in forms of evidence—economic, religion, cultural, and societal—the book draws upon a suitably broad palette of issues to apply the European narrative to the Americas, the Pacific Rim, and large parts of the global south. Jenkins rightly deals in trends, notes late starters in low fertility, but emphasizes (like the old Gerschenkron theory of late industrialization that I learned as a young graduate student (Gerschenkron, 1962)) that the later the start the faster the rate of transition. Scholars in this field should not blanch from speaking about interactive causation: society is far too complex to be governed by one-way relationships. Jenkins might have imposed this a little firmer on his narrative, but the close reader will still see where the author's judgment rests.

Jenkins actually floats quite a number of speculative hypotheses around cause and effect. One such is his attempt to explain why Europe moved sharply (and first in the world) from low fertility to ultra-low fertility in the 1960s and 1970s, and alights upon a psychological impact to moving out of families with large numbers of children to families of few or (it should be added) no children. He alights on "individualistic values" prevailing in low-fertility societies, in which people "lose the ideological incentive to bear children." (Jenkins, 2020, p. 37). But there is much more to the issue than this, ranging from the biological and medical to life choices, and such circumstances need inclusion. Even then, room remains for cultural historians to provide depth to the analysis of cultural changes.[1] Though briefly dealt with, Jenkins is surely right to point to one measure—the ongoing collapse of the link between marriage and reproduction—as a major signifier of change. This too needs to be part of the matrix of interacting factors linking religion, secularization, and economy.

The book could not hope to touch all bases with detail. The area of employment and economic activities deserves more attention, especially since the literature on this has not been in agreement. The work of Evelyn Lehrer is important (though not necessarily always right) here,[2] but more importantly there is a need for the economic, individualistic, and cultural drivers of female employment *and* declining religiosity to be examined. Jenkins' points to feminism (by which he generally means second wave feminism of the late 1960s and 1970s). But fuller note needs to be taken of discourse change: how the era of low fertility during 1860–1960 coincided with the ideology of female domesticity, and how the era of ultra-low fertility from 1960 onwards coincided with the destruction of that ideology. In the nineteenth and early twentieth centuries, moral standards were female defined—the moral pinnacles of a single woman's sexual purity and motherhood—contrasting with the moral dangers surrounding manhood—drink, gambling, and womanizing. From 1800 to the 1960s, men were pictured in public culture as western societies' moral problem, women the moral solution. This changed when, in the 1960s, 1970s, and 1980s, much of the progressive moral legislation concerned women directly (contraception and abortion), contributing to their rising autonomy and to the demands for equalization of gender rights. In consequence, the secularization that had for so long been seen as a modernist product of men's learning and achievement changed rapidly from the 1960s into feminized life stances—if you like, the leading strands of secularization changed gender from male to female with devastating outcomes for the churches. When in the early twenty-first century many European nations witnessed close to the majority of births taking place outside marriage, it was clear that the traditional religious sanctification of motherhood was doomed.

At the end of the day, Philip Jenkins' book is a monograph that offers command of a very wide range of national studies of religion, demography, economy, and culture, wrapped together in astounding geographical and thematic breadth. Whilst I would have wished to see the treatment of the truly remarkable transition of Ireland in the 2000s and 2010s from conservative Roman Catholic religion to liberal secularism used directly as a counterweight to the book's treatment of Poland (considering the case that the latter's conservative Christian heritage, too, could collapse almost overnight under onslaught from progressive educated feminism and youth), the volume as a whole is a masterstroke. This is the first time I have seen evidence of a faith-based scholar being truly honest in assessment of organized religions' recent histories and prospects. The author's grasp of widely-diverse national (and sometimes regional) narratives is admirable and utterly convincing. He can count (many religious historians can't), and appraises with assurance Christian and non-Christian traditions alike (*vide* his really good, though brief, treatment of Japan). The new global narrative he offers supersedes so much literature, bettering it all through a new evidence-based hypothesis, a wide grasp of economic, cultural, and religious history, and honesty about the state of religious decline. But critically, he has accepted a game-changing central proposition—that religious growth and secularization are not merely "religious things" but demographic phenomena. This spawns the realization that religion is too impactful to be left to the scholarship of traditional religious history alone. And it moves women center stage in the history of religion, even in the midst of patriarchy. If students are directed to one book on the recent history and ongoing state of religion on planet Earth, it has to be this one.

Notes

1. Though see a contributing analysis in Lawrence (2019).
2. Lehrer (2009). For a critique of her position on faith and wellbeing, sample the work of Luke Galen in Zuckerman et al. (2016).

Disclosure statement

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Fertility and faith: insights from human behavioral ecology, evolutionary psychology, and life history theory

Robert Lynch [a], Mary K. Shenk [a], John H. Shaver [b], and Laure Spake [b]

[a]The Pennsylvania State University, Main Campus, University Park, USA; [b]University of Otago, Religion Programme, Dunedin, New Zealand

"History is just one damned fact after another," attributed to the historian Arnold Toynbee, captures a sentiment among many that studying the past tells us little about the future. In this interpretation, the world is an extraordinarily complicated and interconnected place, and past events are entirely contingent upon prior conditions, so there are no repeated patterns to uncover. Change a single condition (e.g., Lincoln survives to serve a second term) and you get a counterfactual cascade of events that affects everything that follows. At the other end of the spectrum, however, you have some who use ideology to understand and explain everything within a single theoretical framework. While the former fails to search for any patterns whatsoever, the latter cherry picks evidence in service of a grand and unified narrative (i.e., theory that is "information free"; Boyer, 2007). In his book, *Fertility and Faith*, Baylor historian Phillip Jenkins forges a path between these two extremes. Jenkins offers a focused, nuanced, balanced, and ultimately fascinating examination of the relationship between religious beliefs and fertility, offering powerful evidence of a strong and positive connection between religious faith and fertility rates across the world.

He advances the basic idea that fertility and religious beliefs move together and are generally, if unevenly, on the decline globally, while at the same time being consistently fair to opposing trends that do not support this thesis. He supplies evidence from a wide range of sources and capably describes the now well-known and indisputable worldwide decline in fertility. His argument that religion is on the decline globally is, however, less persuasive, and Jenkins knows it. Part of this is simply a function of measurement and assessing changes in religious beliefs or even defining religion is a much harder task than measuring birth rates across time. Still, making this connection is crucial to his argument and he spends considerable time attempting to do so, by, for example, showing long term trends suggesting the privatization of people's faith and its decreasing impact on decisions that are seen as personal. Crucially, these increasingly private decisions include those regarding the family and fertility.

Jenkins compiles and neatly summarizes many complex social, economic, cultural, and historic changes ultimately showing how demographic patterns (fertility, mortality, age at first birth) move in sync with, and often depend upon the rise and fall of, religious faith. Overall, this was a well-written and fascinating book. He effectively covers the big topics, including the causes of the first and second demographic transitions. He is cautious, only going as far as the facts will let him and is good at acknowledging and explaining exceptions to the general trends he is attempting to explain (e.g., Iran and Saudi Arabia both have high levels of religiosity and low fertility).

CONTACT Robert Lynch robertflynch@gmail.com

The book is, however, surprisingly atheoretical. Why is this all happening and what is the causal model underlying the relationships that he so neatly summarizes? Although Jenkins highlights an important and often overlooked connection between religious belief and fertility rates, and there is much to recommend in his book, he sometimes misses crucial insights from other disciplines, especially those achieved using evolutionary theory as a guide to understanding the ultimate function of religious and reproductive behavior in humans. While it is certainly true that not every subject is likely to benefit from or be better understood by interpretation within an evolutionary framework, this is unlikely to be the case for reproduction—as reproducing offspring who reproduce themselves is the very definition of evolutionary fitness. Jenkins writes as if all fertility rates are conscious "decisions" by calculating rational actors, which we know cannot be the case for non-human primates bound by heuristics constructed over eons by natural selection—and thus is unlikely to be fully true for human primates either, given our many behavioral similarities to other primates and the demonstrated relevance of our evolutionary history to our behavior (de Waal, 2006; Henrich, 2015; Tuttle, 1992). The following is our attempt to add some of the most promising insights that evolutionary theory can bring to bear on the relationship between religion and reproduction, with the goal of extending the insights of Jenkins' impressive work.

Although many so-called theories, ranging from conspiracy theories to other non-scientific approaches, are unfalsifiable and yield nothing in terms of predictability, the same cannot be said of evolutionary theory. Indeed, the word "theory" is used in so many different ways and contexts that we can lose sight of its scientific meaning. In the social sciences, theories are often domain or topic specific and typically limited in scope to a particular body of research; some might occasionally be testable, but few are generalizable to other domains of research. In contrast, evolutionary theory is an overarching perspective that links findings across the natural and social sciences, has withstood rigorous empirical scrutiny, and embodies our most current and best understanding of the evidence. Indeed, evolution by natural selection is the only known cause of the complex array of behavior in the biological world, of which human beings are a part. It is the unifying theory of the life sciences and produces testable, and hence falsifiable, predictions on a regular basis across a wide variety of phenomena. Therefore, a book seeking to understand the historical relationship between reproduction—the prime directive of natural selection—and religion—which as a cultural universal also lends itself to evolutionary explanations—is sure to be illuminated by an interdisciplinary approach informed by the insights of researchers from fields that incorporate evolutionary theory including those from the disciplines of anthropology, psychology, and biology. We believe that understanding the relationship between fertility and faith, and uncovering the processes that govern it, ought to be a unified enterprise. The purpose of this review is to discuss some of the truly fascinating patterns Jenkins reports, and to further outline some of the benefits that a more cross-disciplinary approach would uncover, relying heavily on our own area of expertise in evolutionary anthropology.

Evolutionary ideas on big history and the origin of religion

Jenkins relies on a predominantly Western model of religion and primarily focuses on the 20th and 21st centuries. Because of this focus he has trouble distinguishing between Buddhism and the Abrahamic faiths like Christianity or a belief in God vs ancient life philosophies like Confucianism or Stoicism. A more explicit definition of religion would have helped make sense of some of these distinctions. What is religion exactly? He also fails to incorporate a biological understanding of our species within the context of its own particular phylogeny, and the behavioral constraints imposed by this evolutionary trajectory (e.g., the evolution of monogamy or parental influence over mate choice in early humans; Chapais, 2014). Nor does he cite any of the anthropological research on the origin of religious systems. Why did religions evolve and what purpose do they serve? In order to answer these questions, Jenkins would need to go back further in time and engage with

different cultures and varying modes of subsistence (e.g., pastoralists, hunter-gatherers, horticulturalists, pre-industrial agricultural societies). For example, the well-known association between an agricultural mode of subsistence and high fertility goes a long way towards explaining many of the trends he discusses, but is never mentioned by Jenkins (Bocquet-Appel, 2009, 2011). We realize that with such an ambitious topic Jenkins can't do everything, but it does seem like a missed opportunity to engage with this vast literature.

One particularly noteworthy gap in Jenkins' discussion of the relationship between religion and reproduction involves his failure to discuss the role of religion in fostering cooperation. An ongoing concern of evolutionary anthropologists is an attempt to understand how human groups were able to sustain cooperation as they transitioned from small groups organized around kinship to globalized nation states organized around citizenship. This is because adaptations presumed to have induced cooperation amongst individuals in small hunter gatherer societies (Gurven, 2004) are often based on either kin selection—which depends on beneficent acts directed towards relatives (Hamilton, 1964) – or reciprocal altruism (Trivers, 1971)—which depends on repeated interactions. Neither, however, is sufficient to account for the cooperative networks that ultimately developed in large state societies. Because the time scale is far too short for substantial genetic evolution to have taken place, most hypotheses proposed to explain widespread cooperation with strangers have come out of theories of cultural evolution—the process by which cultures adaptively respond to environmental conditions over time (Caldwell & Millen, 2009)—and some of the most promising involve religion. Indeed, Jenkins seems unaware of (or at least does not cite) much of the literature showing that religion can help to build social capital, promote reciprocity, increase trust and foster in-group bonding (Lynch et al., 2017).

Religion is a good candidate for something that is likely to have arisen through processes of cultural evolution because supernatural beliefs exist in nearly all known human societies and because modern religions are structurally similar across cultures (Boyer, 2008; Bulbulia, 2004; Rappaport, 1999). Although there are a number of possible explanations for why some religions became more successful over time, those that involve the role of religion in promoting cooperation are of particular relevance to the relationship between religion and fertility. Because successful religions often succeed by suppressing selfish behaviors and promoting those that benefit the group, Norenzayan et. al. (2013) hypothesized that believing in the type of all-powerful and all-knowing moral gods which characterize most modern religions (i.e., Christianity, Hinduism, Islam, and Judaism) arose through cultural evolution and the escalating intergroup competition in increasingly sedentary societies following the agricultural revolution. In this interpretation, modern religions outsource the monitoring and punishing of norm violators to high moralizing gods which in turn promotes prosocial behavior, suppresses self-interest, and increases group cohesion.

Of course, this is beneficial to the group as a whole, but it also has implications for individuals and their fertility. In traditional and pre-industrial societies, for example, the majority of alloparenting (non-maternal care for offspring) comes from kin (Sear & Coall, 2011; Turke, 1989), whereas non-kin play a much larger role in alloparenting in post-industrial societies. One hypothesis, therefore, is that modernization and the reduction in kin-based support has contributed to the global decline in fertility (Mathews & Sear, 2013; Newson et al., 2007). Because more religious people in industrial societies frequently have more children (Galbraith & Shaver, n.d.; Kaufmann, 2010; Shaver et al., 2019) some have argued that alloparenting support from co-religionists might offer an explanation (Shaver et al., 2020). Our own work has shown that religious beliefs may help to strengthen or preserve both social connections and emotional ties between relatives which in some studies has been shown to be a better predictor of fertility than either childcare or financial assistance (Schaffnit & Sear, 2017). If emotional support or simply more pronatal beliefs (Heaton, 1986; Heaton & Goodman, 1985) are more often transmitted amongst relatives, this might help to explain why religious people have more children. Although Jenkins suggests reasonable ways that religion might positively affect fertility (e.g., modern religions tend to promote families) and largely asserts without evidence that

religious beliefs and institutions serve to promote it, he rarely tackles the question head on, and seems agnostic as to whether larger families prop up religion or religions encourage higher fertility.

Insights from research on mating and evolutionary psychology

Few things are more closely tied to evolution than mating. Yet, it is common for demographers discussing fertility to ignore the literature on human mating and Jenkins is no exception. Even so, the absence of any discussion of the psychology of human mating in a book titled "Fertility and Faith" is conspicuous. After all, mating is usually an essential first step in reproduction and strikes us as relevant to any discussion of fertility rates. At the same time religious systems are expected to evolve through cultural evolution and will adapt to environmental conditions. If mating or reproduction suffer, then over time the features of the system that produce the dysfunction will either change or cease to exist (Sosis, 2019).

There is good evidence that in the least religious countries, both sex and marriage are on the decline. Much of this is due to the breakdown of traditional family structures (including marriages) which is often linked to the sexual revolution beginning in the 1960s (Popenoe, 1999). In an increasingly secular Japan (Reader, 2012), for example, the proportion of young adults never having had heterosexual intercourse has fallen sharply in recent decades across all age cohorts, especially amongst young unemployed men (Ghaznavi et al., 2019). In Finland, one of the secular Nordic countries currently experiencing plummeting total fertility rates, reproductive patterns are increasingly diverging between the most and least educated (Jalovaara et al., 2021). Among the most recent birth cohorts with completed fertility (those born between 1965-1973) childlessness amongst the least educated men has reached 35% and is likely to increase based on patterns among those who have not yet completed reproduction. This suggests a strong and increasing polarity in reproductive patterns in which the most educated have relatively stable patterns, often having long-term partnerships that produce exactly two children, while the least educated are increasingly likely to be unpartnered and childless. The increasing childlessness also does not appear to be the result of couples simply choosing not have children, but rather results from people never partnering at all (e.g., 40% of Finnish men born after 1985 have never lived with an opposite sex partner; Jalovaara et al., 2019). These emerging trends, which are now being replicated across other Nordic countries such as Sweden, Norway, and Denmark, strongly suggest that mating (or lack thereof) is an important piece of the puzzle of the fertility decline—especially in the context of the second demographic transition within which a reduction in religiosity also occurs.

It is not hard to imagine that religion might play a role here too. Researchers have argued that religious prescriptions around sexual morality may provide reproductive benefits for adherents by increasing paternity certainty and trust between partners (Moon, 2021). Others have argued that religion may function in part to signal qualities positively associated with long term mating (Van Slyke & Szocik, 2020), and experimental research has shown that both men and women claim higher religiosity when faced with higher levels of same sex competition (Li et al., 2010). Research has also shown strong correlations between the importance of religion and both monogamous sexual attitudes and long-term mating strategies (Van Slyke & Wasemiller, 2017), including a large cross-cultural study showing that higher personal religiosity was positively associated with lower sexual permissiveness. Together these studies suggest that religion may play a role in promoting both fidelity and monogamous relationships (Schmitt & Fuller, 2015). Studies suggesting that religious couples are less likely to engage in infidelity (Burdette et al., 2007) support these findings. This is likely to extend to indigenous religions as well, and one study found that women are significantly less likely to be unfaithful in traditional religions that enforce the honest signaling of menstruation and other tenets aimed at avoiding extra-pair sexual relationships (Strassmann et al., 2012). Religion also plays an important role in assortative mating (i.e., like-with-like matching among couples; McClendon, 2016) and in reducing conflict between partners after marriage (Perry, 2015). Some discussion of ideas generated in

evolutionary psychology and elsewhere would have helped Jenkins to introduce and link human mating to reproduction upon which it depends.

Insights from life history theory and biology

Some of the functions of religion that Jenkins seeks to link to declining fertility rates are well known to those familiar with a branch of evolutionary biology known as life history theory. Life history theory is a broad analytical framework for understanding how organisms allocate time and energy into different life functions including reproduction, in different environments to maximize their fitness (Stearns, 1992). Research in this area suggests that there is a strong relationship between mortality and reproduction. For example, both between and within mammalian species, mortality rate is often the best predictor of fertility. A study by Wilson and Daly (1997) showed that higher homicide rates in Chicago neighborhoods was a strong predictor of earlier age at reproduction and our own research has demonstrated that, among women who participated in World War II, mere exposure to death, independent of actual risk of dying, can result in an accelerated reproductive schedule (Lynch et al., 2020). Together these and other studies indicate that there is an important relationship between exposure to death and fertility. In an evolutionary framework this makes sense—individuals are expected to adopt a faster reproductive schedule (i.e., have children earlier and more of them) when they anticipate that their (or their children's) chances of dying are higher.

Because religions and religious practices often seek to remind us of our own mortality (e.g., by offering consolation to friends and family members with funerals, comfort to the dying, or promoting beliefs in an afterlife), they may also affect fertility rates. While Jenkins comes close to making this connection by discussing the relationship between religious beliefs and fear of death, he offers no reasons for how this might affect fertility. Yet, a heightened awareness of death may trigger both belief in God and higher fertility rates. As lifespans increase, the sense that death is something that only happens to the very old (i.e., post-reproductive individuals) increases and we have less use for religion. Although just as many people are dying now as in the past, we know fewer of them and engage with them far less. The number of people dying without any remaining friends or family members has given rise to an entire industry of companies hired to clean up decaying bodies often found only weeks after the person has died, and loneliness amongst the elderly is one of the fastest growing research areas in sociology (Snell, 2017). Indeed, in less religious countries where cremation is the norm, many people have never seen a body being lowered into the ground (Eberstadt, 2019). Jenkins provides evidence that later family formation is associated with religious decline and argues that people who have not started families yet may not have as much of a need for religion. Life history theory, however, suggests the causal arrow is equally, if not more likely, to go in the opposite direction—diminishing religious beliefs and fewer thoughts of death may slow reproductive schedules. In fact, it is possible that the two processes could interact to create a ratcheting effect where reduced death exposure leads to delayed family formation which leads to religious decline which in turn leads to further reductions in death exposure. A familiarity with evolutionary biology could have helped Jenkins to make these connections.

Insights from evolutionary theory might also help explain how religion could generate higher fertility by reducing the overall cost of parental investment. Compromises between how much parents invest per child and overall reproduction, also known as quantity-quality tradeoffs, are a crucial concern of life history theory. Religious people in contemporary societies, however, do not seem to face such steep tradeoffs in the interaction between their number of children and child outcomes (Shaver et al., 2019). This has been dubbed "the paradox of religious fertility"(Shaver et al., 2019) and suggests that there is another important link between religious belief and reproduction. Research using an evolutionary framework which suggests that more religious individuals receive more alloparental support (child care assistance from non-parents) and emotional support from relatives may help to explain this difference in the strength of tradeoffs (Shaver et al., 2019, 2020).

Conclusion

We are in broad agreement with Jenkins' basic thesis that religious beliefs are intricately connected to fertility, and that this generates a feedback loop whereby smaller family sizes lessen the need for religious institutions and beliefs, whose subsequent decline further reduces fertility. He ties much of the decline in religious beliefs directly to the effects of lower fertility, writing "the demographic revolution subverts or renders irrelevant so many of the features and activities that religions have long been accustomed to viewing as essential to their existence and their work" (p. 199). However, he also shows that the causal arrow can go in the opposite direction and points to the role that religion plays in promoting higher fertility (e.g., by promoting family values). Jenkins links reproduction to religious beliefs largely by contrasting less religious societies, associated with low fertility, low mortality, and high individualism, with more religious societies which have higher fertility, higher mortality, and tend to be more communal. His book, however, is almost entirely absent of any unifying theory regarding the ultimate function of religion or reproduction and how one may depend upon the other.

Despite our often-fantasized uniqueness, humans are a species of primates intimately connected to the natural world. Millions of years of biological and cultural evolution influence our behavior, and this has played a crucial role in human history. Evolutionary theory has the unparalleled ability to integrate disparate fields across the biological and social sciences and can provide a powerful structure for understanding the complex causes of this behavior (Wilson, 1999). The relationship between reproduction and religion demands an interdisciplinary approach that acknowledges and incorporates the insights of research in anthropology, psychology, and biology. An evolutionary framework in each of these disciplines links them together and has generated some of the most eminently testable (and falsifiable) predictions in the social sciences. *Fertility and Faith* is an ambitious undertaking. It contains plenty of nuance, reports trends that fail to support its main premise, and relies heavily on empirical data. It could be improved upon, however, by incorporating research from other disciplines also interested in understanding the connection between religious beliefs and reproduction. Understanding this relationship and the underlying causes behind it would not only have made this a more interesting book but would have ultimately helped to put the lie to Henry Ford's remark about the futility of trying to understand the past: "History is bunk. What difference does it make how many times the ancient Greeks flew their kites?" (Waring, 1921). By contrast, we would argue that history should incorporate more insights from other disciplines, especially those that use a scientific approach grounded in evolutionary theory, to better uncover historical patterns, and ultimately lead to understandings of the root causes of human behavior.

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ORCID

Robert Lynch http://orcid.org/0000-0002-2477-6204
Mary K. Shenk http://orcid.org/0000-0003-2002-1469
John H. Shaver http://orcid.org/0000-0002-9522-4765
Laure Spake http://orcid.org/0000-0002-2243-7356

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Global fertility and the future of religion: addressing empirical and theoretical challenges

Nitzan Peri-Rotem

Department of Sociology, Philosophy and Anthropology, University of Exeter, Exeter, United Kingdom

Fertility and Faith (Jenkins, 2020) provides a fresh perspective on the relationships between demography and religion. In this book, Philip Jenkins suggests that the near global fall in fertility rates over the past decades has been an important driver of religious decline or, at the very least, that

CONTACT Nitzan Peri-Rotem n.peri-rotem@exeter.ac.uk

these are parallel processes, which mutually influence one another. This approach is quite different from classic demographic theories of fertility change, as in the example of the Second Demographic Transition (SDT) theory. Proponents of the SDT theory argue that a shift in norms and values orientation, including secularization and individualization processes, have led to the transformations in family arrangements and to the drop in fertility below replacement level in many industrialized societies (Lesthaeghe, 2010). Thus, fertility is more often viewed as the result of ideational and societal developments, rather than the other way around.

However, Jenkins is not alone in highlighting the potential consequences of a dramatic drop in fertility on social norms and attitudes. For example, according to the Low-Fertility Trap Hypothesis (Lutz et al., 2006), which is also mentioned in the book, once fertility falls below a certain threshold, it becomes very difficult to bring it back up again. The explanations for that involve both population dynamics and societal implications. At the population level, low fertility can transform the population age structure in a way that leads to a decreasing number of women entering reproductive age, which brings the number of births further down. At the societal level, undergoing socialization in a low-fertility setting, can shape both fertility preferences as well as economic and lifestyle aspirations. In other words, the lower the number of children in one's close environment, the more they are likely to perceive having fewer children as both normative and desirable.

According to Jenkins, not only fertility preferences can change as a result of fertility decline, but it is also expected to lead to an erosion in the importance of religion in everyday lives; for instance, by having fewer children, families' interaction with organized religious institutions (e.g., religious schools, etc.) is much more limited. In addition, it is argued that the shrinkage of families means that women are able to increase their participation in the labor force and are no longer confined to traditional religious-based family roles. This in turn reduces ties to institutional religion and encourages the adoption of more individualistic and liberal worldviews.

Some of these suggested mechanisms may be more pronounced in countries where religious institutions also fulfill various welfare functions and are highly family-oriented, as in the case of the United States. Indeed, several studies from the USA found that individuals tend to increase their church attendance following major family cycle events, such as marriage or childbirth, as well as when there are school-aged children in the house (Becker & Hofmeister, 2001; Stolzenberg et al., 1995). On the other hand, similar studies that were conducted in Europe, found little or no evidence for increased religious involvement following these family transitions (Berghammer, 2012; Tilley, 2003). For example, in a study based on longitudinal data from the Netherlands, Berghammer (2012) found that higher religiosity is a significant predictor of higher fertility in subsequent years, though a reverse effect of childbearing on religiosity was not supported by the findings.

Jenkins maintains that the causal direction of the relationship between fertility and faith is of lesser importance, as the correlation between the two is highly robust: "Fertile societies tend to be more religious; religious societies are more fertile" (p. 163). While this is true in many cases, it is also important to consider the level of analysis in which this relationship is observed. When the link between religion and fertility is examined empirically, it is often found to be more consistent at the individual level (i.e., within countries) than at the cross-national level. If we look at Europe for example, some of the countries that are considered to have the most secularized societies, including France, the Netherlands and Sweden, have had consistently higher fertility rates over the past decades compared to countries where religious indicators are considerably higher, such as Italy and Poland. However, this is not the only puzzling aspect about fertility in Europe; other studies have also documented a positive correlation between female labor force participation and fertility across European nations, meaning that countries with a higher proportion of women in paid employment also have higher fertility rates (De Laat & Sevilla-Sanz, 2011). How can these counter-intuitive findings be explained?

While both religion and female employment are important predictors of childbearing patterns, many other country-level forces are at work here, including family policies, labor market

conditions, housing opportunities and gender norms. These forces influence overall fertility levels, regardless of individual religiosity.

According to McDonald (2000), fertility in developed societies is lower in countries where there is greater incoherence between gender equity in the public and in the private spheres. Thus, in many high-income societies, women enjoy more equal opportunities in education and employment, though they still carry the main burden of housework and childcare since men's contribution to home production has increased at a much slower rate. This results in increased dual burden for women and intensified conflict between work and family responsibilities (Hochschild, 1989). It should be noted, that this conflict appears to be particularly pronounced in societies where religion plays a relatively important role, and which demonstrate more traditional gender norms (McDonald, 2000).

Interestingly, models based on McDonald's theory of gender equity and fertility predict that as the gender revolution progresses and men will gradually increase their involvement in child rearing and other household tasks, this would lead to a *rise* in fertility, by alleviating women's double burden and increasing union stability (Esping-Andersen & Billari, 2015; Goldscheider et al., 2015). Therefore, moving towards greater gender egalitarianism does not necessarily push fertility downward, while stronger religious influence in a given society is not always conducive to higher fertility.

Another problematic generalization, which is occasionally implied in Jenkins' work, is the association between poverty and religiosity. Several studies have examined the relationship between religion and socioeconomic status, though findings are often mixed. The American economist, Laurence Iannaccone, has noted that there is no evidence for an inverse correlation between income and religious belief or practice and that religiosity is often positively correlated with education. Based on these empirical analyses, he concluded that "Religion is not the province of the poor or uninformed" (1998, p. 1470).

Despite these shortcomings, one of the main strengths in Jenkins' account of religion and fertility is by extending his analysis to regions beyond the Global North, as well as addressing the unique cultural and political context in each of these regions. Furthermore, he adopts what could be described as a cultural relativist approach to religion, by pointing out that not only there is substantial variation in how religion is measured, but also the ways in which we define and perceive religion and the sacred, tend to differ across societies and over time.

Acknowledging the dynamic nature of religion adds further complexity to the secularization debate; if researchers are struggling to agree on a standard definition of religion and what it means to be religious, it is no surprise that secularization has become such a contentious concept. While some scholars argue that religion is in a constant decline (Bruce, 2011; Voas, 2008), others contend that this decline is not consistent across different societies and that in many respects, religion continues to maintain high, if not increasing, public and political importance (Davie, 2002, 2007; Kaufmann, 2010). In any case, Jenkins does not situate himself firmly on any side of the secularization debate. Instead, he puts a question mark on whether the secularization process can only go in one direction and suggests that processes of "rescralization" or "reenchantment" may well be happening if the circumstances are right.

One of the examples brought forward to challenges the idea of a unidirectional secularization process, is the case of ultra-Orthodox Jews. This is an illuminating example, since the ultra-Orthodox population in Israel has undergone what can be described as a reverse demographic transition; while the general population of Jewish and Muslim women in Israel experienced a fertility decline during the latter half of the twentieth century, the total fertility rate of the ultra-Orthodox increased by about one child per woman (Berman, 2000). Furthermore, during the same period, religious practices within that group have become increasingly more stringent (ibid.). While this is a rather unique case of a relatively small population group, it demonstrates that both fertility and religious trends can change direction.

Projecting the religious landscape in future years is a particularly challenging task, since not only demographic factors of natural increase should be taken into account, but also changes to religious

adherence over the life course. For example, people who are born into a particular religion may become disaffiliated or switch to another religion during adulthood, while religiously unaffiliated individuals may switch to become affiliated.

By analyzing current demographic trends and switching patterns of religiously affiliated and unaffiliated populations, Hackett et al. (2015) show that the share of religiously affiliated populations is expected to grow in the next decades. This is due to the earlier and higher childbearing patterns of religiously affiliated groups, which more than offset the increase in disaffiliation through religious switching. Another important insight that arises from this analysis is that secularization is largely a matter of geography. While in Europe and North America, religion is projected to continue declining, other parts of the world are expected to show either stability or increase in the proportion of those identifying with a religion (ibid.).

Apart from these trends, there are other reasons to be skeptic about the prospect of a secular world; first, as societies are undergoing vast changes, due to cultural, economic and technological developments, religious institutions are also evolving and religious norms and values are being adjusted to the new ways of living. Thus, instead of diminishing, in many cases religious adherence is becoming increasingly personalized and with greater emphasis on individual values of happiness and self-fulfillment (Davie, 2007; Martin, 2005).

Second, religious identification is often intertwined with other markers of identity, including ethnicity and nationality. Therefore, identifying with a particular religion is not only a matter of adherence to religious beliefs, but also a symbol of a shared cultural heritage. In addition, the role of religious identity may become more pronounced in the context of globalization and increasing cultural diversity, as it nurtures a sense of belonging and strengthens the identity of self versus others (Day, 2011; Pace, 2007). While this form of identification may not necessarily reflect commitment to religious teachings, it does contribute to the persistence of religion in everyday life.

In regard to fertility trends, there is greater agreement among scholars that total fertility rates around the world will continue to drop as a result of increased access to contraception and other social and economic developments, although the speed and extent of this decline are uncertain (United Nations, 2020). As more countries are moving toward replacement or sub-replacement fertility levels, this transition is likely to have some implications on religious attitudes and behaviors in one way or another. However, the ways in which fertility and religion interact and influence one another, largely depend on the wider social context.

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ORCID

Nitzan Peri-Rotem http://orcid.org/0000-0001-5828-9693

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Faith and fertility in evolutionary perspective

John H. Shaver [a,b], Laure Spake [a,b], Robert Lynch [c], and Mary K. Shenk [c]

[a]Religion Programme, School of Social Sciences, University of Otago, Dunedin, New Zealand; [b]The Centre for Research on Evolution, Belief and Behaviour, University of Otago, Dunedin, New Zealand; [c]Department of Anthropology, Pennsylvania State University, University Park, PA, USA

Philip Jenkins' *Faith and Fertility* (2020) is a well-researched, expansive, insightful, and important contribution to the scientific study of religion. It draws attention to the manifold ways in which demography influences religious change, and how religious change, in turn, affects demography. Specifically, Jenkins argues that demographic transitions, beginning in the eighteenth Century in Western Europe and continuing to the present, have profoundly altered the nature of religious practice, driving a widespread decline in involvement with institutional religion. In a dynamic feedback loop, individualized religion/spirituality and secularism also encouraged further demographic change, specifically, greater reductions in fertility. Jenkins provides a wealth of cross-national and

CONTACT John H. Shaver john.shaver@otago.ac.nz

historical data to clearly illustrate the dynamic interrelationships between demography, religious practice, and secularization.

We are in broad agreement that: (a) changes to socio-economic environments profoundly affect reproductive decision-making, and (b) demography is critical to understanding religion and religious change, although it is often neglected in research. Here we extend the insights of *Faith and Fertility* by briefly considering anthropological and evolutionary perspectives on human reproduction, the family, demographic transitions to low fertility, and religion. Through cross-cultural comparisons, evolutionary anthropological perspectives focus attention to the cooperative nature of human reproduction, the cross-culturally flexibility of the networks supporting maternal fertility, as well as how religious involvement structures the size, composition, and duration of the social networks that impact fertility.

Evolutionary frameworks are advantageous because they focus on *why* demographic patterns emerge when they did (referred to as ultimate explanations), while simultaneously clarifying *how* these differences are motivated (referred to as proximate explanations) (Sear, 2015; Sear et al., 2016). In the remainder of this text, we begin by describing ultimate explanations for variation in human fertility, then return to proximate explanations, and lastly turn to the role that religion plays in these dynamics. We hope that the inclusion of these perspectives can help to clarify and strengthen the ideas put forth in *Faith and Fertility*, and generate additional testable hypotheses.

Human reproduction in historical and cross-cultural perspective

In *Faith and Fertility*, Jenkins primarily focuses on proximate determinants of fertility (e.g., increases to women's education lead to a delay in the onset of reproduction which then causes a reduction in fertility) and how they affect and are affected by religious change. While acknowledging the importance of extended families, Jenkins appears to view the nuclear family as natural, when it is in fact a relatively new family type even in Western societies (e.g., Sear, 2021). Shifts to nuclear families are important in shaping fertility and demographic transitions, which is not always recognized nor well understood outside of evolutionary fields of study. We identify this change in family structure, which entails reductions in support to mothers, as an ultimate explanation for fertility reductions during the demographic transitions of the last few centuries.

Anthropologists widely acknowledge the cross-cultural novelty of the nuclear family (for a recent review see Sear, 2021), while historians note that even in the West, the nuclear family—where men work and women raise children—is a relatively recent invention, emerging only after the Industrial Revolution (Coontz, 1993; Creighton, 1996). Addressing the "myth" of the nuclear family (Sear, 2021) requires that scholars recognize that support to mothers—support that extends far beyond that provided by fathers—is crucial to maternal reproductive decision-making. Understanding changes in support received by mothers is necessary for developing more accurate models seeking to explain why fertility varies across social and environmental contexts including demographic transitions.

Evolutionary anthropologists and evolutionary demographers recognize that humans are a cooperative breeding species (Hrdy, 2005, 2011). Human females exhibit higher fertility than our closest great ape relatives, and this higher relative fertility is accomplished, in part, through high levels of investment in children by individuals other than the mother (Walker et al., 2008). Referred to as alloparental investments, these energetic and resource contributions allow for earlier weaning and shorter inter-birth intervals than would be possible without such support (Galdikas & Wood, 1990; Kuzawa & Bragg, 2012). Who helps mothers is highly flexible and varies considerably across cultures. Indeed, cross-cultural studies find that, although highly variable, older siblings (Kramer, 2010), fathers (Hewlett, 2004), and adult kin (Sear & Coall, 2011; Sear & Mace, 2008) all invest substantially in children. Humans achieve relatively high fertility (compared to our closest relatives) due to the cooperative nature of human breeding and several scholars have emphasized this as a key factor in the demographic success of our species (Bell et al., 2013; Kramer, 2010, 2019).

Evolutionary researchers also recognize that human children require substantial and sustained investment to survive and reach maturity, and that these investments are more than one woman alone can provide (Kramer, 2010). Alloparental investment has been shown to positively influence child survival and well-being (Sear & Coall, 2011; Sear & Mace, 2008). Paternal investment in children, by contrast, is less frequently associated with child well-being (Sear & Mace, 2008), and is more variable across cultures (Geary, 2000; Meehan, 2005; Nettle, 2008).[1] With industrialization, paternal investment becomes more common, and particularly so in contemporary Westernized settings (Sear & Coall, 2011), and consequently it becomes more consistently associated with child well-being (Emmott & Mace, 2021). Even in industrialized environments, however, where paternal investment is high, women continue to receive substantial support from individuals beyond the father. Indeed, data collected in 2020 suggest that mothers in the UK and the US still receive substantial help with childrearing from those outside the natal unit (Spake et al., 2021). For example, women in the US receive direct childcare help from 1.16 non-partner individuals per month (range = 0–8), while women in the UK receive help from 1.00 non-partner individuals (range = 0–9). While women who are unpartnered receive less help with their children than partnered women, unpartnered women still receive substantial help, particularly from maternal kin. This demonstrates the continued importance of extra-pair individuals in caring for children in contemporary Western settings. Moreover, contemporary familial networks supporting children can even extend across large geographic distances. For example, anthropologist Robin Nelson notes the shifting networks and porous boundaries among contemporary Caribbean households (Nelson, 2020). Caribbean mothers sometimes migrate to the United States in search of better employment opportunities. These mothers send resources to their children from overseas, and while they are away, fathers (often living in different households from where the child resides), maternal kin, and unrelated others care for their children. Similar wide networks of childcare, well beyond the nuclear family, have been extensively documented among contemporary groups throughout the world (e.g., Ukwatta, 2010), including in the West, among African American families (e.g., Stack, 1983). These broad networks of support (or the lack thereof), and their variation, are necessary for explaining and understanding why women achieve divergent levels of fertility across environments.

While support for mothers from a range of individuals continues to be important in Western industrialized settings, the support available to mothers tends to diminish as individuals become integrated in market economies. In part, this reduction in support is because these economic systems result in the greater dispersal of individuals over larger geographic ranges (Zelinsky, 1971). In other words, migration in search of employment results in the breakdown of the kin networks that support mothers and enables high fertility in pre-industrialized environments. For example, market integration among women in rural Poland is associated with a reduction of kin in their social networks (Colleran, 2020). Moreover, cross-cultural studies indicate that reductions in kin networks correspond to reductions in alloparental investment from kin, particularly older siblings, cousins, aunts, and uncles (Sear & Coall, 2011). In Tanzania, women residing in town report lower support than do women residing in rural areas, although those residing in town appear to substitute non-kin support for reduced kin support (Hassan et al., in preparation). It is suspected that fertility levels decline during the demographic transition in part because of decreases to maternal support due to increasing involvement in market economies by kin (Newson et al., 2005).

Jenkins begins his book by describing the dramatic socio-economic changes that occurred during industrialization, beginning about 300 years ago in Western Europe. These changes coincided with reductions in birth and mortality rates. Most of *Faith and Fertility*'s focus, however, is on the further reductions to fertility that began in the mid- to late-twentieth Century, such as changes that occurred alongside increases in women's education, participation in the workforce, and the increased availability of birth control. In the subsequent section, we briefly discuss an evolutionary perspective on "modern" fertility and these *proximate* explanations.

Evolutionary perspectives on demographic transitions

Evolutionary scientists assume that processes of natural selection result in fertility decisions that maximize the number of children surviving to reproduce (a concept known as reproductive success) calibrated to the local ecology (Sear et al., 2016). In other words, parents must make decisions about where to invest their energy, and they use environmental cues to inform these decisions, particularly when it comes to reproduction. Importantly, energetic and material resources available for children are finite such that investments in one child can neither be directed towards another existing child, nor used to produce another child. Parents therefore face a tradeoff between number of children and the success of those children. Studies find, for example, that a child's sibling number is negatively associated with cognitive outcomes including years of schooling (Gibbs et al., 2016), performance in schools (Lawson, 2009; Shaver et al., 2020), as well as physical outcomes, such as height (Lawson & Mace, 2008). Reductions to offspring outcomes, of course, have a negative effect on an individual's long-term reproductive success. For example, using two centuries of longitudinal historical data from Iceland, Lynch found that increased offspring number reduced an individual's average lifespan and lifetime reproductive success (Lynch, 2016).

Although individuals living in "modern" or post-industrial environments have fewer children, they invest substantially more in each child than parents in non-industrial environments. In a study of 13,176 British children, child number was found to be the single best predictor of per child investment, with each additional child born to parents resulting in lower levels of investment for each child (Lawson & Mace, 2009). This shift can also be observed early in the process of economic development. Research conducted in rural Ethiopia (Gibson & Lawson, 2011) that compared villages who were part of a development program (with improved access to a water supply) to those that were not part of the initiative showed that parents from the villages included in the development program had lower rates of infant mortality. These parents also invested more heavily in *some* of their children's education than parents who were not involved in the development program. When resources are relatively stable and risk of child mortality is low, parents invest more in offspring, but these increased investments come at the expense of having additional offspring.

In contemporary skill-based economies, evolutionary researchers anticipate that investments in human capital, especially education and other forms of skills training, will be associated with greater success (Kaplan, 1996). It is expected that investments in one's own educational and economic capital can result in a higher quality spouse, more resources, and ability to invest in offspring, and that increased investment in the education of offspring will be associated with their success and the success of grandchildren. Critically, resources invested in one's own capital (e.g., in continued education) cannot be directed towards reproductive effort (e.g., having more children or investing in current children). Thus, the negative relationship between women's education and fertility in competitive labor markets can be understood as the result of proximate psychological and physiological mechanisms calibrated to maximize reproductive success in these environments (regardless of whether or not this is accomplished, see Goodman et al., 2012; Kaplan, 1996). In other words, in contemporary environments individuals are motived to invest in their own education as well as their children's, and these investments make high levels of fertility difficult without reductions in child outcomes. In post-industrialized societies the financial and perceived costs of children are higher than in industrialized (or non-industrialized) environments and thus fertility is lower.

Alloparental investments in children, however, can mitigate the tradeoffs parents face between future reproduction and parental investments. For example, although child number is negatively related to child education among most secular and religious groups, these relationships are erased among some highly cooperative religious groups, such as Mormons (Gibbs et al., 2016). Similarly, prior to the privatization of Israeli kibbutzim, when all kibbutz members shared wages, day care, and education, the costs of having additional children were spread across the group. Under these collective arrangements, there was no relationship between parental education and fertility (Ben-

Porath, 1973). After the financial difficulties of kibbutzim in 1996, however, many kibbutzim offloaded the costs of day care and education (among other common goods) to individuals. Fertility among individuals living on privatized kibbutzim dropped dramatically, with more educated parents exhibiting lower fertility than less educated parents (Ebenstein et al., 2016). The tight relationship between parental education and fertility emerges under conditions in which parental support and parental resource holdings are reduced to levels typical of contemporary Western (and some non-Western) nuclear families, where maternal networks are curtailed, and when high levels of parental investment are required for offspring success in skill-based market economies.

Cross-culturally, women engage in substantial and significant work beyond childrearing. In foraging, pastoral, and agricultural societies women engage in high levels of economic production, often at levels above males (Hewlett, 1991, 2004; Marlowe, 2001, 2007). Even during the beginning of the Industrial Revolution, many women worked alongside men in factories, and it was only after years of market proliferation that men became “the sole breadwinners” (Creighton, 1996; Sear, 2021). While women do face reductions to productive activity when they have young children, they are compensated for this temporary decrease by increased production from other members of the family (Marlowe, 2003). When women engage in substantial levels of extra-household labor, but still receive broad support, maternal fertility often remains high (Hewlett, 1991; Marlowe, 2007). Thus, increased labor participation by women in Westernized societies is, at best, only a part of the reason for lower fertility in these settings. Rather, it is more likely that in contemporary Western contexts, the tradeoffs between work and fertility are stronger, due to a reduction in maternal support/alloparenting.

Jenkins places a large emphasis on the role of women’s improved access to education, greater engagement in employment, and other improvements in women’s status as explanations for the reductions in fertility that began 50–60 years ago, initially in the West and now across much of the world. As we indicated above, while we agree with his findings, we consider these factors to be proximate explanations of fertility reduction. Additionally, it is possible that many of these mechanisms are a response to—rather than a driver of—declines in fertility (see Kaplan, 1996). For example, increases in contraception use might result from a wish to limit fertility following changes in the tradeoffs between labor, education, and offspring quantity/quality in contemporary environments. The underlying ultimate explanation, therefore, is that the fertility decline is driven by a reduction in maternal support networks which arises out of engagement in market economies, fundamentally alters reproductive ecologies and subsequent decision-making.

Along with major economic and other social changes, post-industrial subsistence and economic patterns also entail the emergence of secularization, and the beginnings of fertility differentials between religious and secular populations. Examining fertility differentials within modern societies, and how higher levels of fertility are maintained among the religious, can help to explain the relationship between religion and fertility more broadly.

Religion, cooperation, and reproduction today

If human reproduction is cooperative in nature, and women face tradeoffs when making reproductive decisions, how might religion alter these features of human reproductive ecologies to affect fertility? Religion works to promote trust and cooperation between individuals (Power, 2018; Sosis & Ruffle, 2003), altering the resources that are available to families. Social scientists have long recognized religion as a fundamental building block of human groups (e.g., Durkheim, 1915), and these groups are often able to achieve high levels of resources (both economic and social) and make them available to group members. However, once achieved, these resources are vulnerable to exploitation by outsiders. Under such conditions, collective resources are more likely to emerge and stabilize when individuals can reliably communicate their commitment to the group. Several scholars have proposed that ritual behavior, because it is costly—in terms of energetic, material, and

temporal investments—is difficult to fake, and therefore can function as a reliable signal of commitment to the group (Alcorta & Sosis, 2005; Bulbulia, 2004; Irons, 2001). Indeed, studies find that groups that require high levels of costly involvement of members, in the form of ritual participation, tend to be more cooperative with one another than their secular counterparts (Sosis & Ruffle, 2003).

One form of cooperation available to the members of contemporary religious groups is alloparental support to parents. The religious alloparenting hypothesis predicts that the greater releative social support to religious individuals helps to explain why religious people tend to have higher fertility than their secular counterparts (Shaver, 2017; Shaver et al., 2019, 2020). Among 12,890 New Zealanders, fertility was higher among religious individuals, and non-reproductive religious individuals were more likely to contribute alloparental support to others than their secular counterparts (Shaver et al., 2019). More generally, and consistent with cooperative breeding models of human fertility, the members of ethnic groups with higher fertility (namely Māori and Pacific Islanders) engage in more alloparental support than members of ethnicities with lower fertility (e.g., Asians). These findings suggest that fertility levels correspond to levels of alloparental support, and because religious individuals receive higher levels of alloparental support, they are able to achieve higher fertility.

Subsequent work examined maternal networks among a large sample of women in the United Kingdom who gave birth to a focal child in 1992 (Shaver et al., 2020). Women who attended church more frequently reported more social network support, and also reported that they received more help/aid from co-religionists. Critically, the social network resources of secular mothers diminished over the first ten years of the focal child's life, while the social network support of religious women remained constant over this same time period. The higher levels of social resources available to religious women appear to positively affect fertility, as women who reported that they received aid from their co-religionists exhibited higher fertility over the ten years after the focal child's birth. There is also some evidence that the greater social resources available to religious mothers may help to offset the cost of larger family sizes: in tests administered to children of school age, there was a negative relationship between sibling number and child test scores. Maternal social network support and aid from co-religionists, however, were associated with higher test scores, particularly for those tests that were administered when children were older. In conjunction with the studies mentioned above, these findings suggest that higher levels of social support among religious communities may help to buffer religious mothers from the tradeoff between number and success of children. In *Faith and Fertility*, Jenkins notes the often very different levels of country-level religiosity when comparing religious identity with religious practice. These results, however, suggest that religious practice has a much stronger relationship with fertility than religious identity (cf: Frejka & Westoff, 2008).

In post-industrial societies we expect that religion may, among other things, function to replace the social resources available to mothers that are typically lost as networks break down due to increasing female participation in market economies. In societies that are rapidly developing, therefore, religion may support the continuance of strong kin ties, and/or it may help to replace kin with unrelated co-religionists. Indeed, in rapidly globalizing Bangladesh, the social networks of more religious women are larger, contain more kin, and are also more geographically diffuse (Lynch et al., in preparation). Alternatively, religion may help women to recruit more help from kin. In the US and the UK, religious women receive more help with childcare and household tasks from their kin than do non-religious women, even though religious women tend to have fewer kin residing nearby (Spake et al., in preparation).

Conclusion/Moving forward

We conclude by reiterating that we are in broad agreement with Jenkins' emphases on fertility for understanding religion and on recognizing the importance of religion for understanding fertility. An evolutionary lens draws attention to the cooperative nature of human reproduction and the diversity of family forms and asks questions of why and how religion affects human reproduction under specific

ecological conditions. We expect that the process of economic development/market integration/urbanization will have a deep impact on how well "traditional" family forms support women, as well as how religion in these settings might buffer against kin dispersal and/or replace these individuals. We suggest that religious involvement has a stronger effect on reproductive decision-making in modern environments, where "traditional" forms of maternal support may have broken down. Government programs, as Jenkins rightly points out, are also able to provide support to mothers, and to the extent that they do may be associated with increases in secularization across societies.

Note

1. In contexts where fathers do not substantially invest in young children, they very often play critical roles in the social success of adolescent and adult children (e.g., through investments associated with initiations and/or marriages) (Scelza, 2010; Shenk & Scelza, 2012).

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ORCID

John H. Shaver http://orcid.org/0000-0002-9522-4765
Laure Spake http://orcid.org/0000-0002-2243-7356
Robert Lynch http://orcid.org/0000-0002-2477-6204
Mary K. Shenk http://orcid.org/0000-0003-2002-1469

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Linking the fertility and secular transitions

David Voas

UCL Social Research Institute, University College London, London, England

Introduction

What follows, I confess, is an exercise in self-plagiarism. My excuse is that few readers of this journal will have seen the original sources. Philip Jenkins has read them, but then Jenkins is the kind of scholar who has read everything. What is even more admirable, though, is that he transcends disciplinary limitations. Historians trade in particularity. Generalization is usually left to social scientists (like me) who ignore inconvenient complexity. Jenkins is willing to tell a global story, which requires him to combine the wisdom and erudition of his craft with the boldness of a theoretician.

CONTACT David Voas d.voas@ucl.ac.uk

He remains stronger on description than explanation, but that is true of almost everything by everyone concerned with religious change.

Fertility and Faith (Jenkins, 2020) is a work of remarkable scholarship, amounting to a global overview of both the demographic transition and the decline in religious involvement. As I wrote in a review for the journal *Church and State* (Voas, 2021), work on this topic is often intemperate, marked by claims that one group is going to swamp another, or that the world is going the dogs because too many people are (take your pick) too Muslim, too secular, too religious, or too selfish. By contrast Jenkins is a model of good sense and balanced judgment.

Those qualities make the central thesis of this book all the more astonishing. The biology-religion nexus will hardly seem shocking for readers of this journal, and people have long been familiar with the idea that faith can promote fertility. What Jenkins does, though, is point to a direct link between low fertility and secularity. As population growth has been falling almost everywhere outside sub-Saharan Africa, the implication is that organized religion is in trouble around the world. The jacket blurb states that "the religious character of many non-European areas is highly likely to move in the direction of sweeping secularization."

Jenkins does not explain what connects religious and demographic change. Does reproduction suffer when religious commitment declines, or is there something about low fertility that leads to loss of faith? Or is there an underlying cause for both? He argues that "it is scarcely necessary to determine an exact sequence of change, as the two factors, fertility and religiosity, work so closely together, and developments occur within a short time span" (pp. 11-12). This emphasis on correlation rather than causation is unsatisfying, at least to my mind. I want to emphasize, though, that the book represents an advance: it is empirically rich and theoretically innovative.

The concept of the secular transition

"The basic proposition [of the secularization thesis] is that modernization creates problems for religion" (Bruce, 2002, p. 2). The key questions that follow are why, and how?

In a paper presented at a conference in 1999, subsequently published in an edited collection (Voas, 2007), I argued that social change tends to follow particular routes. Certain major transformations—such as the industrial revolution, the decline in mortality, or equalization in the status of women—occur exactly once in each society. These transitions are a species of social change, but a rather peculiar one: they are very difficult to undo. Back-tracking is exceptional and temporary.

A transition, then, is a *permanent* large-scale change. It is not cyclical or recurring; once out, the toothpaste will not go back into the tube. Social dynamics, transnational markets and global communications being what they are, most transitions are likely to occur everywhere eventually. Any claim to historical inevitability would be dubious, but a case can be made for this kind of universality. Where common causes operate in more or less every society, outcomes may be inescapable.

We can use knowledge gained about one transition to illuminate the course and causes of another, even one that seems very different at first sight. Specifically, there are various parallels between the fertility transition—the global decline in birth rates—and what might be called the secular transition, the move away from institutional religion. At first glance the only link that is apparent between the shift from large families to small ones and from general to minority religious participation is that we have had great difficulty in understanding both transformations. By treating them as instances of a specific type of social change, however, it may be possible to apply what we know about one to explanations of the other.

When I wrote the paragraphs above, I was simply suggesting that there were parallels between the fertility and secular transitions. Both can be regarded as outcomes of modernization. To that extent, though, they are just related processes under a common umbrella: I did not claim that one caused the other. By contrast, Jenkins suggests that fertility decline leads to religious decline, albeit in a way that is hard to specify.

It is an audacious theory, but Jenkins is persuasive in marshalling the evidence. Although it has long been apparent that there is a strong inverse relationship between the Human Development Index (a scale measure that includes life expectancy, income per capita, and years of schooling) and aggregate religiosity, it also seemed until recently that secularization was principally a European phenomenon. Religion was holding up well in the United States and thriving in the global south. Not only is it now clear that the United States is not an exception (Voas & Chaves, 2016), there are increasing signs that religion might be weaker than previously assumed in Latin America and Asia. Most of the world is not secular, but then most of the world is not modern. The countries that have the longest history of low fertility and socio-economic development, however, tend to be the least religious.

Human nature and demand for religion

As a demographer, I had the case of fertility in the front of my mind when I puzzled over the causes of secularization. Demographic transition theory was in serious trouble in the 1960s. It was far from clear that there was, in fact, any close association between modernization and declining birth rates. No clear relationship had been found in the histories of the European regions between the main socio-economic indicators and the onset of reduced fertility. Nor were the patterns as might have been expected within regions; in late-nineteenth century England, for example, industrial workers tended to have higher fertility than others, and there was little difference between urban and rural areas. What was worse, many countries elsewhere in the world had reached levels of development and life expectancy that were superior to those obtaining in the West at the time of the transition, despite which they showed few signs of embarking on fertility control. Many commentators were convinced that, as the biologist Paul Ehrlich wrote, “the urge to reproduce has been fixed in us by billions of years of evolution … The story in the UDCs [underdeveloped countries] is depressingly the same everywhere—people *want* large families” (Ehrlich, 1968, p. 29, 83).

In short, demographic transition theory faced an equivalent of the thesis that demand for religion is permanent. Religion is supposed to promise something that no secular institution can offer, namely life after death. Similarly, children were supposed to provide security in old age, something that was not otherwise available in traditional societies. The urge to reproduce is deeply embedded in human nature, and the grounds for thinking that birth rates would never come down in the absence of draconian social control were far stronger than those for the corresponding view about religion. It was feared in the 1960s and even later that voluntary birth control was a purely European phenomenon. The attempts to promote family planning in the developing world had enjoyed little success and in some cases were highly visible failures. What happened next was unexpected: in one country after another, family sizes began to fall. By now we take it for granted that low fertility will span the globe.

What we discovered is that human nature does not demand uncontrolled fertility. Moreover, the evidence for the security motive (the economic afterlife provided by offspring) is remarkably weak. Reproductive behavior does not necessarily change once you give people pensions or other substitutes for family support, and conversely it has changed even in the absence of such alternatives. As powerful and as universal as the urge to reproduce apparently was, it is not inescapable. The same appears to be true of religiosity.

The relationship between fertility and faith

The fertility transition has occurred with striking simultaneity, not just within individual societies or nations, but across whole continents or cultures. If we divide the globe into cultural zones, the order by onset of fertility decline would be something like the following: France; Northern/Western Europe and overseas dominions; Southern/Eastern Europe and Russia; Japan / China / East Asia;

Latin America; India; North Africa, Middle and Near East; Sub-Saharan Africa. One could conjecture that secularization will spread across the world in essentially the same order.

If we divide the first few large zones into smaller, sub-national regions, we find that the secular and fertility transitions occurred in the same order, which offers some support to the hypothesis that the same will be true on a global scale. The regional pattern of secularization in Europe corresponds closely to the date of onset of fertility decline. It is therefore not a little intriguing that Uruguay, the country in South America that entered the fertility transition in the late nineteenth century, many decades before the rest of the continent, is now remarkably secular. Argentina, which followed it in fertility decline, is likewise on the road to secularization.

Viewed from the mid-twentieth century, there appeared to be a Western exceptionalism about low fertility: not only was there little sign of it elsewhere, there seemed to be little prospect of it. And yet it happened. The secular transition will not operate as quickly, but it seems likely to come eventually.

The correlation between the fertility and secular transitions could be explained in three ways. The first—declining religiosity causing fertility decline—can be ruled out. While non-religious people usually have fewer children than their religious neighbors, society-wide fertility decline clearly predates the advent of secularization. An alternative hypothesis is that low fertility leads to low religiosity; Jenkins seems to take us in this direction, but he does not fill in the causal story. The final possibility is that some third factor (or set of factors) is responsible for declines in both fertility and faith, with elements of modernization being the obvious candidate. I will review this conventional theory next, before turning to the more innovative conjecture that causality runs directly from fertility to religious decline.

Modernization as the common cause

The inseparability of the various transitions could be regarded as the main element of modernization theory. There is little point in talking about modernization at all unless we believe that modernity is characterized by a number of essential features; the question is simply what they are. They include technology, industrialization, urbanization, bureaucratization, mass communication, gender equality, liberal democracy, free markets, and values such as individualism. In the process, we expect to see declines in poverty, insecurity, illiteracy, mortality, fertility, extended families, community, religion, and values such as respect for traditional authority.

High religiosity, like high fertility, will persist the longest where individuals and households are tied most tightly into extended families and communities. The notion of control—the changed relationship between the individual and his or her world—is an important link between the demographic and secular transitions. What seems to be crucial is not what people say they want, because that changes late and varies little across social strata, but rather their willingness to make non-traditional choices. A powerful, if complicated, result of modernization is precisely that kind of individual empowerment.

The fertility transition tends to occur in culturally related regions all at once, however different those regions are in terms of industry, standard of living, or degree of urbanization. Conversely it may occur at different times in places that are culturally distinct, however close they might be geographically (Lesthaeghe, 1977).

One of the apparent paradoxes of European fertility decline is that it began before so-called appliance methods of birth control became widely available or affordable. On the other hand, books on family planning were in circulation. It is possible to argue that these debates, like the similar Victorian debates over discoveries in biology and geology, were important more for their existence than their content. The mere existence of the discussion might have been significant in bringing such matters into the "calculus of conscious choice," even if the points themselves were not adopted (Woods, 1987). Battles in the public arena over what is published are fraught precisely because we understand the legitimizing effect of dissemination. The popular picture of science

exploding the foundations of faith is far from being an accurate representation of what occurred; nevertheless, the thinkability of unbelief radically changed in the nineteenth century, as did the thinkability of contraception within marriage.

One benefit of diffusion models is that early and late adopters can act in the same way for different reasons. Apostles might be persuaded by doctrine, for example, while subsequent converts may be motivated by non-cognitive factors. (A celebrity may choose a hairstyle to match her features, while others choose to match her choice). It is necessary to explain how and why the innovation came to be adopted, but the story need not be the same for everyone. Thus, the fact that so few non-churchgoers are avowed atheists does not mean that the erosion of plausibility was unimportant as a force, if early unbelievers acted as trendsetters.

Explanations

Dudley Kirk, one of the early proponents of the demographic transition, has written that "Its greatest strength is the prediction that the transition will occur in every society which is experiencing modernization; its greatest weakness its inability to forecast the precise threshold required for fertility to fall" (Kirk, 1996, p. 365). Explaining the timing of onset of religious decline remains the great question, just as it was and is with fertility.

The problem for theorists of the secular transition—as for demographers dealing with the fertility transition—is to specify the mechanisms involved. The process will not necessarily be the same everywhere; "The persistence of distinctive value systems suggests that culture is path-dependent" (Inglehart & Baker, 2000, p. 37). The details seem elusive and the state of theory is frankly unsatisfactory; modernization theorists have work to do. Still, there is a big picture: societies around the world have undergone a number of major identifiable changes, and these changes are systematically related to what happens during modernization.

The comparison with the fertility transition makes it less surprising that secularization has not proceeded in a linear fashion; revivals and renewal movements maintain the impression of religious vitality. It was not unusual to find birth rates rising in the early phases of modernization before subsequently declining: the initial impact of modernization is to put the resources of improved health, technological efficiency, and mass communication at the service of traditional values. It is only when those values start to change that the transition sets in.

A direct effect of low fertility?

Jenkins' reluctance to move much beyond the correlation between fertility and faith presents an interesting contrast with a book published just a few months later: *Religion's Sudden Decline: What's Causing it, and What Comes Next?* (2021), by the prominent political scientist and survey researcher Ronald Inglehart (who sadly died in May 2021). Inglehart also points to the first and second demographic transitions as antecedents of secularization, and he is much more specific about the supposed mechanisms and causal connections. His argument, in a nutshell, is that people in late modern societies are committed to autonomy, self-expression, and individual control over their bodies, sexuality and intimate relationships. Religions typically seek to regulate reproductive behavior, promote fertility, and defend traditional norms around sex, marriage and gender roles. Given the resources to pursue their own choices, people will leave religion behind.

We generally imagine that attitudes and values are shaped by religion rather than the other way around. Recent research has shown that reverse causation is noticeable in the United States, where perceptions of a conservative capture of Christianity have led progressives to say that they have no religion (Hout & Fischer, 2002, 2014; Putman & Campbell, 2010). Inglehart suggests that a similar mechanism could operate more broadly and on a global scale.

The Jenkins-Inglehart theory of secularization is that fertility decline leads to religious decline. People want individual choice and control over their lives. We do not want our personal interests

subordinated to those of social institutions. Once survival has been secured, these more or less universal human desires support both the fertility and the secular transitions.

Causality does not have to run in just one direction. Inglehart suggests that it used to go from religion to fertility, and now it has been reversed. Jenkins writes that "A shift to lower fertility encourages declining religiosity, which in turn would discourage religious enthusiasm, and so on, in a kind of feedback loop" (p. 14). I continue to suspect that value change rooted in the prosperity, complexity, diversity, and freedom of modern society is the cause of both. The simplicity of the Jenkins-Inglehart theory is appealing, though: it should be a fruitful avenue for research in the years ahead.

Jenkins is a reluctant prophet. He quotes Voas (2007) at length in his last chapter but quite rightly goes on to look for reasons that the secular transition might stall. I am not persuaded by his conclusion that "the potential opportunities are rich indeed" for religion (p. 199), but I ended my own chapter with exaggerated caution ("We shall all be in our graves before the truth about secularization is known."). Given the sorry failure of the most developed nations to eradicate poverty, achieve gender equality, or even defend liberal democracy, it is apparent that modernization is and might remain incomplete. Faith, like fertility, will always be with us: the question is where and how much.

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Fertility and faith: The danger of a grand narrative

Sarah Walters and Rebecca Sear

Department of Population Health, London School of Hygiene & Tropical Medicine, London, UK

Introduction

Philips Jenkins has produced an impressive and wide-ranging book, covering Christianity, Buddhism, Islam, Hinduism, Judaism, several eras of history, and all regions of the world, from a perspective that borrows from multiple disciplines including history, anthropology, economics, demography, and sociology. Jenkins links the demographic transition—wherein societies shift from high-fertility, high-mortality demographic regimes, to low-fertility, low-mortality ones—with the rise of individualism, liberalism, gender equity, and resulting secularization. He describes the arising likely demo-religious shifts wherein "old" faith communities (especially in the global north) will increasingly be outnumbered by high-fertility societies of greater religious fervour (often originating in the global south), and wherein conflicts may arise over differing conceptions of religions' role in regulating social and moral norms and expectations. In his conclusion, he outlines how organized religion needs to adapt to remain relevant and popular in the face of global demographic change.

The grand narrative of Jenkins' book—connecting "the demographic revolution" with the "transformation of world religions"—is powerful and seductive. With his global scope and historical reach, he weaves a persuasive account of the "tidal shift" in the demo-religious landscape, which has huge potential geopolitical implications. Indeed, it is the credible seamlessness of Jenkins' grand narrative, together with its potential ramifications, which render this book not only flawed but also potentially dangerous.

In our commentary, we interrogate three core elements of Jenkins' argument. First, we consider his demographic determinism, calling to account his underlying causal framework. Second, we show how Jenkins' apparent marshaling of multiple disciplines and international history, belies a rather superficial engagement with those individual disciplines and historical processes. Third, we consider how Jenkins' use of language and references demonstrate his particular partisanship, showing how his narrative is both dangerous and incendiary, with the potential to defend populist and racist ideas.

Demographic determinism and causation

Jenkins includes in his introduction a section on "causation and correlation", in which he argues that "if the correlation between fertility and faith is strong and easily demonstrated, the precise nature of causation is not so clear" (p. 14). He describes "a kind of feedback loop" wherein fertility and religiosity might change in parallel—for example, a decline in religiosity might loosen so-called "traditional" gender roles, leading to women bearing fewer children, reducing the need for community-based support and hence ties to religious institutions. Yet, throughout the rest of the text, Jenkins' evinces demographic determinism for declining religiosity. He speaks of "the demographic laws that underlie and shape … religious currents" (p. 164). He sees the "two phenomena" of secularism and fertility decline as "closely linked, to the point of inevitability", with secularism as "one fragment of a wider social revolution and thoroughgoing moral reconstruction, all rooted in demographics" (p. 48). He acknowledges that the coincidence of changing demographics and religious adherence "does not prove causation" but says that "the more we examine the process of religious transformation, the more unavoidable becomes the demographic interpretation" (p. 49).

CONTACT Rebecca Sear rebecca.sear@lshtm.ac.uk

The book's structure embodies determinism. Jenkins' begins his account in Western Europe, where he describes how the "freedom and opportunities" demanded by the post-war baby-boomers, including the 1960s sexual revolution and rising opportunities for women led to a "moving away from families" and the rise of radical individualism which, together with the concomitant rise in social welfare provision, created decline in the call for and commitment to institutionalized religion. He points to waning acceptance of Church doctrines on marriage, sexuality, abortion, and contraception in the increasingly liberal context, as well as to the decline in women's volunteerism and service both in the laity and as nuns in the face of competing demands and occupational opportunities. Having set out this narrative for Western Europe, Jenkins then proceeds through the rest of the world, showing how different regions and religions are at various stages on this continuum, with implications for the balance of geopolitics and for immigration.

The problems with such demographic determinism are, first, that it leaves little room for the genuine interrogation of evidence to understand the past, or change over time, while avoiding present-centeredness and anachronism, and allowing for complication and diversity. Second, demographic determinism has long provided fodder for eugenic and racist attitudes, and its irresponsible application has serious consequences.

Present-centered history: modernization, patriarchy, nuclearization, individualism

Since the 1930s, historians have been grappling with the "fallacies" of writing history "backwards," or the practice of "starting from the perceptual and conceptual categories of the present" (Ashplant & Wilson, 2009, p. 253). Jenkins' work manifests such "present- centeredness" in three ways. First, in the way that evidence is marshaled, and is often incomplete. In describing the connection between fertility and faith, Jenkins' emphasizes examples where a decline in fertility has co-existed with or prompted a decline in faith, and he seeks explanations for that process in social, economic, and philosophical terms. He ignores instances where faith has prompted or effected a change in demographics and social/moral order in the opposite direction. For example, in the chapter devoted to Africa, he discusses contemporary high fertility and religiosity, but does not mention the rise in fertility which characterized much of the continent in the mid-twentieth century, and which occurred in tandem with the expansion of mission education and influence, often driven by very direct and interventionist missionary and colonial policies to disrupt and change the moral organization of reproduction in the region (Dyson & Murphy, 1985; Hunt, 1988; Turshen, 1987; Walters, 2021). Similarly, in describing the role of feminism and the decline in patriarchy in prompting demographic change and religious decline, Jenkins' ignores the role of the church in *instituting* patriarchy and gender inequity in colonial Africa (Baten et al., 2021; Evans, 2015; Summers, 1991; Thomas, 2003). From Africa's perspective, historical scholarship relating fertility and faith would be expected to give far more weight and attention to the coercive practices introduced in the name of Christianity during the colonial period and their demographic and social impacts than Jenkins' gives credence or space.

Second, present-centeredness is evident in the way that generalizations are made from a model produced in one context but applied to diverse situations and regions. The universality and inevitability of various processes described by Jenkins—including modernization, demographic transition, and nuclearization of families—have all been subject to fierce debate, but they are presented as inexorable in this study, and they are also simplified (Greenhalgh, 1996; Sigle, 2021; Szreter, 1993). For example, Jenkins' presents the nuclearization of the family as inevitable progress from a pre-industrial era when extended and large families were the norm. Such a presentation gives no space to the huge diversity of "pre-modern" family forms which have been documented, including differences in the timing and universality of childbearing and marriage, inheritance systems and gender roles, as well as plentiful evidence of fertility regulation before the advent of modern contraception (for a summary of the literature, see Guirkinger & Platteau, 2020). There is a further generalization in Jenkins' presentation of female

emancipation. His starting point is the image of the male-breadwinner-headed household which he implies was the historical norm prior to the sexual revolution of the 1960s, and that it was the shift away from this norm through female education and emancipation which has triggered demographic and religious "crisis." Such a conceptualization ignores the myriad other forms of family organization outside of Europe and the USA as well as debates about "nuclearization" itself (Sear, 2021b). Jenkins' view that women were largely unempowered until emancipation began in recent decades in the West, freedom which then spread to other parts of the world, puts a simplistic narrative on a complex topic. There is considerable variation in female empowerment between populations over time and space, and the assumption that low fertility societies are now "gender egalitarian" ignores evidence that women are still far from achieving equality in many domains in such societies (Breda et al., 2020).

The assumption that all societies are on a trajectory towards "modernization" leads to what Arland Thornton refers to as "reading history sideways"—the idea that contemporary lower- and middle-income societies represent different stages of the historical trajectory of economic development that the West went through in previous centuries (Thornton, 2001). This narrative in turn can lead to developmental idealism—the belief that, if the West went through certain transformations on its way to economic development, such as female empowerment, then these stages should be desirable goals in their own right, because they will then subsequently "cause" development to follow (Thornton et al., 2015). What modernization, reading history sideways and developmental idealism narratives all have in common is the assumption that Western Europe has reached a pinnacle of development to which all other populations should aspire (Reid, 2021; Watkins & Hodgson, 2019). The inevitability and universality of demographic transition are given similar rather uncritical treatment, side-lining the huge diversity in the mechanisms and timing of the onset and progress of transition in different historical and geographic contexts (Johnson-Hanks, 2008; Kirk, 1996; Szreter, 1993). There is little discussion of the role of coercion and/or Western pressure for population control in the global south—a surprising omission given the very public and current debates in this field, especially in the context of rising environmentalism (Klancher Merchant, 2021; Nandagiri, 2021; Sasser, 2018).

The third manifestation of "present-centeredness" are instances in *Fertility and Faith* where no evidence is used at all, and we are left to rely on assertions rendered apparently credible because of the wider narrative. An example is Jenkins' argument for an inevitable relationship between low-fertility, individualism, and religious decline. He provides little evidence, rather asserting that "many observers" (without citing any) "have commented on the psychological effects of belonging to families with many children … Large families tend to value kinship, community, and shared values, and also have a commitment to posterity. That stands in sharp contrast to the individualistic values prevailing in low-fertility societies. As families shrink in size.. … they lose the ideological incentive to bear children" (p. 37). This grand and unsubstantiated statement ignores vast literature on the motivations and values that people place on childbearing in different contexts, as well as on how kinship and relatedness form and re-form through different historical processes (Geschiere, 2020; Nyambehda, 2004). The suggestion that the same factors which are driving a loss of an ideological incentive to bear children are also driving a disassociation from the community and kinship offered by organized religion is a further leap, and one which is belied by evidence suggesting that the decline in childbearing may lead to the rise of many other modes of kin-making and communal life, themselves presenting positive and constructive alternatives to traditional family structures and religious affiliations.

Partisanship, language, populism

Had the title of the book been "Fertility and Race," it probably would have generated far more heated public discussion and critique. Instead, race is manifest throughout this work under the rubric of faith. In an unattributed paraphrase of W. E. B. Du Bois, Jenkins writes "to adapt a famous

comment made about race, the problem of the twenty-first century is the fertility line" (p. 23). This comment seems to manifest Jenkins' vision of the threat posed to "old stock" (his term) and dying Western Christian communities by the vibrant and demographically numerous growing faith communities in the global south. Jenkins' sense of embattlement is manifest through his language, and his preoccupation with immigration. Jenkins' tries to appear as a non-partisan narrator—for example by explicitly presenting some discussions as stemming "from a traditionalist or rightist standpoint"—but his arguments are not balanced by alternative perspectives (p. 47). A case in point is in the final pages of his chapter on "Europe's Revolution," where he gives credence to Derek Thompson's "doom loop of modern liberalism," in which fertility decline is seen as resulting from the rise in liberalism, especially gender equality, but fertility decline inevitably leads to immigration, which "cannot fail to stir populist opposition" (p. 46). He writes that "From a traditionalist or rightist standpoint, European demographic trends illustrated a decadence amounting almost to a death wish, given the influx of migrants whose values were so distinct from those of an older Europe. In this view liberalism and individualism had become excuses for simple selfishness, a refusal to consider the good of the nation or race" (p. 47). Rather than balancing or countering these standpoints with descriptions of positive integration, enrichment of host societies, and significant immigrant contributions, he goes on to give airtime to the "many works" which present "great replacement" narratives imagining "a [European] continent swamped or overrun by teeming masses of migrants" (p. 47).

This one-sided description of the potential relationship between declining fertility, rising immigration, and "inevitable" rise in populism and even white supremacism, is given added emphasis by the language used throughout the book which consistently "others" and stereotypes non-European races and immigrant communities. Although Jenkins' warns against "accepting the familiar stereotype of Africa as hopelessly mired in deprivation and chaos" (p. 125), on the same page he goes on to describe continent-wide "systemic corruption and misgovernment" and "woefully inadequate infrastructure," he points to "*kleptocracy*" in Nigeria, unfavorably compares Kenya's GDP per capita to that in "an advanced European nation like France or the UK," and argues that "even in peaceful regions, stable and honest government is a distant dream." He speaks of Burkina Faso as "little known to the non-specialist Westerner," as though places and peoples can only be realized through Western eyes; lumps together "traditional" African religions as "primal"—a term which implies evolutionary backwardness (pp. 125-6); he even refers to "black African nations"' in his description of the UN population projections—a racial phrase largely abandoned since the 1950s (p. 122). His blatantly Malthusian comments about the inevitability of disaster in the region are unspecific, generalizing, and provocative, failing to note either the systematic and decades-old debunking of Malthusian theory, nor awareness of the coercive and racist ends to which it has been employed (p. 133) (Greenhalgh, 1990; Nandagiri, 2021; Sasser, 2018). This othering and negative view of sub-Saharan Africa, then plays into Jenkins' establishment of African Christianity as a threat to the Western Church.

He describes that threat as manifest in sheer numbers, noting how even imminent fertility decline "would not prevent African nations overwhelmingly dominating the Anglican communion by [2050], or the mainline Protestant denominations, nor would it halt the growing African hold on the Roman Catholic Church" (p. 187). Again, the language is provocative—why not simply describe the numbers, rather than presenting this growth as something that should be stopped? The peril is also described in terms of the threat posed by immigrant Christians to "old-stock white believers" in Europe. Even more than the growth of mosques, Jenkins sees the growth of vigorous and young "immigrant Christian churches" as a "challenge" for the "old-stock" church (p. 196). He points to a higher level of conservatism among African Christians, especially relating to issues of gender and sexuality, and of how growing African influence in the higher echelons of the church has therefore led to serious conflicts within Christianity. For example, he describes how the Anglican communion has been "rent so viciously" by gay rights controversies, contrasting "liberal Britain" and North America, with the conservative churches of Nigeria, Kenya and Rwanda. In the USA, he

speaks of "open schism" between "mainly white" conservative Episcopalians who are increasingly "under the ecclesiastical control of primates and senior clergy from Africa—a situation that would have seemed unthinkable a couple of decades ago" (p. 131). Nowhere does Jenkins point to examples where religious institutions and beliefs have supported queer identities in Africa, or other examples of a more liberal Christianity emerging in the region (Chitando & van Klinken, 2021). We have focused here on Jenkins' description of Africa, but the language he uses about the threat posed by Islam is no less inflammatory (p. 141).

Jenkins standpoint is also made clear in his sources, as he acknowledges his debt to "a handful of really distinguished authors" who have similarly tackled the subject of secularization in relation to demographic change, including Mary Eberstadt, David Goldman, and Eric Kaufmann (p. 21). These scholars' "sophisticated and well-argued" (p. 21) theses form springboards for Jenkins' own assertions, without any acknowledgement of the public outcry their works have produced. Kaufmann's *White Shift*, argues that the rise of populism and white supremacism can be seen as a natural and understandable response to immigration, and it has been critiqued by many as providing justification and normalization for the rise in racist and anti-immigrant politics (Trilling, 2019). Mary Eberstadt situates the rise in identity politics in the sexual revolution of the 1960s, which she argues led to a disintegration of the binary gender identity, the "traditional family," marriage, and Christian morality, leading to unhappy and disaffected youth who are now seeking kinship through organization into "identity" groups, including the rise of the alt-right (Eberstadt, 2019). One of her previous books on similar themes has been described as "a tissue of propagandistic threads woven into an incoherent whole" (Eberstadt, 2016; Withers, 2016). David Goldman's works on "how civilizations die" and "the Great Extinction of Nations" raise the issue of "cultural suicide," arguing that secularism in Europe and modernity in Islam has led to a lack of faith in civilization and an arising demographic crisis which will transform world order (Goldman, 2011). Goldman wrote under the penname "Spengler," borrowed from Oswald Spengler, whose "The Decline of the West," described the importance of strengthening blood ties to "save the West" from decline in the interwar period (Valencia-García, 2019). To cite and extol the theories of these commentators without acknowledging the public debates and criticism their ideas have generated, is one-sided, and adds weight to the concern about Jenkins' own partisanship and worldview.

Conclusion

The core thesis of *Fertility and Faith, therefore,* rests on uncritical application of various meta- processes—demographic transition, gender revolution, modernization, development idealism—and a level of argumentation wherein the narrative is constructed from a self-sustaining logic rather than a balanced appraisal of real-world evidence. Such intellectual Jenga may seem harmless enough as an exercise in social theory, but we argue that Jenkins' text presents rich material for racist and populist thought and action. Jenkins' particular standpoint from the doorway of an "embattled" western Christianity, is writ large through these pages. He presents the "inevitable" growth and influx into western countries of people of faith from the global south as a threat to northern congregations and communion, not least through the highly provocative language he employs. His aim may be to mitigate and prevent future conflict, and to enable and empower western Christianity to rise to future challenges, but he cannot be unaware of the potential attraction of his thesis for populist and racist groups (Root, 2019). As a discipline, demography has long struggled with its past connections with racial and colonial approaches; it is distressing to see some of these issues emerge again in the text of *Fertility and Faith* (Sear, 2021a).

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ORCID

Sarah Walters http://orcid.org/0000-0001-9929-1917
Rebecca Sear http://orcid.org/0000-0002-4315-0223

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RESPONSE

Moving forward from "Fertility and Faith"

Philip Jenkins

History Department, Baylor University, Waco, TX, USA

It is an enormous honor to have my book *Fertility and Faith* as the centerpiece of a symposium in this prestigious journal. These commentators are figures I respect greatly, and whose work (in most cases) I have used extensively. I approached their responses with considerable nervousness. I have learned much from their perceptive and scholarly remarks. Semi-seriously, I note that the various comments and suggestions could easily form the basis of a new monograph, a sequel to the first.

By way of background, I should explain how my original project began. Some twenty years ago, I was working on global trends in religion, and rapidly discovered the severe limitations of the then-familiar and much quoted demographic models, particularly in the Islamic world. In 2007, I published a journalistic article in the *New Republic* on the sharp fall of fertility rates in Iran and the Levant, under the title "Infertile Crescent" (Jenkins, 2007). Such a view was radically counter-intuitive at a time when much writing on Europe was foreseeing an imminent invasion by hordes of hyper-fertile Muslim migrants. As I wrote and lectured, for both scholarly and popular audiences, I discovered how surprising such findings about the extra-European fertility decline were, and so were the religious implications. Until very recently, so many prognoses of the religious future were still based on dated assumptions of a continuing population explosion in the Global South. Nor was there any appreciation of that increasingly obvious correlation between low fertility and low faith societies.

For some years, I was contemplating a comprehensive book on the issue. *Fertility and Faith* was primarily intended to establish and explain the correlation between those two components, between fertility rates and levels of religious faith and practice. To show the practical impact of that linkage, the book then described a European Revolution in the direction of both low fertility and low faith. It then traces how that revolution became a transcontinental phenomenon, sweeping much of the

CONTACT Philip Jenkins philip_jenkins@baylor.edu

Global South or what had been the "Third World." Meanwhile, older high fertility patterns continued to flourish in Africa and areas of the Middle East and South Asia. In each regional instance, I describe the causes and consequences of the changes, with a special focus on matters of religion.

I emphasize this framework for two reasons. First, I was making an ambitious attempt to survey many different societies and cultures, synthesizing a sizable amount of evidence. At the same time, my goal has always been to present scholarly findings in a style and format that can be read by an intelligent non-specialist audience, including journalists as well as secular policy-makers, and church leaders. That placed a severe constraint on the length of the book, which was intended to be concise and accessible. It also limited the many relevant topics that could in theory have been addressed. This is in no sense an excuse for gaps or absences in the book, or for failure to address key issues: as I will remark, some of the criticisms about such gaps are very well taken. Rather, I was anxious not to have the central argument buried, or diverted into many subsidiary paths. I was constantly battling temptations to expand the book, to make it far longer than the 90,000 words that actually appeared. To that extent, the range of topics and approaches addressed was controlled by the art of the possible.

With that context in mind, I will address major themes that emerge in the various commentaries.

Gender themes

As I wrote the book, I became ever more conscious that it was in large measure a study of shifting gender roles and relations. This is a point that Callum G. Brown has long stressed in his scholarship, and again in his commentary here on "The Agency of Women in Secularization." If I were to rewrite my own book today, that element would become ever more central, so I was pleased and relieved to see that he did not criticize me for under-stating this. His comments on the book as a whole are generous in the extreme.

Quite critical of details of my argument is Nitzan Peri-Rotem, in her "Global Fertility and the Future of Religion: Addressing Empirical and Theoretical Challenges." She is an admirably cautious and precise scholar, a classic "splitter" rather than a "lumper," and her detailed examination of aspects of my book demands serious attention. That is especially true in matters of gender. As she rightly suggests, the broad demographic patterns I discuss are indeed occurring, but local factors will play a considerable role in determining the impact on religious practice and behavior. These are very proper cautions and caveats.

Evolutionary perspectives

Two related commentaries suggest important approaches derived from anthropology and evolutionary theory, and how I could have made profitable use of such theories. Respectively, these are the commentaries by Lynch et al. ("Insights from Human Behavioral Ecology, Evolutionary Psychology, and Life History Theory") and Shaver et al. ("Faith and Fertility in Evolutionary Perspective"). Both papers raise broadly similar points, about the lack of theoretical avenues that *Fertility and Faith* might and should have taken. Specifically, they concern insights that could have been derived from a broader survey of human societies through the ages. Such comments are entirely fair and instructive. As the authors remark, they suggest ways in which such insights can be used to build profitably upon the existing work. I learned much from these responses.

To give one example, both raise the issue of alloparenting, the provision of non-maternal child care as a factor in promoting or discouraging fertility. For instance, the existence of extended networks among more conservative believers might supply the support that allows women to contemplate expanding their families, in a way that is not available to more limited secular households. As both papers remark, alloparenting is the subject of a large literature, which I do not address. I do however discuss the topic, and found somewhat contradictory examples. In cases where women do leave the household for paid employment, such extended family networks of aunts and

grandmothers do indeed provide essential childcare. In this case, however, generous alloparenting serves to facilitate the generational shift to working outside that home, and this to *lower* fertility. The phenomenon is unquestionable, but the consequences are open to debate.

Another insight I found significant concerned mating and evolutionary strategy (in Lynch et al.). The authors are quite right to take me to task for ignoring the literature here, and their comments offer many valuable insights that need to be taken into account in any future developments of my project. I do discuss related ideas quite frequently, in terms for instance of the never-married and never partnered, particularly in societies like Japan. However, I could and should have contextualized this into the larger literature.

A revolution in death?

Lynch et al. raise a critical point about the awareness of death as a force making for increased religious belief, and also higher fertility. When people live in the midst of death, when death and the dead are visible all around, that naturally turns people's thoughts to mortality and the afterlife. At the same time, societies with high death rates are likely to be marked by high fertility, as new generations have both the wish and the opportunity to replenish the ranks of the dead. Conversely, in a "low-death" society—where death and the dead are so often invisible—opposite forces apply. The authors rightly point out that I address those issues in a somewhat tangential form, but that I should be more explicit. Perhaps we should be speaking of a "low death – low fertility – low faith" social arrangement, which has gradually been achieving global dimensions.

Not only are the authors correct about these points, but I have already developed that argument on "the decline of death" elsewhere, with a focus on the history of cremation (Jenkins, 2019a, 2019b). In retrospect, it is almost incredible to read the violent hostility that existed to cremation in most Christian societies until the twentieth century. Death and funerals virtually always meant a body, which was usually displayed in a casket, and that in turn was lowered into a grave, to await a bodily resurrection. Cremation seemed to imply a wholesale rejection of ideas of a bodily resurrection. Catholics, especially, were vehemently opposed to any use of crenation. Yet one of the characteristics of cultural modernity is a steep rise in the scale of this once abhorred practice. (I stress that I am here referring to Western societies, as opposed to other faith traditions in which cremation is the ancient norm).

Cremation rates in what was once Protestant Europe normally run upward of seventy percent, although they are somewhat lower in traditionally Catholic societies. Predictably for a distinctly secular society, the British rate now approaches eighty percent. The US is moving fast to European conditions, and the number of cremations has grown from four percent in 1960 to over fifty percent today. That recent surge correlates quite well with the increasing number of Nones, those rejecting any religious affiliation. The whole story should make us ask what other cultural and religious revolutions have we lived through, but which have simply escaped our notice?

Religions East and West

Having expressed my appreciation for so many of the lessons offered by Lynch et al., I will argue against one of their points, namely that I rely "on a predominantly Western model of religion and on the 20th and 21st centuries." Accordingly, in their view, I have trouble "distinguishing between Buddhism and the Abrahamic faiths like Christianity." I am sensitive to this complaint because these are issues I have spent many years addressing in multiple Religious Studies courses, in which my students groan at my lengthy and seemingly picayune attempts to define what is or is not "religion."

The question of whether Buddhism, as a spiritual or theological system, can actually count as "a religion" in any Western sense is a running debate: does Buddhism even have a God? I would argue that as a lived religion, ordinary believers actually do treat supernatural beings and bodhisattvas

very much like Westerners treat saints, or indeed the deity, so perhaps the distinctions are smaller than we sometimes think. However, any such debate really does not matter for my discussion in this book. I am primarily discussing the decline of religion as an institutional or hierarchical system, and the structures of Buddhism in a society like Thailand or Japan or South Korea look very much indeed like Western and Christian forms, with their clergies and propertied institutions. That is all the more true when global media mean that non-Western religions adopt characteristically Western styles and customs, such as televangelism. Accordingly, a crisis or decline within Buddhist societies looks very much like the parallels in predominantly Christian Europe or North America.

In one specific instance, the difference between religious traditions matters more seriously, and I give this due attention. As I discuss at some length, Muslims commonly define religious adherence quite differently from Christians, as Islam is an integral part of the commonly accepted social structures and value systems in a way that has not been true of Christianity since the most exalted days of "Christendom." That matters immensely when we try to count "Muslims," as opposed to Christians. More particularly for my purposes in *Fertility and Faith*, this distinction is critical to any account of any supposed decline of religious practice or adherence, or a process of secularization.

In fairness, then, I think I am indeed duly sensitive to the distinctions between religious assumptions, and really do not fit them into any kind of Western-styled Procrustean bed.

Nuclear families

I will argue against one point made by Shaver et al., and which becomes the basis of larger arguments. This concerns the nuclear family, and whether it can legitimately be termed "traditional." As the authors write,

> Anthropologists widely acknowledge the cross-cultural novelty of the nuclear family … while historians note that even in the West, the nuclear family—where men work and women raise children—is a relatively recent invention, emerging only after the Industrial Revolution.

For my purposes, even if the nuclear family did only emerge at that point, that would still make it the older "traditional" norm against which I am setting the developments of the past century or so. But I do know the historical literature on these issues quite well here, and that nuclear family debate is more complex, and more controversial, than this account might make it. Some historians might indeed note certain things, but that does not necessarily mean that they are correct, or even that they represent any kind of consensus.

In the English context, we are dealing with highly contentious issues and claims. In 1978, Alan Macfarlane created a furor with his book *The Origins of English Individualism*, which suggested that in structures of family and kinship, as in so much else, English society in the Early Modern Era (and indeed, well before) looked far more "modern" than we might expect. Many of these key changes long predated the Industrial Revolution, at least by half a millennium. That detonated a minor historical revolution, which in the late twentieth century made the extended family almost a mythical beast in English historiography (Macfarlane, 1978; Tadmor, 2010). At the most extreme ends of the debate, some scholars so minimized extended kinship ties as almost to deny their existence. In the words of highly respected (and strictly mainstream) historian Keith Wrightson, "our current working hypothesis must be that kinship ties beyond those of the nuclear family were of limited significance in the social structure of village communities" (Quoted in Tadmor, 2010, p. 25). Flowing from that, women also had much greater ability to choose or approve marriage partners than had been suggested in some older theoretical models. This all had immense consequences for child care and alloparenting, for mutual support networks, and thus for fertility. The implications for evolutionary strategies are apparent.

Subsequent research has created a far more nuanced approach to Early Modern history, while still challenging older assumptions about kinship and family. Also, even the seemingly radical rejections of extended family and kinship were rooting themselves firmly in English (and Anglo-

American) realities, which did not necessarily apply to Europe more broadly. But that proto-modernity was very significant. It suggested a national exceptionalism, an early leap to individualism, modernity, and the nuclear family, which might help explain England's leading role in industrialization and the creation of a mass commercial society. Alternatively, we might propose reasons why England was not in fact as distinctive as it appears: perhaps (for instance) the relevant sources available to English historians are more extensive than those obtainable elsewhere. "The West" is a large and diverse entity. But whatever we conclude about that, this historical debate does demand respectful attention, and the nuclear family might indeed be more authentically "traditional" than some sources suggest.

When polemic goes off the rails

The most critical of the commentaries comes from Sarah Walters and Rebecca Sear, in their "Fertility and Faith: The Danger of a Grand Narrative." What they argue, roughly, is that *Fertility and Faith* purports to offer a sweeping cross disciplinary narrative, but on closer examination, individual aspects of that Grand Narrative prove less convincing than I claim. If they do not criticize every statement or opinion expressed in the book, they come close.

The criticisms here are too numerous to address at length, but I will focus on a couple of points.

Walters and Sear unjustly and inaccurately accuse me of demographic determinism. I specifically reject such an approach on multiple occasions, and repeatedly, I stress that I am finding correlation between fertility and faith, rather than claiming causation. As I say on a number of occasions, both the shifts in fertility and faith could well be reflections or manifestations of other, third forces, whether we locate those in changes in gender attitudes, or economic trends, or other possible transformations. I explicitly deny that changes in fertility simply cause changes in faith, or vice versa. In fact, other commentators in the present collection say, probably rightly, that I am too timid in failing to declare a formal theory of the exact processes involved. As I am not vaguely guilty of demographic determinism, then citing the "eugenic and racist attitudes" that can arise from such an approach has not the slightest relevance to the discussion. So why do they write this? It looks like ugly innuendo.

It is difficult for me to respond to the section in their paper on "Present-centered history," which is a series of statements about alleged errors in my book. It would be a waste of space to go through each and every mis-statement or distortion that the authors make. The fact that I do not contest every one of these items presented does not mean that I concede the claims made by the authors in any given instance. Nor let me highlight every instance where the authors attribute to me things I never said, and views I have never held.

I will briefly note a couple of examples here. The reason I "ignore the role of the church in *instituting* patriarchy and gender inequity in colonial Africa" is because I do not accept that argument, which is one partisan side of a substantial and controversial literature, which I know very well. Nor do I say or imply, anywhere, that "all societies are on a trajectory towards 'modernization'." Really? Where do I say that? But as I say, let me not hammer away at every incorrect assertion in their paper.

If their second section is multiply incorrect, their third section on "Partisanship, language, popularism" ventures into the genuinely weird. I offer one typical extract, chosen at random:

> [Jenkins] speaks of Burkina Faso as "little known to the non-specialist Westerner," as though places and peoples can only be realized through Western eyes; lumps together "traditional" African religions as "primal"—a term which implies evolutionary backwardness (pp. 125–6).

Where to begin here? Burkina Faso is indeed little known to the non-specialist Westerner. That fact might be unfortunate, but fact it is. I mention it in the book as a way of drawing the Western reader into the topic, by initially admitting that they are not likely to be familiar with the place, but that (as I would then explain) it deserved their serious attention. That is a well-known and effective rhetorical technique, which is essential when dealing with non-specialist audiences. Walters and Sear

might appreciate that point if they had any experience writing for non-academic or non-technical readerships.

The phrase "primal religion" is a standard and familiar descriptor in academic writing on African religion, including by people deeply sympathetic to those faith traditions. It is not the only such term in circulation, but rival words such as "traditional" and "indigenous" both pose their own problems. (Surely, after 1,300 years, Islam must now count as a "traditional" African religion? Not to mention Christianity after 1,900 years?) But "primal" certainly does have plenty of users, who apply it in a totally non-judgmental fashion. If the authors don't like that fact, they should take it up with a great many of the contemporary scholars writing on African religion, and presenting academic papers at organizations like the American Academy of Religion. Such scholars know vastly more about African religions, and their classifications, than do Walters and Sear, who (as far as I can see) make no claim to expertise in matters of religion.

Pace the authors, my views are neither Malthusian nor, perforce, blatantly Malthusian. Not at any point. I do talk about societies with intense youth bulges being very unstable. Is that what the authors think the term "Malthusian" means? I am baffled.

I do plead guilty to referring to "systemic corruption and misgovernment" across the continent of Africa, together with its "woefully inadequate infrastructure," while I also refer to "kleptocracy" in Nigeria. Such statements, say the authors, are part of the stereotyping and "Othering" in which I allegedly engage. Would Walters and Sear please assist my future research by referring me to some knowledgeable experts who would challenge any of those statements, or who might present a fair and balanced counter-view? Where might I find the scholars who would for instance assert that many or most contemporary African nations are models of good governance and thriving infrastructure? Or specifically, can they point me to reputable Nigerian scholars who would dispute the term "kleptocracy" as applied to their own country? I would dearly love to meet such learned and impartial observers. If Walters and Sear could cite just ten or twenty prominent scholars, that would be wonderful.

There is no single criticism of my comments in these matters that the authors could not levy with equal force against respectable and well-informed media outlets like the *Economist*, the *New York Times*, or even the *Guardian*. What are Walters and Sear talking about?

Quoting extremism

But it gets worse. The authors assert, utterly falsely, that my approach in the book stems from the political far Right. Throughout their essay, they repeatedly quote me using sources from the political far Right as if those views are mine, when it is clear that I am representing an argument that is made by particular individuals or groups, although it is (or should be) obvious that I do not myself hold those views, or anything like them. Guilt by association runs riot.

In one uniquely offensive instance, the authors say that I "cannot be unaware of the potential attraction of [my] thesis for populist and racist groups." Well, yes, I am aware of the implications of rapid demographic change for those extremist circles, which is a totally different thing from suggesting that it is my accurate reporting and analysis of the demographic data that is somehow to blame. Look again at that initial sentence: it is not the unquestioned *fact* of demographic change that galvanizes the far Right, it is (potentially) "my thesis." What a baseless charge. "My thesis" has precisely zero attraction for the lunatic Right, and any suggestion to the contrary is scandalous. If the charge were accurate, then it could be directed against virtually every scholar working on global demographic trends.

I am actually very well acquainted with the role of demography as a factor driving the far Right. Over the past three decades, I have published quite extensively on terrorist and extremist movements, mainly (but not exclusively) stemming from far Right and racist movements. Those works have been well and widely reviewed. Writing in *Foreign Affairs*, Sir Lawrence Freedman termed my book *Images of Terror* "a brilliant, uncomfortable book, its impact heightened by

clear, restrained writing and a stunning range of examples." After the horrific synagogue massacre in Pittsburgh in 2018, the leading Jewish magazine *The Tablet* turned to me to contextualize the atrocity in the region's long history of racist and anti-Semitic violence. In short, I do claim serious expertise and indeed visibility in these matters.

So here is my dilemma. In a modern context, do I cite the existence of those racist and far Right opinions on demographic change, because if I do, by the logic of Walters and Sear, I must agree with them? Do I, as they say, "give airtime" to such works? Or do I keep the existence of those views a dreadful secret? Personally, I think it is essential for readers to understand the perilous and even violent conclusions that people can draw from studying demographic change: we have to confront these opinions as and when they might arise.

Full disclosure: I also write a good deal about Islamist terrorism, and even quote ("give airtime" to) Islamist texts, so by the same logic, I must also hold those opinions.

At many points, the authors have to stretch far to justify their frankly silly claims. To take one example of many, I note in the book that the author David Goldman, whose nom de plume is "Spengler," has already written about some of the changes that I portray concerning fertility decline. I cite him as part of a narrative literature review, to show that I am not claiming to have invented the wheel in this regard: Goldman got there first. Walters and Sear might or might not be aware that such a "literature review" is actually quite standard practice in academic writing. When writing such a review, the fact that you do not share the political opinions of a particular author is no excuse for failing to cite a relevant work. Walters and Sear then produce what they clearly think is a knock-down argument. They proceed to explain that.

> Goldman wrote under the penname 'Spengler,' borrowed from Oswald Spengler, whose *The Decline of the West*, described the importance of strengthening blood ties to 'save the West' from decline in the interwar period.

Is it possible to read this without being meant to draw the implication that (a) Goldman is a latter-day fascist, and that therefore, (b) because I quote him, I must follow in the same tradition? Seriously?

The one good thing about the polemic the authors present here is that it is so bizarre and over the top that it cannot be taken seriously. That is a pity. Walters and Sear are both highly qualified scholars, and it would have been interesting to read a thoughtful response to my book that addressed actual issues.

A Jenkins-Inglehart theory of secularization?

As most of the commentaries point out, my emphasis in the book was on a correlation between fertility and faith, rather than a causal relationship, and it might well be that I was too timid about more boldly proposing a theoretical framework. In his "Linking the Fertility and Secular Transitions," David Voas fairly calls me a "reluctant prophet." He also takes the opportunity to draw parallels between the framework presented by me and that of Ronald Inglehart, referring to a "Jenkins-Inglehart Theory of Secularization." Given my enormous respect for Inglehart and his work, such a term naturally gave me great pleasure. Moreover, it does force me to consider just how our approaches do mesh with each other.

One truly important work that appeared after the publication of my own book was Inglehart's *Religion's Sudden Decline: What's Causing It, And What Comes Next?* (Inglehart, 2021). Inglehart centrally emphasizes issues of reproduction and fertility in the present sharp decline of faith that is so evident around the world. Central to his argument is his statement that religion was always strongly committed to promoting natalist goals and combating or suppressing any contrary impulses. That was doubly essential in times of very high infant mortality, when societies needed high reproductive rates just to maintain their population levels. However, as he observes,

> Recent technological advances have greatly increased life expectancy and cut infant mortality to a tiny fraction of its historic levels, making these norms no longer necessary for societal survival. These norms require repressing strong natural urges, but, since they present traditional norms as absolute values, most religions strongly resist change. The resulting tension, together with the fact that rising existential security has made people less dependent on religion, opened the way for an exodus from religion.

His emphasis on changes in infant mortality is incontestable, and this is a point I made in my own book. Obviously, I had some disagreements with *Religion's Sudden Decline*, mainly from a historical point of view, but the importance of the work is beyond question, and the same is true of his immense scholarship.

Rather a sad story attaches to this. I wrote an extremely appreciative response to Inglehart's book, which his editor promised to forward to him immediately (Jenkins, 2021). Only at that point did both the editor and myself discover that Inglehart had died just two days before. He leaves an immense gap in the study of contemporary religion, and specifically its connections with matters of reproduction and fertility.

To return to Inglehart's argument in that most recent book, Voas summarizes his views well:

> His argument, in a nutshell, is that people in late modern societies are committed to autonomy, self-expression, and individual control over their bodies, sexuality and intimate relationships. Religions typically seek to regulate reproductive behavior, promote fertility, and defend traditional norms around sex, marriage and gender roles. Given the resources to pursue their own choices, people will leave religion behind.

This of course is very close to my own position in *Fertility and Faith*. And as Voas rightly says, however simple the basic theory might appear, it does have quite complex aspects, in tracing the directions of influence—of seeing how changing values shape fertility shifts, but also the reverse.

Is this the only way of understanding contemporary trends in religion, and especially of trends in secularization? Of course not. But if one point does emerge from these various commentaries and discussions, it is that any worthwhile account of those processes must of necessity include a major demographic component. It has to speak to issues of gender, of sexuality, and fertility, and it must offer an approach that spans the life-cycle. If the book *Fertility and Faith* makes people aware of those dimensions, then it will have achieved its goal.

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