PART I: CULTURE AND SOCIETY

A "Demographic Hybrid": Haredi Demography in the Early Twenty-first Century

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INTRODUCTION

This essay presents and interprets the fundamentals of Haredi demography. How many Haredi Jews exist? What forces account for the change in size and relative weight of this population among Jews, on the global scale? How is Haredi demography different from the demography of other Jewish and non-Jewish populations? This is not the first time that these questions have been addressed systematically but, really, that very first time was not that long ago. In 2022, the first assessment of the size and distribution of the global Haredi population was published—a development long overdue.[1] It contrasts strongly with the fate of the estimates of Jewish population as a whole. From the end of the nineteenth century till this very day, estimates of the number of Jews globally and in individual countries, have been published in a special chapter of the *American Jewish Year Book*. Haredi population accounts are therefore about 120 years behind the general Jewish ones!

Arguably, better late than never. Yet it is worth devoting a few words to explain how Haredi demography found itself in such an unambiguous position of a "low priority." This is for two reasons. First, religiosity in the West has declined over the past 120 years among Jews and non-Jews alike, and strong and committed religiosity has become very marginal in many Western and European societies. This was reflected by the diminishing centrality of religious institutions in public life and by the reduction in intensity of religiosity at a personal level, as expressed, for example, via the reduced attendance of places

of worship. Steven Bruce's choice of a title for his book presenting the secularization thesis ("God Is Dead") is very telling.[2] More moderate assessments exist, yet a drift toward a lesser role of religious ideas and institutions, both in the broadly defined West and beyond, is a matter of wide consensus.[3] In view of this decline, monitoring the population dynamics of the Haredim did not feel like a high priority. What would be the point of monitoring the numerical fate of a vanishingly small and diminishing population? Such would be the logic of the realization that religiosity was in decline, as documented across the fields of sociology and political science.

Second, creating estimates of the Jewish population as a whole is not a simple task to begin with. In Israel, population statistics of Jews are unproblematic. They are routinely produced by the Israeli statistical authority, based on input from the national population registration system. The system, which has operated from the very first days of the modern State of Israel, allows identification of Israelis by religion. In the Diaspora, the situation is very different. Some countries hosting Jewish populations (e.g., the United Kingdom) have population censuses asking about religion or ethnicity, which allow for the identification of their Jewish populations. Others (e.g., the US) do not have such censuses. Not all sample surveys of the population ask about religion or ethnicity either. Those surveys that have been developed to compensate for the shortcomings of the national censuses and that ask a religion/ethnicity question, often contain only a small number of Jews, in proportion to their population share. For this reason, they are often unusable. And where estimation of the total number of Jews is difficult, estimation of the size of a subgroup within the larger Jewish population is even more complex.

But the realities of social and scholarly life have been changing, introducing some correctives. One significant corrective to the "secularization thesis" view came from the field of demography. In 2010, Eric Kaufmann pointed out the existence of a counterforce to secularization, namely the relatively high birth rate of the religious segments of the world population.[4] As Kaufmann highlights, religious people can reasonably be expected to increase their share of the population notwithstanding the deepening disengagement from religion among others, as a matter of arithmetical necessity. Having more children translates into relatively greater numbers of religious versus non-religious in the next generation and, if the process continues, also in the subsequent generations. If in the long run "desecularization by demography" outpaces ideational secularization, society is bound to become more religious over time. Admittedly, the long-term prospects are unclear: when differences in fertility

between religious and non-religious are modest, continuing secularization (conversion out of religion, i.e., reduction in scope and intensity of religious behaviour and faith) may well outpace the demographic "desecularizing" influence.[5] Still, in the medium-term religious segments of a population are not expected to diminish in size, let alone disappear. For Haredi populations, this is especially true, as will be shown shortly. As Haredi populations grew, the visibility of Haredi Jews, in political and cultural terms, increased. Some commentators have defined this new visibility, or their own awareness of it, as the "Haredi moment."[6]

Estimates of the Jewish population in the Diaspora have not become easier but, arguably, some things have changed for the better. This is the second corrective: developments in data collection and storage. With the passing of time, censuses that included a religion question were repeated resulting in a sharper view of religious and ethnic groups comprising populations. Some survey samples grew in size, leading to the more reliable estimate of subgroups in a population. These developments had little to do with Jews or Haredim for that matter. Progressive diversification of Western societies caused the demand for population estimates of religious and ethnic groups to go up. Yet, Jewish demography has benefited considerably from them. In parallel, data processing and storage became cheaper and simpler than ever. Two large-scale surveys of Jewish populations in Europe, conducted by the European Union Agency for Fundamental Rights in 2012 and 2018, would not have taken place without new online platforms of data collection. The old style "pen and paper" surveys would not have been suitable for that task. Finally, important changes happened with regard to the availability of administrative data on many Haredi populations—a development propelled by the maturation and growth of Haredi communities and technological changes. Haredi communities, united by intense religiosity and a lifestyle, produce communal address and telephone directories that have become increasingly easy to compile, maintain and, when it comes to the research process, investigate.

The very possibility of producing global estimates of Haredi population, such as those offered in this paper, arises from the convergence of the new realities, lines of inquiry, and technological changes.

The rest of this essay is structured in three substantive parts. The next section presents the "big picture": the most recent estimates of the number of Haredi Jews across the globe, with some consideration of future developments. Large amounts of data gathering and significant methodological work underlie these estimates. These are reported elsewhere; readers with technical

demographic interests are encouraged to consult these sources.[7] The section that follows focuses on two case studies, the Jewish populations of Belgium and the United Kingdom, looking in greater depth at the demographic fate of these populations in recent history and the role that Haredi play in them. The last substantive section maps the demographic origins of Haredi growth, placing the discussion in a broad comparative context. It shows the uniqueness of the Haredi demographic experience. In the concluding section, some thoughts on the very meaning of the Haredi demographic experience in the framework of modernity are offered.

Who Is Haredi?

There are many ways to define a social group. Belonging to Haredi Judaism, in particular, can be defined with reference to some shared ideology.[8] Yet, shared ideology is not something that is easy to capture unambiguously in quantifiable terms. In more empirically measurable terms, Haredim can be defined (and often are defined by scholars) through self-identification as "Haredim" in surveys of Jewish populations, in response to a question offering a choice of labels starting from "secular" or "just Jewish" through "Traditional," "Reform," "Orthodox" and then "strictly Orthodox/Haredi." Other empirical options include identifying Haredim as persons who (1) use the administrative infrastructure of known Haredi communities: e.g., membership lists, address and telephone directories, intra-communal newsletters and/or (2) send their children to Haredi schools and/or (3) live in relatively homogeneous geographical clusters, facilitating development of services and facilities tailored to strictly Orthodox lifestyle.

The approach adopted here is to allow the sources used for the estimation of the Haredi population to define the term. The underlying estimation relies on all sources listed above: surveys of Jewish populations, data from Haredi schools, data from administrative sources maintained by Haredi communities, and geographical data mostly coming from the national censuses. In most countries containing Haredi populations, more than one source is available for estimation. Where several sources exist, they are all used for estimation and the impressions rendered by different sources are then compared. As a rule, estimates arising from different sources agree well with each other. Thus, the question of how to define Haredi can be, metaphorically speaking, "put to bed." Being "Haredi" is a solid fixture of social reality, quantified in a very similar way irrespective of the exact approach to the method of quantification.

The way people define/label themselves as Haredi corresponds well to the ways in which they behave, as reflected by different sources that, independently of each other, register their behavioural patterns (schools, membership lists, residential patterns). There is not much of a definitional problem or ambiguity for the purposes of a demographic inquiry.

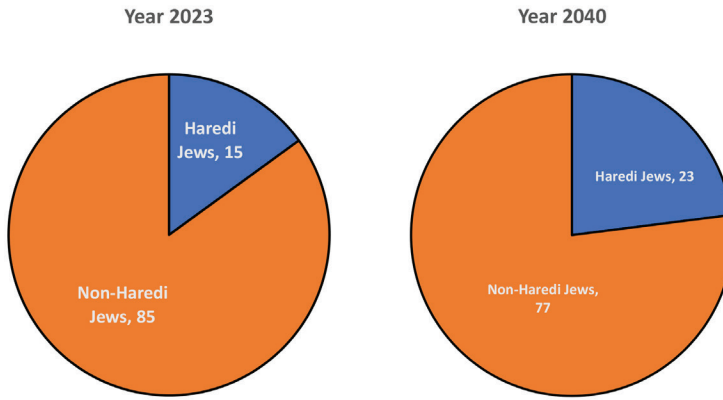
THE GLOBAL HAREDI POPULATION: TODAY AND TOMORROW

Sometime in the late 2010s, the author of this essay became a witness of a verbal exchange between a Haredi communal activist and a representative of a local authority in the area of Greater London containing a significant population of Haredi Jews. At the end of the discussion on housing policies, the representative of the local authority proposed a date for the next meeting. The proposed date was several months ahead. "The date works for us," replied the Haredi communal activist. "Take into account that by that time our community will grow a little more," he added with a smile. This was a light-hearted communication of a serious point, analytically and policy-wise. Whenever an estimate of Haredi population is published, be it at a global or a country-specific level, it is already out of date by the time of publication. Haredi population grows very rapidly, so much so that no published estimate can keep pace with it.

When the first estimate of the global Haredi population was published, it related to the year 2020 and was best understood as a mid-year estimate. It put the global Haredi population size at 2.1 million.[9] If one pushes this estimate to the middle of 2023, using an annual growth rate of 3.0%–3.5%, the Haredi population reaches 2.3 million. Haredim comprise about 15% of the total Jewish population in the world estimated at around 15.7 million at the end of 2022.[10] This is another way of saying that every seventh Jewish individual today is Haredi. The continuing high rate of Haredi growth, alongside low growth in the non-Haredi segment of the global Jewish population, means that the Haredi share of the total Jewish population is destined to grow in the future. Should the current rates of growth persist, the Haredi population is expected to number close to four million people around 2040, coming to about 23% of all Jews (fig. 1).

Rates of growth of Haredi population are well-documented. Haredi populations grow at approximately 3.5%–4% annually. In the projection offered here the level of 3.5% is adopted to be on the side of caution. The meaning

Figure 1. Proportion of Haredim in total Jewish population of the world, around 2023 and 2040, %



Note: projected to year 2040 using a 3.5% annual growth rate for the Haredi population and a 0.2% annual growth rate for the non-Haredi population.

of this rate of increase is that it causes a doubling of the population size every eighteen to twenty years. The non-Haredi segment of the global Jewry, in striking contrast, is growing at a rate of 0.2% per year. This is a greater rate than that seen in Western populations today given that the rate of growth of the Israeli non-Haredi segment is high, but is still very low compared to that of Haredi Jews. Doubling this sector of the population at this rate would take 350 years!

The critical question, of course, is: can the application of the 3.5% annual rate of growth all the way to 2040 be justified? Population projections rely on the assumption that future demographic realities are known. In this case, the assumption is that the observed rates of growth of the Haredi and non-Haredi Jews will persist. How can one be confident of that? Simply put: the pace of demographic change is typically rather modest. The projection horizon adopted in this case is under twenty years, which is less than a demographic generation. This is a considerably less ambitious and more careful horizon than some projections use. It is not unusual for national statistical offices to project populations fifty and even a hundred years ahead. Such strategy is consciously avoided here. As a consequence, it can be reasonably assumed that a significant, truly game-changing reduction of Haredi growth during this period of time is not very likely.

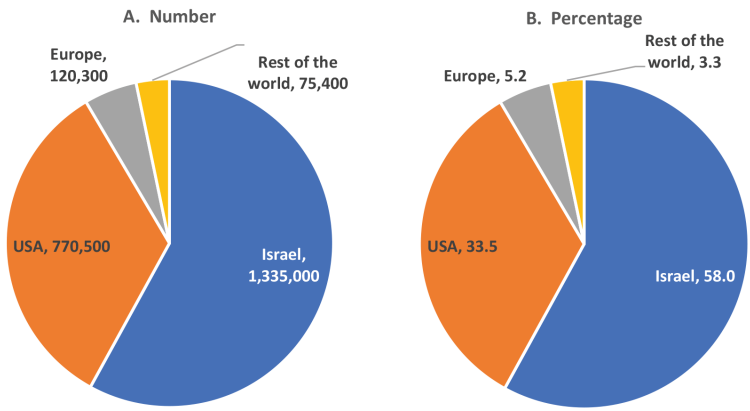
First, in the absence of political and economic upheavals (including those caused by natural disasters, major wars and epidemics), political, cultural and technological developments impact fertility and mortality, two processes

that underlie the rates of growth, yet they tend to do so gradually. Furthermore, it is not just fertility and mortality rates that matter for growth. Population structures are important as well. Long-term high fertility, such as that observed among Haredi, tends to lead to very young age structures. Following a drop in fertility, large young cohorts continue to move into adulthood and have children of their own. The number of children per woman may be relatively small at that stage but the number of children in a population will continue to be rather large just because the number of mothers is large. This is a phenomenon called "population momentum" in the field of demography: a significant deceleration in population growth is something that happens only with some delay relative to the drop in fertility.

THE GLOBAL HAREDI POPULATION TODAY: IN GREATER DETAIL

The majority of Haredi Jews live in Israel and the United States, which, combined, account for about 92% of the global number of Haredi Jews. This pattern of Haredi concentration in just two countries resembles in broad strokes the pattern shown by the Jewish population as a whole. Europe hosts 8% of

Figure 2. Haredi population by geographical area, around 2023



Note: percentages and numbers are rounded for readability.
Source: for Israel, see L. Cahaner and G. Malach, "Statistical Report on Ultra-Orthodox Society in Israel" (The Israel Democracy Institute, 2023); for data on all other locations, an update on 2020 estimates appeared in Staetsky, "Haredi Jews around the World." An update was produced through the application of 3.0%–3.5% annual growth rate (applied exponentially).

the global Jewish population and 5% of the global Haredi population. Latin America, South Africa, Canada and Australia, combined, host about 6% of the global Jewish population and 3% of the global Haredi population.

Today, Israel hosts the largest Haredi population in the world. In 2023, the Haredi population in Israel was estimated at about 1,335,000, or nearly 19% of its Jewish population. The United States of America contains the second largest Haredi population. In 2023, its estimated size was 771,000, about 12% of all Jews in the US (fig. 2).

If we look at the profile of Haredi population in greater detail (Table 1), the five countries with the largest proportion of Haredi Jews out of the total Jewish population (20% or above) are Belgium, UK, South Africa, Austria and Mexico.

Table 1. Haredi Jews: an overview of the largest numbers and proportions by country, around 2023

	Number		Percent of all Jews in a country
Israel	1,335,000	**Belgium**	38
USA	771,000	**UK**	25
UK	78,000	**South Africa**	22
Canada	33,000	**Austria**	21
Argentina	15,000	**Mexico**	21
France	13,000	**Israel**	19
Belgium	11,000	**Switzerland**	18
South Africa	11,000	**USA**	12
Australia, Mexico	circa 8,000 (each)	**Argentina, Australia, Canada**	7%-9% (each)
Switzerland	3,000-4,000	**Germany, France**	2%-3% (each)
Austria, Germany	2,000-3,000 (each)		

Note: percentages and numbers are rounded for readability.
Source: for Israel, see Cahaner and Malach, "Statistical Report on Ultra-Orthodox Society in Israel"; for data on all other locations, except the UK, an update on 2020 estimates appeared in Staetsky, "Haredi Jews around the World." An update was produced through the application of 3.0%–3.5% annual growth rate (applied exponentially); for data on the UK, an update of 2021 estimate appeared in Staetsky, "Strictly Orthodox Jewish Population in the United Kingdom."

Israel and Switzerland are only a little behind. Belgium is an unambiguous leader in that group. Note that three out of these leading five countries where the proportion of Haredi Jews is highest are located in Europe. Unless a major reshuffling of the Haredi Jewish population in Europe takes place, for example, as a

result of migration, then the total Jewish populations of the UK, Austria and Belgium can be expected to grow after many years of stability or decline.

HAREDI JEWS IN BELGIUM AND ENGLAND: TWO CASE STUDIES OF POPULATION TRANSFORMATION

Haredi populations in Belgium and England deserve special attention for two reasons. First, the demographic development of these communities is well documented. Censuses of Jewish populations took place in Antwerp, Belgium in the mid-1960s, and in 2001–2021 in the United Kingdom. In the Belgian case, it was a scholarly and communal initiative; in the British case, it was the result of a decision made by the Office for National Statistics to include a question about religion in the census questionnaire. Second, given how far along Jews in Belgium and England are on the path of demographic desecularization, social scientists and historians would be correct in regarding these sites as laboratories of social and cultural processes that accompany and run counter to such desecularization, particularly the phenomenon known as "Haredisation."

The total number of Jewish households in Antwerp was estimated at 2,750 around 1965, with about 316 being Haredi.[11] Given the average number of persons per Haredi household (5.5), one is led to the conclusion that in the mid-1960s Antwerp was home to 1,700 Haredi individuals. The Jewish population of Belgium as a whole stood at about 35,000 at that time, with Brussels and Antwerp being the main Jewish population centers. No Haredi Jews, then or now, chose to live outside of Antwerp in any significant numbers. Therefore, in the mid-1960s Haredi Jews accounted for 5% and non-Haredi Jews for 95% of Belgian Jewish population. About half a century later, when the numbers of Haredi and non-Haredi were surveyed again, the picture was dramatically different. This time the Haredi population of Antwerp stood at about 10,000, accounting for 34% of all Jews in Belgium.[12] A spectacular rise of nearly 500% in the number of Haredi was accompanied by a 43% decline in non-Haredi population (Table 2). The latter declined due to a relatively low fertility rate, advancing age, and a significant migration of Jews out of Belgium, to Israel and other locations.

Given that Antwerp and Brussels are very different in the nature of their respective Jewish populations, it is worth looking specifically at the transformation of the relationship between these two localities over time. Today,

Table 2. Haredi and non-Haredi Jewish population of Belgium: half a century perspective

	The mid-1960s	Around 2020	Change
Haredi Jews	1,700 (5%)	10,000 (34%)	488% increase
Non-Haredi Jews	33,300 (95%)	19,000 (66%)	43% decrease
Total	35,000 (100%)	29,000 (100%)	17% decrease

Note: numbers are rounded for readability.
Source: Gutwirth, "Antwerp Jewry Today"; and Staetsky and DellaPergola "Jews in Belgium."

Antwerp Jews are predominantly Haredi (63%). Indeed, a strong Haredi presence has become a hallmark of life in Antwerp. In the mid-1960s, Haredim were a small minority of Jews there (16%). There has also been a remarkable change in the relative numerical power of Brussels and Antwerp too. In the mid-1960s, Brussels was the undisputed population center of Belgian Jewry (other areas around Brussels are included in the counts of Brussels but these are numerically rather marginal). In the half a century since then, the Jewish population of Brussels decreased by close to 50% while the Jewish population of Antwerp has experienced growth on a similar scale. As a result, in the 2020s, Antwerp become the Belgian city with the largest number of Jews (Table 3).

Table 3. Jewish population of Belgium: Antwerp versus Brussels in the past half a century

	The mid-1960s	Around 2020	Change
Antwerp	10,500 (1,700 Haredi, 16%)	16,000 (10,000 Haredi, 63%)	52% increase
Brussels and other areas	25,000	13,000	48% decrease
Total	35,000	29,000	17% decrease

Note: numbers are rounded for readability.
Source: Gutwirth, "Antwerp Jewry Today"; and Staetsky and DellaPergola "Jews in Belgium."

The demographic development of the Haredi population in the UK is traceable for a shorter period. Still, even the two decades covered by the British census are very telling. The British Haredi population doubled in size between 2001 and 2021: from 37,000 to 73,000. Its share of the Jewish population in England and Wales increased from 13% in 2001 to 24% in 2021. At the same time, the non-Haredi segment decreased a little (Table 4).

Both Belgian and British Haredi population experienced outmigration and grew at a pace which is lower than Israeli Haredim: 3.2%–3.5% per annum

Table 4. Jewish population of England and Wales: two decades perspective

	2001	2011	2021	Change 2001-2021
Haredi Jews	37,000 (13%)	53,000 (18%)	73,000 (24%)	97% increase
Non-Haredi Jews	239,000 (87%)	235,000 (82%)	237,000 (76%)	decrease of -0.8%
Total	276,000 (100%)	288,000 (100%)	310,000 (100%)	12% increase

Note: (1) numbers are rounded for readability. (2) the total number of Jews in England and Wales and in the UK is being assessed continuously following the release of the 2021 Census results. Thus, discrepancies between different publications are possible. In particular, the total number of Jews in 2021 proposed here is somewhat different from the numbers suggested by: DellaPergola, "World Jewish Population, 2023"; and Staetsky, "Jews in the 2021 Census of England and Wales."
Source: estimates appearing in Staetsky, "Strictly Orthodox Jewish Population in the United Kingdom"; earlier estimates appearing in Staetsky, "Jews in the 2021 Census of England and Wales."

in contrast to 4% per annum observed among Haredim in Israel. Even with this clearly trimmed rate of growth, the Haredi population is highly significant for both Belgian and British Jewry. In Belgium, Haredi growth is the only factor that has prevented the Jewish population from numerical collapse. Without Haredim, Belgian Jewry would have been approximately half of the size observed in the 1960s. With Haredim, its decline has dramatically decelerated to 17%. The population of British Jews without Haredim in the first two decades of the twenty-first century would be in slight decline or at a level of numerical stability. It is only due to Haredi growth that British Jewry as a whole grew by 12% in this period.

Both country studies showcased here highlight the state of the non-Haredi component of the Jewish Diaspora populations. The demographic story of the non-Haredim in Belgium and the UK is typical of many, perhaps most, Diaspora communities. Due to low fertility and advanced aging the non-Haredi Jewish populations cannot grow on their own. Where Haredi Jews are absent, growth and/or stability still can be observed in a country's Jewish population, but this would be due to the arrival of immigrants, not natural replenishment. In Europe, a textbook example of this is the Jewish population of the Netherlands, a population with few Haredim, that managed to maintain its size since the 1960s despite the negative balance of births and deaths due to immigration of Israelis.[13] Across the Diaspora, vigorous growth attributable to a preponderance of births over deaths is only seen where Haredi Jews are present.

The situation in Israel is different. The non-Haredi Jewish population in Israel is growing on its own. The natural increase of non-Haredi Israeli,

estimated at about 1% per year, is considered rather high on the contemporary demographic landscape. Still, Haredim matter even in Israel: Haredi growth accounts for about 40% of the total natural increase among Jews in Israel, boosting Israel's Jewish natural growth to 1.5% per year. To conclude, depending on the exact situation of the non-Haredi segment, the Haredi constituency can (1) prevent a collapse, (2) generate growth of a country's Jewish population, where otherwise there would be none, and (3) boost the natural growth of Jewish population (a scenario clearly identifiable only in Israel).

THE MIRACLE OF HAREDI GROWTH

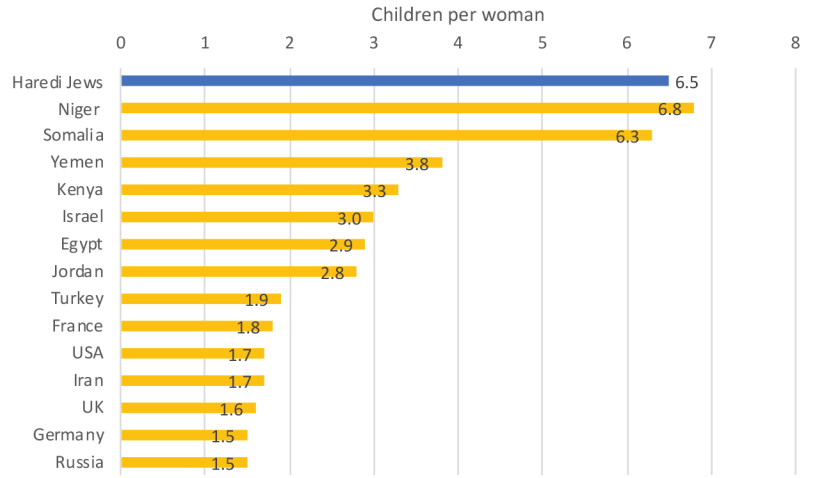
What makes Haredi populations grow so fast is the combination of several factors: high fertility, high longevity, and high rates of lifestyle retention. The role of high fertility can be well understood by a layman; it is sufficiently intuitive. An image of a pregnant mother pushing a stroller in front of her and, in addition, surrounded by a group of children is one of the most readily recognizable markers of Haredi society. Two aspects are often overlooked and deserve some elaboration. First, although Haredi fertility is correctly understood as being high, there is not a full appreciation of just how high it actually is, both from contemporary and historical perspectives. Second, high fertility cannot generate the observed Haredi rates of growth on its own. It is very considerably helped along the way by very high rates of longevity. Below is an elaboration of these points.

Haredi Fertility

The total fertility rate of Haredim is 6.5 children per woman, on average.[14] There are no substantial differences in this respect between Haredi populations across the globe. This is, of course, very high compared to the average of 1.5 children per woman in today's Europe, 1.7 in the US, and 3.0 in Israel.[15] The more interesting and less familiar fact is that it is one of the highest rates in the world (fig. 3).

In the 2020s, the only country with a fertility rate higher than that of the Haredi population seems to be Niger. Other countries of sub-Saharan Africa have much lower fertility rates at this point in time, and the same applies to the countries of the Middle East. For many years, sub-Saharan Africa and the

Figure 3. Haredi fertility compared to selected populations, 2021–2022



Source: Haredi, an average of estimates based on studies cited in n. 14; comparator populations, "Fertility Rate: Children per Woman."

Middle East were associated in the public mind with very high, traditional, levels of fertility. This is no longer so in reality. In Yemen, perhaps the most fertile country of the Middle East today, the total fertility rate today does not exceed four children per woman, while in Iran and Turkey, fertility rates reached sub-replacement levels (below 2.1 children per woman), i.e., levels that cannot support natural population growth in the long term. Iran and Turkey are now part of large group of countries, especially those in Europe, with sub-replacement fertility levels. This comparative framework highlights just how unusual Haredi fertility is at present.

It is important to note that high fertility rates were present in Europe and the Middle East a century ago. Yet, even there, levels comparable to Haredi fertility today were not universal. In England, for example, fertility in the nineteenth century was close to five children per woman, on average,[16] much lower than among Haredim today. Fertility comparable to Haredim was observed in Russia at the end of the nineteenth and beginning of the twentieth centuries and in Arab societies of the Middle East in the mid-twentieth century.[17] Some commentators have noted that in Israel, where the fertility trajectory of Jews (by religion) can be documented in detail, there was a substantial drop in Haredi fertility between 2000 and 2021.[18] While this is true, an important nuance should be added: the decline developed after a long period of increase. Fertility as high as 7.3 children per woman was registered among Haredim

around 2001. The more recent and rather gradual reduction in Haredi fertility only brings it to levels seen during the 1980s.[19] So far at least, there has not been a sharp drop in Haredi fertility.

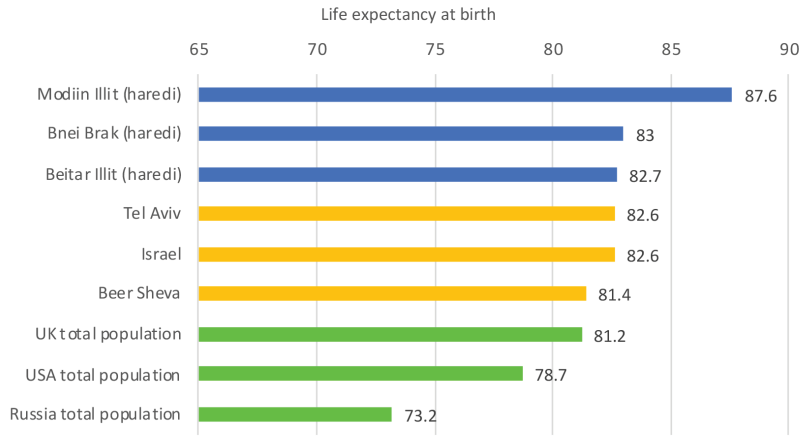
Haredi Longevity

High fertility is a necessary but insufficient factor for explaining Haredi growth. Haredi rates of growth are due to a combination of high fertility and high longevity. Historically, Jews have been a distinctive population with respect to life expectancy. Their status is no different today. Israeli life expectancy is among the highest in the world. Jewish longevity in the Diaspora is also, as a rule, higher than the longevity of the general populations in which Jews live. Indeed, demographers consider Jewish longevity indicative of the maximal possible life expectancy under given socio-economic conditions. The reasons for high longevity of Jews are rooted in the cultural, economic and political conditions under which they have dwelt. The present account cannot do justice to all aspects of this phenomenon and all existing explanations. Suffice it is to say that various factors converged to generate what can be described, very broadly, as a health-protective lifestyle among Jews. This lifestyle, evident among men and women, young and old, translates into high longevity almost irrespective of time and place.[20]

The life expectancy of Haredi populations today is at the same level or higher than the life expectancy of non-Haredi Jews. Around 2020, Haredi life expectancy stood at about eighty-three years for males and eighty-six years for females.[21] This is clearly above the European and American rates: approximately seventy-six years for males and eighty-two years for females.[22] Haredi longevity can only be measured indirectly. Certain localities in Israel (Modiin Illit, Bnei Brak and Beitar Illit) are Haredi-dominated sites, in the sense that an absolute majority of residents in them are Haredi. Official statistics on life expectancy in these localities gives the best approximation of Haredi life expectancy (fig. 4). Other localities in Israel as well as several national examples of life expectancy representing major Western and European countries are presented in fig. 4. Israeli Haredi longevity is notably higher than these examples.

One can be confident that the life expectancy of Haredi Jews outside Israel is similar. In general, Haredi demography across the globe is quite homogeneous. This should not come as a surprise. Connections via study, marriage, and business link Haredi populations to each other in different venues. Bearing

Figure 4. Haredi life expectancy at birth in comparison to selected populations (2019)



Source: Israel, Central Bureau of Statistics, Israel. 2019. Health and social profile of the localities in Israel, 2017–2021; UK, USA, Russia, OECD statistical database.

in mind this social and cultural interconnectedness, it would be appropriate to relate to the Haredi population in global terms.

It is the combination of high fertility and high longevity that is producing the phenomenally high rates of growth of Haredim. While high fertility existed in historical populations, it produced very low growth. With high mortality across all ages but especially among the young, high fertility simply could not generate as vigorous a growth as it does today. A child born in 1900, merely 125 years ago, could be expected to live to just thirty-two years, on average.[23] What does life expectancy of thirty-two years mean, in concrete terms? An important insight can be gleaned from the autobiographical account of Golda Meir, the fourth Prime Minister of Israel, when discussing the situation of her family in the Russian Empire in the late nineteenth century: "my mother had other troubles too. Four little boys and a girl fell ill: two of them died before they were a year old; another two of them went within one month. My mother mourned each one of her babies with a broken heart, but like most Jewish mothers of that generation, she accepted the will of God and drew no conclusions about child-rearing. . . . Then, right after the last of the babies had died, a well-to do family offered my mother a job as a wetnurse to their new baby. . . . So it was thanks to this . . . that I was born into relative order, cleanliness and health. Our benefactors saw to it that my mother always had enough to eat, and soon my parents had three children."[24]

With death following the birth so closely in historical populations, there is little wonder that fertility was so high. The role of high fertility was precisely to maintain population size—something that sometimes succeeded and sometimes did not. At the level of mortality as described above, fertility at a level of 6.5 children per woman would produce an annual growth of about 1% (not 3.5%–4.0% as it does among Haredi today), resulting in population doubling time of about seventy years. A lower level of fertility, for example five children per woman, would result in very low positive growth; fertility at a level of four children per woman would lead to a negative growth![25] The shift from high to low mortality and, in close succession, also from high to low fertility is known as the "demographic transition" in professional jargon used by demographers.

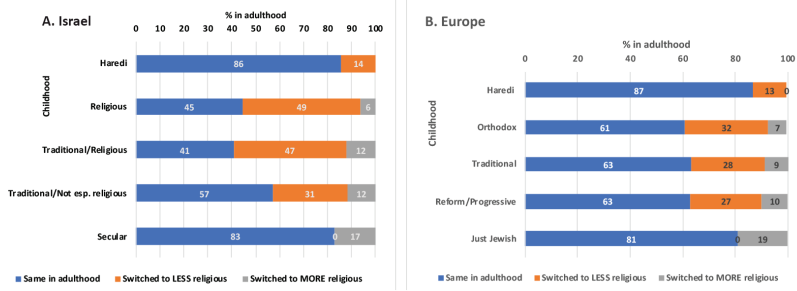
The demographic transition is also seen by demographers as a transition "from waste to economy." A regime of waste is an old demographic regime where a lot of life is produced and a lot of it is wasted, so that large amount of production results in small output. A regime of economy is a regime of small-scale production with little or no waste. All this makes it easy to see how high fertility, being a mere population *sustainer* under a regime of waste, becomes a powerful, at times, explosive factor of *growth* under a regime of economy. This happens because under a regime of economy, high mortality no longer neutralizes the gains produced by high fertility. The Haredi demographic situation is an embodiment of this combination of "olden days" fertility and "modern days" longevity that yields phenomenal growth.

Lifestyle Retention and "Switching"

The last relevant point to mention is the retention of a Haredi lifestyle, which is very high. This is another way of saying that most people born into Haredi families remain Haredi when they grow up. Data from Israel and Europe indicate that, in proportionate terms, close to 85% of Haredi-born people remain Haredi in adulthood (fig. 5). This level of lifestyle retention is close, incidentally, to the level of retention observed among secular Jews: about 80% of Jews born into secular homes remain secular in adulthood and 20% or so adopt a more religious identity. In other groups, retention is lower. In traditional circles, for example, 40%–60% retain the childhood identity in adulthood, about 10% adopt a more religious identity and 30%–50% adopt a less religious identity.

This may come as a surprise to some. After all, life stories of Haredi individuals abandoning their traditional lifestyle in favour of secularism make headlines. The phenomenon, known also as "going off-the-*derech*/path" or

Figure 5. Retention of religious lifestyle among Jews, 2010–2020



Source: A. Hleihel, "Fertility among Jewish and Muslim Women in Israel by Level of Religiosity, 1979–2009," Working Paper Series 60, Central Bureau of Statistics, Israel, 2011; 2018 survey of European Jews, conducted by the European Union Agency for Fundamental Rights (GESIS Data Archive, Cologne. ZA7491).

hazara be-sheela (questioning one's Orthodox lifestyle) with both terms expressing rejection of a Haredi lifestyle, is known even outside of Jewish cultural circles. Such identity change may be associated with many struggles, including estrangement from one's family of origin, divorce, cultural curiosity or a struggle to obtain adequate education and employment necessary to function outside of the Haredi world. The story told by the data is that the described phenomenon is very real, yet it is much smaller in scope than the image circulating in popular culture. True, up to 15% of Haredi-born individuals no longer call themselves Haredi in adulthood, but how exactly do they see themselves?

Closer inspection of the actual journeys of Haredi "switchers" reveals that for the majority of them (about 65% to be precise), the change of lifestyle, in fact, is a change of a label and not something that suggests a partial or wholesale rejection of religiosity. While they no longer see themselves as Haredi, they still adopt a "label" compatible with a religious lifestyle that may be only marginally less intense than implied by the "Haredi label," e.g., they call themselves "Orthodox" or "religious." In view of that, it would be more appropriate to relate to the Haredi "switchers" as Haredi "drifters." In sum, in Israel and Europe, just 4% of Haredi-born Jews become secular (arguably, these are the proper "switchers"), 9%–11% continue to self-identify as religious in some form, and 85% continue to self-identify as Haredi in adulthood.

What accounts, it seems, for the relative centrality of the "off-the-*derech*" phenomenon in public perception is better explained with reference to Tuchman's Law than with any hard facts captured by social surveys of Jews. This is how Barbara Tuchman, the eminent popular historian, formulated it herself, semi-humorously: "After absorbing the news of today, one expects to

face the world consisting entirely of strikes, crimes, power failures, broken water mains, stalled trains, school shutdowns, muggers, drug addicts, neo-Nazis, and rapists. The fact is that one can come home in the evening—on a lucky day—without having encountered more than one or two of these phenomena. This has led me to formulate Tuchman's Law, as follows: 'The fact of being reported multiplies the apparent extent of any deplorable development by five- or tenfold (or any figure a reader would care to apply).'"[26] The "off-the-*derech*" (OTD) phenomenon can be added to Tuchman's list above. Popular press and, in our days, social media amplify the significance of the OTD phenomenon by focusing on the exceptional at the expense of the common and mundane.

As an aside, survey data also reveal that the proportion of Haredi-born Jews going OTD is rather close to the proportion of Jews raised in secular, Reform or traditional homes who adopt a Haredi or Orthodox lifestyle in adulthood. Given the fact that non-Haredi Jews are at present numerically dominant, a very modest flow coming out of this population (1%–3%) may look as negligible relative to their size. Adoption of Haredi lifestyle is hardly a factor of major population loss for non-Haredi Jews. Yet, it is not as negligible relative to the Haredi population size. For Haredim, this flow can be a weighty factor of population gain. Through it, Haredi are compensated, so to speak, for the loss of members going OTD by arrivals from other Jewish groups.

Understanding the scope of the OTD trend is important not just in sociological terms, as a window into the social realities of Haredi and non-Haredi Jews—nor in political terms, as an insight into which lifestyle "wins" among Jews. It needs to be accounted for in order to chart the fate of Haredi population growth with greater confidence. If a lot of Haredi-born Jews adopt a different lifestyle in adulthood, then Haredi growth would be limited by this process. It has been stated in the past that religious "switching" among Haredi is not powerful enough to change the conclusions regarding Haredi growth over the next twenty years or so. New estimates confirm this conclusion: even if 15% of Haredi-born switch completely to non-Haredi lifestyle, Haredi growth will be around 3% per year under contemporary conditions, suggesting doubling of population in twenty-three years' time.

Demographic instruments are powerful tools allowing us to predict future populations owing to the certainty built into fertility and mortality rates and existing population structures. "Switching" in terms of identity and migration is far less predictable; it follows cultural and economic changes that can be rapid. We cannot be certain about the future. Yet, we can be quite certain about the past. It is clear, from the British and Belgian Haredi examples analyzed

in detail earlier in this paper, that to date Haredi switching has not become a factor of discernible impact on growth. The growth of these two communities was in line with expectations based on the well-documented realities of Haredi fertility, mortality and migration. Stated otherwise, there was nothing in their growth that suggested the presence of an unaccounted factor operating in the background.

CONCLUSIONS

This article opened with a presentation of the essentials of Haredi demography. 2.3 million Haredi Jew live in the world today, and 15% of the world's Jews are Haredi. Barring some totally unexpected developments, the number and the share of Haredi will rise to four million and 23% of the world Jewry in 2040. Haredi populations, it has been indicated, grow fast, at about 3.5% per annum. British and Belgian Haredi populations, whose numerical development is well documented, can be seen as laboratories of demographic transformation for Jewish communities. The Haredi share in British and Belgian Jewries came to single digits in the 1960s. It is very likely that a scholar of Jewish demography who observed these populations in the 1960s, registered the rate of expansion of Haredi communities, and named a date at which Haredi would become a majority of Jews, would have been dismissed, if not ridiculed, by laymen. Population growth follows an exponential trajectory, which means that a steep increase in population is a little delayed, from the perspective of the lay observer. At present, Haredim comprise 24% and 34% of the Jews in England and Belgium, respectively; a Haredi majority date is still in the cards for the mid-twenty-first century.

Will cultural change follow demographic transformation? Will Haredi and non-Haredi segments of Jewish communities drift apart in cultural terms? Or, on the contrary, will they come closer? Will Jewish politics change? Will the image and position of Jews among non-Jews be transformed? These questions are beyond the scope of this essay. It should be noted, however, that the Jewish communities of England and Belgium are the exact locations where such questions are most appropriate to explore. They are, after all, the most advanced in terms of demographic desecularization and can be treated as sociological laboratories. While the future is rather foggy, the recent past and the present are an open book. A good way for sociologists to begin figuring out the social

and political consequences of demographic change among Jews is to look at what already has happened in two Jewish demographic laboratories located in Europe.

Our purpose here is to elaborate further on the position of Haredi Jews in the demographic landscape of humanity. The speed of Haredi growth is something that both laymen and experts in demography are familiar with. Nevertheless, there is a degree of misunderstanding, on the side of the former, and lack of familiarity, on the side of the latter, as to what actually generates these phenomenal rates of growth. High fertility is seen as a force of Haredi growth, and correctly so. The role of low mortality remains underestimated. Without such high longevity, high fertility would not have been able to produce demographic gains that it has generated so far. Under the "old longevity regime," a fertility rate of 6.5 children per woman would have produced very low population growth or no growth at all!

Thus, Haredi Jews are best understood as a "demographic hybrid." Haredim are traditional when it comes to fertility patterns, but modern when it comes to longevity. While the traditional nature of fertility is a choice, modern mortality is inevitable, or almost so. Everybody who lives inside the cultural and technological space identified with the West shares what demographers call "a mortality regime": modern clinical medicine, modern notions of healthy and unhealthy life and public health services, i.e., major factors in shaping how long we live. Being exposed to a mortality regime is a matter of embeddedness into modern life and cannot be modified easily.

Both Haredim themselves and many others around them, Jews and non-Jews alike, see the Haredi lifestyle as an embodiment of authenticity—as an authentic Jewish way of living in the "olden days" but transferred into the present. This authenticity is not defined in specific terms but rather softly as a mixture of deep emotional and intellectual religiosity, avoidance of certain types of modern technology (smartphones, internet use, etc.), and old-style family patterns. Contestation of the idea of Haredi authenticity occurs in the political domain but it is rarely fierce or relentless. Haredi patterns of fertility align well with understanding of the Haredi lifestyle as authentic, uncompromising, and traditional. At the same time, modern Haredi longevity demonstrates that it is impossible for any population to be entirely frozen in the past. Simple embeddedness in modern conditions results in uncontrollable modernization of many aspects of one's life. The only feasible form of traditionalism is a "modern traditionalism."

Notes

1. L. Daniel Staetsky, "Haredi Jews around the World: Population Trends and Estimates" (London: Institute for Jewish Policy Research, 2022).
2. S. Bruce, *God Is Dead: Secularization in the West* (Religion in the Modern World 9; Maldon, MA: Wiley-Blackwell, 2002).
3. G. Davie, *Religion in Britain: A Persistent Paradox* (Maldon, MA: Wiley-Blackwell, 2015); R. Inglehart and C. Welzel, *Modernization, Cultural Change and Democracy: The Human Development Sequence* (Cambridge: Cambridge University Press, 2012).
4. E. Kaufmann, *Shall the Religious Inherit the Earth? Demography and Politics in the Twenty-first Century* (London: Profile Books, 2010). Outside of the demographic field, voices pointing out the possibilities of desecularization are exemplified by the volume edited by Peter Berger, ed., *The Desecularization of the World: Resurgent Religion and World Politics* (Grand Rapids, MI: Eerdmans Publishing Company, 1999).
5. This is shown, for example, by Lyman Stone, "America's Growing Religious-Secular Fertility Divide," Institute for Family Studies, https://ifstudies.org/blog/americas-growing-religious-secular-fertility-divide.
6. David Myers, ed., "The Haredi Moment: An Online Forum, Part I," *Jewish Quarterly Review* (2021), Herbert D. Katz Center for Advanced Judaic Studies, University of Pennsylvania, https://katz.sas.upenn.edu/resources/blog/haredi-moment-online-forum-part-1.
7. Of particular relevance is the methodological appendix of the following publication: Staetsky, "Haredi Jews around the World." Further details on specific European Haredi communities (UK and Belgium) can be found in Daniel Staetsky, "Strictly Orthodox Jewish Population in the United Kingdom: Assessment of the Census Undercount Using an Alternative Estimation System," 2023, https://www.academia.edu/108383380/Strictly_Orthodox_Jewish_population_in_the_United_Kingdom_assessment_of_the_census_undercount_using_an_alternative_estimation_system; Staetsky, "Jews in the 2021 Census of England and Wales: The Actual Number, the Actual Developments," Daniel Staetsky: Jewish World in Data, January 22, 2023, https://danielstaetsky.com/jews-in-the-2021-census-of-england-and-wales-the-actual-number-the-actual-developments/; L. Daniel Staetsky and S. DellaPergola, "Jews in Belgium: A Demographic and Social Portrait of Two Jewish Populations (London: Institute for Jewish Policy Research, 2022).
8. B. Brown, "The Fundamental Components of Haredi Ideology (*Hashkafa*)," in *Contemporary Israeli Haredi Society: Profiles, Trends and Challenges*, ed. K. Caplan and N. Leon (London: Taylor and Francis Group, 2023), 32–66.
9. Staetsky, "Haredi Jews around the World."
10. Source for the global Jewish population figure: S. DellaPergola, "World Jewish Population, 2023," *American Jewish Year Book* (forthcoming, 2024).

11. J. Gutwirth, "Antwerp Jewry Today," *The Jewish Journal of Sociology* 10, no. 1 (1968): 122–23.
12. This account relies on the data appearing in Gutwirth, "Antwerp Jewry Today," 122–23; and Staetsky and DellaPergola, "Jews in Belgium."
13. L. Daniel Staetsky, "Jews in the Netherlands in the 2020s: Fifty Years of Stability and Israelization" (London: Institute for Jewish Policy Research, forthcoming, 2024).
14. This assessment is based on A. Hleihel, "Fertility among Jewish Women in Israel by Level of Religiosity, 1979–2017" [in Hebrew], Working Paper Series 101, Central Bureau of Statistics, Israel, 2017; L. D. Staetsky and J. Boyd, "Strictly Orthodox Rising: What the Demography of British Jews Tells Us about the Future of the Community" (Institute for Jewish Policy Research, 2015); and L. Stone, "Ultra-Orthodox Fertility and Marriage in the United States," *Demographic Research* 49, article 29 (2023): 769–82.
15. "Fertility Rate: Children per Woman," Our World in Data, https://ourworldindata.org/grapher/fertility-rate-with-projections?tab=table&time=2021..latest&showSelectionOnlyInTable=1&country=OWID_WRL~Africa+%28UN%29~Asia+%28UN%29~Europe+%28UN%29~Northern+America+%28UN%29~Latin+America+and+the+Caribbean+%28UN%29~Oceania+%28UN%29~NER~RUS~USA.
16. H. Jaadla, A. Reid, E. Garrett, K. Schurer, and J. Day, "Revisiting the Fertility Transition in England and Wales," *Demography* 57, no. 4 (2020): 1543–69.
17. S. Zakharov, "The History of Fertility in Russia: From Generation to Generation," *Demographic Review* 10, no. 1 (2023): 4–43; L. Daniel Staetsky, "Stalling Fertility Decline of Israeli Muslims and the Demographic Transition Theory," *Population Studies* 73, no. 3 (2019): 317–33.
18. See Cahaner and Malach, "Statistical Report on Ultra-Orthodox Society in Israel."
19. Central Bureau of Statistics, Israel, 2022, Fertility of Jewish Women in Israel, 1979–2021 [in Hebrew] ,פריון של נשים יהודיות ואחרות בישראל, לפי מידת הדתיות שלהן 1979–2021 (cbs.gov.il).
20. L. Daniel Staetsky, "The Role of Smoking in the Explanation of the Israeli Jewish Pattern of Sex Differentials in Mortality," *Population Studies* 65, no. 2 (2011): 231–44; Staetsky and A. Hinde, "Jewish Mortality Reconsidered," *Journal of Biosocial Science* 47, no. 3 (2015): 376–401; Staetsky, "COVID-19 Mortality among Jews in 2020: A Global Overview and Lessons Taught about the Jewish Longevity Advantage," *Journal of Biosocial Science* 56, no. 1 (2024): 15–35; Staetsky, "Elevated Jewish Mortality from Coronavirus in England and Wales: An Epidemiological and Demographic Detective Story," *Contemporary Jewry* 41, no. 1 (2021): 207–28.
21. A. Paltiel, M. Sepulchre, I. Kornilenko, and M. Maldonado, "Long-range Population Projections for Israel: 2009–2059," Central Bureau of Statistics, Israel, 2012, and Central Bureau of Statistics, Israel, 2021, Statistical Abstract of Israel 72, Table 3.5.
22. United Nations, Department of Economic and Social Affairs, Population Division (2019), World Population Prospects 2019, custom data on mortality acquired via website.

23. Global life expectancy at birth: "Life Expectancy," Our World in Data, https://ourworldindata.org/life-expectancy.
24. Golda Meir, *My Life* (London: Weidenfeld and Nicolson, 1975), 4.
25. These estimates are based on the demographic regularities connecting level of mortality, fertility, and growth, demonstrated in M. Livi-Bacci, *A Concise History of World Population* (Cambridge, MA: Blackwell, 1992), 102.
26. B. Tuchman, *A Distant Mirror: The Calamitous 14th Century* (New York: Alfred Knopf, 1978), xviii.

Bibliography

Berger, Peter, ed. *The Desecularization of the World: Resurgent Religion and World Politics*. Grand Rapids, MI: Eerdmans Publishing Company, 1999.

Brown, B. "The Fundamental Components of Haredi Ideology (*Hashkafa*)." In *Contemporary Israeli Haredi Society: Profiles, Trends and Challenges*, edited by K. Caplan and N. Leon, 32–66. London: Taylor and Francis Group, 2023.

Bruce, S. *God Is Dead: Secularization in the West*. Religion in the Modern World 9. Maldon, MA: Wiley-Blackwell, 2002.

Cahaner, L., and G. Malach. "Statistical Report on Ultra-Orthodox Society in Israel. The Israel Democracy Institute, 2023.

Central Bureau of Statistics, Israel. 2022. Fertility of Jewish Women in Israel, 1979–2021. [In Hebrew.] פריון של נשים יהודיות ואחרות בישראל, לפי מידת הדתיות שלהן, 2021–1979 (cbs.gov.il).

Davie, G. *Religion in Britain: A Persistent Paradox*. Maldon, MA: Wiley-Blackwell, 2015.

DellaPergola, S. "World Jewish Population, 2023." *American Jewish Year Book*. Forthcoming, 2024.

"Fertility Rate: Children per Woman." Our World in Data. https://ourworldindata.org/grapher/fertility-rate-with-projections?tab=table&time=2021..latest&showSelectionOnlyInTable=1&country=OWID_WRL~Africa+%28UN%29~Asia+%28UN%29~Europe+%28UN%29~Northern+America+%28UN%29~Latin+America+and+the+Caribbean+%28UN%29~Oceania+%28UN%29~NER~RUS~USA.

Gutwirth, J. "Antwerp Jewry Today." *The Jewish Journal of Sociology* 10, no. 1 (1968): 121–37.

Hleihel, A. "Fertility among Jewish and Muslim Women in Israel by Level of Religiosity, 1979–2009." Working Paper Series 60. Central Bureau of Statistics, Israel, 2011.

Hleihel, A. "Fertility among Jewish Women in Israel by Level of Religiosity, 1979–2017." [In Hebrew.] Working Paper Series 101. Central Bureau of Statistics, Israel, 2017.

Inglehart, R., and C. Welzel. *Modernization, Cultural Change and Democracy: The Human Development Sequence*. Cambridge: Cambridge University Press, 2012.

Jaadla, H., A. Reid, E. Garrett, K. Schurer, and J. Day. "Revisiting the Fertility Transition in England and Wales." *Demography* 57, no. 4 (2020): 1543–69.

Kaufmann, E. *Shall the Religious Inherit the Earth? Demography and Politics in the Twenty-first Century*. London: Profile Books, 2010.

"Life Expectancy." Our World in Data. https://ourworldindata.org/life-expectancy.

Livi-Bacci, M. *A Concise History of World Population*. Cambridge, MA: Blackwell, 1992.

Meir, Golda. *My Life*. London: Weidenfeld and Nicolson, 1975.

Myers, David, ed. "The Haredi Moment: An Online Forum, Part I." *Jewish Quarterly Review* (2021). Herbert D. Katz Center for Advanced Judaic Studies, University of Pennsylvania. https://katz.sas.upenn.edu/resources/blog/haredi-moment-online-forum-part-1.

Paltiel, A., M. Sepulchre, I. Kornilenko, and M. Maldonado. "Long-range Population Projections for Israel: 2009–2059." Central Bureau of Statistics, Israel, 2012, and Central Bureau of Statistics, Israel, 2021. Statistical Abstract of Israel 72, Table 3.5.

Staetsky, L. Daniel. "COVID-19 Mortality among Jews in 2020: A Global Overview and Lessons Taught about the Jewish Longevity Advantage." *Journal of Biosocial Science* 56, no. 1 (2024): 15–35.

Staetsky, L. Daniel. "Elevated Jewish Mortality from Coronavirus in England and Wales: An Epidemiological and Demographic Detective Story." *Contemporary Jewry* 41, no. 1 (2021): 207–28.

Staetsky, L. Daniel. "Haredi Jews around the World: Population Trends and Estimates." London: Institute for Jewish Policy Research, 2022.

Staetsky, L. Daniel. "Jews in the 2021 Census of England and Wales: The Actual Number, the Actual Developments." Daniel Staetsky: Jewish World in Data, January 22, 2023. https://danielstaetsky.com/jews-in-the-2021-census-of-england-and-wales-the-actual-number-the-actual-developments/.

Staetsky, L. Daniel. "Jews in the Netherlands in the 2020s: Fifty Years of Stability and Israelization." London: Institute for Jewish Policy Research, forthcoming, 2024.

Staetsky, L. Daniel. "The Role of Smoking in the Explanation of the Israeli Jewish Pattern of Sex Differentials in Mortality." *Population Studies* 65, no. 2 (2011): 231–44.

Staetsky, L. Daniel. "Stalling Fertility Decline of Israeli Muslims and the Demographic Transition Theory." *Population Studies* 73, no. 3 (2019): 317–33.

Staetsky, L. Daniel. "Strictly Orthodox Jewish Population in the United Kingdom: Assessment of the Census Undercount Using an Alternative Estimation System." 2023. https://www.academia.edu/108383380/Strictly_Orthodox_Jewish_population_in_the_United_Kingdom_assessment_of_the_census_undercount_using_an_alternative_estimation_system.

Staetsky, L. D., and J. Boyd. "Strictly Orthodox Rising: What the Demography of British Jews Tells Us about the Future of the Community." London: Institute for Jewish Policy Research, 2015.

Staetsky, L. Daniel, and S. DellaPergola. "Jews in Belgium: A Demographic and Social Portrait of Two Jewish Populations. London: Institute for Jewish Policy Research, 2022.

Staetsky, L. D., and A. Hinde. "Jewish Mortality Reconsidered." *Journal of Biosocial Science* 47, no. 3 (2015): 376–401.

Stone, Lyman. "America's Growing Religious-Secular Fertility Divide." Institute for Family Studies. https://ifstudies.org/blog/americas-growing-religious-secular-fertility-divide.

Stone, Lyman. "Ultra-Orthodox Fertility and Marriage in the United States." *Demographic Research* 49, article 29 (2023): 769–82.

Tuchman, B. *A Distant Mirror: The Calamitous 14th Century*. New York: Alfred Knopf, 1978.

Zakharov, S. "The History of Fertility in Russia: From Generation to Generation." *Demographic Review* 10, no. 1 (2023): 4–43.